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A BOOM IN BARK.

Something over two years ago the bottom dropped out of hemlock bark and some heavy dealers were driven to the wall. Heavy failures occurred at about the same time in the leather trade, which was kept in an unsettled and unsatisfactory state for months afterwards. The New England tanneries which are the chief consumers of the Canadian bark that is exported were run on a reduced scale, and that with the large stock of bark on hand made the outlook a poor one, and as it has proved kept the price of bark depressed for over two years. But the causes which inevitably bring about an improvement have been quietly at work for some time. The leather trade has picked up and the tanneries beginning to use more bark stock in New England yards have been perceptibly reduced. A few weeks ago there began to be a sharp inquiry for bark and prices began to harden. The fact is there is not a great supply of Canadian bark accessible. The low prices prevented peeling on anything like the old scale. Outside of what is held by Canadian tanners for their own use, the bark in sight in the Province of Quebec does not exceed 100,000 cords and is probably considerably under that figure. The chief holders are Church & Fee, who have about 37,000 cords, and Goodhue, of Danville, who owns from 25,000 to 30,000 cords. The price has gone up with a bound from $4 to $6 per cord and there is a combination to corner the market and kite values up to $8 or $9, and perhaps $10, on the cars here. New England tanners have become frightened and have agents picking up small lots in the hope of being able to tide over the scarcity till they can draw supplies from the new Pennsylvania bark next season, say in July or August. The holders of the Canadian article, which was in the main purchased at a low figure, are in a position to net a handsome profit on their deal and recoup themselves for former losses.—*Waterloo Advertiser.*

LUMBER EXPORT DUTY.

The recommendation for the abilition of the import duty on Canadian lumber into the United States contained in President Cleveland's message to Congress is attracting great attention in the city. It is not the first time by several, that a similar suggestion has been thrown out, but hitherto the opposition of the Michigan and Wisconsin lumbermen, and the interest they can bring to bear on the members of the Legislative Assembly have hitherto proved fatal to the abolition of the tax. In view of the possibility of the recommendation being acted upon, a *Free Press* scribe waited on a number of Ottawa lumbermen, and asked their opinion of the effects of the remission of the duty.

Mr. Bronson, jr., said it will be of great importance in increasing the exportation of the coarser cuts of lumber. The greater parts of the finer cuts are imported from Montreal or Quebec, or to South America, passing through the United States in bond, these would not be affected; the coarser cuts, however, are entirely consumed either at home or in the United States. Upon these the producer here has to pay all charges, freight and duty, and no doubt the remission of the duty would increase the sale of these cuts considerably. Still I do not think the Canadian producers would get the benefit of the whole duty on their price. The duty is $2 per thousand feet, and they perhaps would get the half, and the New York or American importer the other. You must understand that the general run of timber now made is coarser than it used to be. Lumber is made now which would not have been considered marketable years ago, but the pine trees are very scarce, having been first used and therefore the tendency of the lumber trade is towards coarser cuts.

Would the abolition of the duty make vital difference in Ottawa?

I can hardly say, but it is possible it might. Of course, the Michigan lumbermen would oppose it, lest we should cut them in price.

Mr. Pattee, of Messrs. Perley & Pattee, said: "Oh yes, I think it would make a considerable difference. I am not prepared say what difference it would make to Ottawa, but it would produce a boom in all lumber producing towns in Canada."

"The duty is a fixed duty of $2 per 1,000 feet is it not?"

"Yes, it used to be an ad valorem duty, but that was found so confusing the fixed duty was substituted. The duty is the same all along the line. I think it would be a boon throughout the Dominion, and certainly Ottawa would come in for its share."

Mr. Booth was away from the works, but his representative said: "There is no doubt it would make a great increase in the export of the coarser kinds of lumber, and would bring more trade into the city. I would rather not say much about it just now, as I think any sign of hailing the change would stir up the Michigan men to a more strenuous opposition. The duty does not effect the higher class of fine cuts."

"It runs sometimes to 50 per cent. on the coarser, does it not?"

"Nearly 33⅓ and 40 per cent.; yes nearly 50, but I think it would be unwise to say much about it."

Mr. Cushman, manager for Mr. E. B. Eddy, said: "I do not think it will make any great difference; the consumer as a rule pays all charges, and so it does not come out of the Canadian lumberman's pocket; still there might be a division of the amount. If they would take the duty of the manufactured article it would enable Canadians to make up their lumber at home instead of in the States. I do not see that it would greatly effect us here."

Mayor McDougal said: "It would be a great boon to Ottawa, it would increase her trade immensely. There is a class of lumber sold for somewhere about $4 per 1,000, upon which the $2 duty acts as a prohibitive one. It would not effect the trade in superior lumber, but would make an immense difference to the lower kinds."—*Ottawa Free Press.*

DURABILITY OF CROSS-TIE TIMBER.

In an investigation of this subject made by Mr. F. B. Hough for the Department of Agriculture, some interesting facts are brought out. The relative importance of the various kinds of timber for railway purposes are reported in the following order:—Oaks, pines, chesnuts, hemlock, cedars, tamarack, cypress, elms, ash, cherry, black walnut, firs, spruce, beech, locust, redwood, maple, butternut, coffeenut, mulberry, and musquit.

The average durability of oak, as reported in 32 cases, is 7.4 years, while the average prices of each cross-tie is 41.2 cents. The kind of oak is not specified. For white oak the average durability in 152 reported cases is 7.3 years, and the average price in the 173 cases is 40.6 cents. the average duration of a post oak tie is 7 years, and the average price 33 cents. For burr oak, durability, 7.4 years; price, 37.3 cents. Rock oak showed an average durability in 18 cases of 7 years; price 42 cents. In the case of red oak 5 years is the average durability, with an average cost of 27 cents. Chestnut oak is more durable, showing an average lifetime is a tie of 7.1 years, cost, 28 cents per tie. Black oak shows an average durability of 4½ years; average price, 43 cents.

Long leaf or southern pine will last on an average 6½ years; average cost per tie, 37 cents. White pine has about the same durability with less cost, the latter showing an average of 31½ cents per tie.

Cedar shows the greatest average durability, being 1.18 years, with average cost of 34 cents, but is too soft to bear heavy freightage, and for that reason is not much employed in railway construction. Red cedar is more durable than white cedar, being in proportion of 11 to 7. Cypress shows greater durability than white oak, the former showing an average of 8.7 years. White ash and black ash rot very quickly, the former in 4.3 years, and the latter in 3.8 years. Cherry is a durable timber when used as cross ties, running from 6 to 10 years. All woods are much more lasting when hewn than when sawn.

The redwood of California makes very durable ties, lasting over eleven years, but allowance must be made for the fact that they are used on the Pacific road in a dry climate, where the causes producing decay are not so great as in states east of the Rocky Mountains. The growth of the redwood is very slow. Trees 15 years old have a diameter of only 10 or 12 inches, and will make about three ties. When younger than this the wood is not durable. The redwood of the Santa Cruz Mountains furnishes the best ties it being much heavier and denser than when grown further north. The average cost of redwood ties is 40 cents. The total length of railway track in the United States approximated at 150,000 miles. Assuming that the average durability of ties is seven years, and the distance apart is three feet, there will be 2,640 to the mile, which is rather under than over the actual number employed, making the total number in use 396,000,000. Estimating one-seventh to be replaced every year, the annual demand to keep up the present railways will reach 56,571,428. Supposing that an acre will supply 100 ties, a liberal estimate, it will require 565,715 acres annually to furnish the ties required by the existing lines oi railways. For each line of railway there will be an annual demand for 377 ties, requiring the cutting off of 3.77 miles. It will require 30 years on an average for trees to grow large enough for making cross-ties. The acres that must be kept in timber and growing will be 16,971,420 for supplying ties to the railway lines now in existence.

The increase in railway mileage, estimated by two decades, is about 4,150 miles annually. To construct the railways that will probably be built in the next ten years, 109,560,000 ties will be demanded, the product of 1,095 600 acres of woodland. Allow 30 years as the period of growth for ties, this would add 3,286,801 acres to the timber reserve for railways alone, making a total of 18,995,579 acres as the needful reserve. Evidently this question is one demanding reach of statesmanship and a careful preservation of our present timber supply. The time is not far distant when one of the largest items in the construction of expenses will be the one for cross-ties.

It is reported that Canadians are again scouring the woods of northern Michigan for rock elm ship timber for export. They pay from $1.25 to $1.50 for each tree standing. The sticks are hewed in the woods. Last season, it is estimated, there was 5,000,000 feet of rock elm timber shipped out of Michigan.

The schooner Ottawa started from Chicago for Georgian Bay, loaded with outfit, 16 horses and 40 men, for the establishment of logging camp. Encountering the great gale of December 4th. and 5th, the vessel had to put into Grand Haven, where she lay up, and the expedition was abandoned.

HOW SAP MOVES.

All plants obtain their nourishment in a liquid or gaseous form by imbibition through the cells of the younger roots or fibrils. The fluids and gases thus absorbed, probably mingling with other previously assimilated matter, are carried upwards from cell to cell, through the alburnum or sap-wood until they reach the buds, leaves and smaller twigs, where they are exposed to the air and light and converted into organizable matter. In this condition a part goes to aid in the prologation of the branches, enlasgement of the leaves and the formation of buds, flowers and fruit, and other portions are gradually spread over the entire surface of the wood, extending downwards to the extremities of the roots. We often speak of the downward flow of sap and even of its circulation; but its movement in trees in no way corresponds with the circulation of blood in auimals, neither does it follow any well defined channels; for it will, when obstructed, move laterally as well as lengthwise, or with the grain of the wood. The old idea that the sap of wood descends into the roots in the fall, remaining there through the winter, is an error with no foundation whatever. As the wood and leaves ripen in the autumn, the roots almost cease to imbibe sap, and for a while the entire structure seems to part with moisture, and doubtless does so through the exhalation from the ripening leaves, buds and smaller twigs; but as warm weather again approaches, the temperature of the soil increases, the roots again commence to aborb crude sap and force it upward where it meets soluble, organized matter, changing color, taste and chemical properties. If this not the case, we could not account for the saccharine properties of the sap of the maple or for the presence of various mucilaginous or resinous constituents of the sap of trees in early spring, because we find no trace of such substance in the liquids or crude sap as absorbed by them from the soil. The life of the tree, Mr. Fuller teaches, is all in the bark and sapwood, the heart being dead and serving the tree only to strengthen it mechanically, as shown in the fact that it may be removed entirely by decay, and still the tree grows on vigorously for centuries.—*Fuller.*

EXCESSIVE STUMPAGE.

The following is a sample of a number of letters that have been appearing in the press of New Brunswick:—

HIGH STUMPAGE.

"*To the Editor of the Sun*:

"Sir, | I have noticed that there have been some discussion in the newspapers on the question of stumpage, and I don't think this question is brought up a day too soon.

"It is all very well for the Government to say that this tax is necessary for the purpose of revenue, but let them reduce expenses and do with less revenue. If they continue to insist on collecting this stumpage they will drive us, lumbermen, out of the country. The reason is because we cannot go into the woods and produce logs for sale to millmen without losing money.

"Every season some of us have to go greater distances, others have to incur additional expense in getting out their logs, and then, when we come to sell, we find that prices instead of being higher are lower, and we come out at the little end of the horn.

"I don't believe there is a practical lumberman in the country who does not agree with me.

"It is all very well for some of the papers to call attention to small purchases of licenses, but we know of hundred of miles of Crown lands that have been given up by the owners.

"I suppose it wont make much difference if I go elsewhere to earn my living, but if many others do the same thing people will begin to feel the effect on trade in the towns and the farmers in the settlements, for there is do doubt we support the various trades with our requirements for lumbering to a considerable extent.

"Yours,

"Lumbermen."

The steady advance in the rates of stumpage by the Provincial Government has led to much discontent among the lumbermen of New Brunswick. The log haulers are obliged to go far away from the streams for the timber; the damming of streams is a more expensive item than formerly; wages have increased considerably of late years; the camp supplies are of a higher class and more costly; and, everything considered, the cost of producing the logs and delivering them in the booms near the sawmills, has been so seriously increased that only the prices of an extra good market would remunerate the lumbermen. But while the market in England—to which they are principally shut up—has been growing worse and worse through the competition of Norway woods and the pine and spruce deals of other parts of Canada, with the New Brunswick spruce deals, the Government of New Brunswick has been steadily increasing the lumbermen's burthens by increasing the stumpage charged on logs cut on Government lands. These rates are excessive when compared with the value of the material,—in most cases equal to 25 per cent. of the value. It is not surprising, under the circumstances, that there was a large falling off in the cut last season, and consequently a serious reduction in provincial exports. Most lumber men have again reduced their operations for the current season, greatly to the loss of the farmers who depend largely upon the lumbering operations for a market for their surplus pro duce, and to the loss of the merchants whose transactions with the farming population are thus considerably curtailed. The towns are also sufferers, since there is less labor employed and less money disbursed in connection with sawing operations. It seems, too, that some lumbermen are leaving the province and looking elsewhere for a more congenial field, and we know of one large operator from that quarter who has recently made an extensive purchase of saw mills and timber limits on the Ottawa. If a reduction of the stumpage rates will prevent the ruin of lumbermen, and by reviving a prostrate industry tend to promote prosperity among the agriculturists and merchants, the Provincial Government should not hesitate as to the course it should pursue. It is manifestly its duty to relieve the industry of a least a portion of the special taxes imposed when the lumber business was in a prosperous condition. The charges were excessive even when spruce logs commanded their highest figures, and they should certainly be reduced now when they are out of all proportion to the logs' value. The lumbermen have a very strong case, and they will, no doubt, know how to press it vigorously.—*Montreal Herald.*

AN IMPORTANT MATTER.

On the question of lumber duties and the purchases of Canadian timber limits recently made by American lumbermen, the Montreal *Journal of Commerce* says:—

"The conservation of the timber supply of Canada is a matter of great moment to the future industries of the country. The part which wood of various kinds plays in these is so important that a diminution in its supply, or a large increase in its cost, would injure or destroy many branches of manufacture which now help to support a considerable proportion of the population.

"The lumber trade at present suffers somewhat from the duty exacted by the United States on the portion of the product exported there. We must always look to that quarter for a market for more or less of the cut, which, burdened with a duty of $2 per M feet, has to compete with the lumber manufactured in Michigan and Wisconsin. The effect of this has practically been that the Americans supply their wants from our forests at little more than the cost of manufacturing and delivery. The value of the standing pine in Michigan to-day ranges from $3 to $5, or more, per 1,000 feet; our timber brings no more than $1.50 to $2 per 1,000 feet for the standing tree. If the duty of $1 were removed by the United States it is not likely that the whole benefit would be reaped by manufacturers here. The object of the remission of the duty, and no doubt its effect to some extent, would be to reduce the price of lumber, and the benefit would probably be shared between the producer and the consumer. If such action increased the average price $1 per 1,000 it would be added almost entirely to the value of the standing timber, since the cost of manufacture would remain unchanged, and the increase would represent additional profit to be got out of the stumpage. An appreciation of 50 per cent or more in the value of our standing timber would be an enormus increase to the national wealth.

"Whatever may be said for or against a protective policy generally, it will be generally admitted that, as far as possible, the working up of the timber supply should be carried on at our own mills, and furnish employment for our own capital and labor. Heretofore this has been almost the invariable rule, as far as logs are concerned, the exports of this class of goods having been comparatively trifling in amount. But of late indications of a change have been apparent.

"The mill-owners on the eastern side of the state of Michigan have in part exhausted their own supplies of standing timber, and the balance has been rapidly accumulating in a few strong hands, where it is held for the future supply of the owner's mills, or for future sale at greatly enhanced prices. This has caused those in need to go further afield, and purchasers from Michigan have been exploring the Georgian Bay and Lake Superior country, and have been buying up any suitable limits which they could obtain. The timber for these could be rafted to the Saginaw river and other lumbering centres in Michigan, and all the benefit which this country will derive therefrom will be the export duty, at present $1 per 1,000 feet.

"Here is, we think, a case in which the intervention of the Government is called for. If the United States will not take our lumber without imposing a duty of $2 let us exact the same duty on the unsawn timber with which they would supply their mills. We should have free trade or fair trade in this article, if in any."

THE WEEPING BIRCH.

W have lately noticed, says a contemporary, how some trees have suffered in the very hot weather, especially in the London parks, and it is a pleasure to see the way in which the birch adds to its tiny shoots in the fiercest heat, and always looks as fresh as in May. The white (Betula alba) is, either in leaf or leafless, a handsome and graceful tree, and it is no less remarkable for its lightness and elegance than for its hardiness. It stands in no need of protection from other trees in no stage of its growth, and lives on the bleak mountain side and other exposed situations, which even the sturdy oak would shrink. It is a fast-growing, and rather short-lived tree, in favorable situations sometimes attaining a height of 80 feet, but generally not exceeding 30 feet or 40 feet.

Wrought Iron Shanty Cook Stoves

The Best Article Ever Offered to the Trade.

I have much pleasure in drawing attention to my **WROUGHT IRON COOKING STOVE, for Shanty, Hotel and Boarding House use.** These stoves are made of **Heavy Sheet Iron,** the top and lining of the fire-box being of **Heavy Cast Metal** and all the connecting parts of substantial **Wrought Iron Work.** The dimensions of these Stoves are as follows:

SINGLE OVEN STOVE

Top surface contains six 10-inch holes, with ample room between, and one oven 28 x 24 x 19. Fire box takes 28-inch wood.

DOUBLE OVEN STOVE

The Double Oven has a top surface containing twelve 10-inch pot holes, with two ovens, each 28 x 24 x 19. One fire-box of suitable size for area to be heated. Below will be found Testimonials from some of the leading Lumbermen, who have used my **Wrought Iron Cook Stoves** since I commenced manufacturing them. They are the names of gentlemen who are well known and reliable, and will carry more weight than any recommendation of my own could do.

The Best Stove I have ever Used.

Peterborough, May 31, 1880.

Adam Hall, Esq., Peterborough. Dear Sir,—I have used your Wrought Iron Cooking Stove in our lumbering operations since its introduction here, and have no hesitation in saying that I prefer it to any other. For durability, economy and efficiency, where a large number of men are employed, it is the best stove I have ever used. You can, with confidence, offer it to hotels, boarding houses and lumbermen.

Yours truly, THOS. GEO. HAZLITT.

The Stove for Lumbermen.

Peterborough, June 1st 1880.

Adam Hall, Esq., Peterborough. My Dear Sir,—We have used your Wrought Iron Cooking Stove and find it is very satisfactory for lumber operations, especially so on drives. We can recommend it highly.

Yours truly, J M. IRWIN

In addition to the above I can refer you to the following lumber firms who use my Wrought Iron Range exclusively in their camps:—

THE GEORGIAN BAY LUMBER CO.....Waubaushene
THE LONGFORD LUMBER CO.....Longford Mills
MESSRS. GILMOUR & CO.....Trenton and Ottawa
MESSRS. RATHBUN & CO.....Deseronto
THE MUSKOKA LUMBER CO.....Gravenhurst

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All the necessary TINWARE and CUTLERY for Shanties Supplied at the Lowest Prices.

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It may not be out of place to mention a number of purposes to which the wood and bark of the tree are applied. Bread of birch bark from Lapland, made as long ago as 1867 shows one of the very many uses to which birch bark is or may be put. Shoes made of strips of bark, used by the peasants of Northern Sweden when at work in their distant meadow swamp; neat baskets in which they sell wild wild raspberries; and a specimen of the well known Alphorn from Switzerland, by no means exhaust the enumeration of articles illustrating birch bark at Kew. It is a valuable tanning agent, and an oil obtained from it is largely used in the preparation of Russian leather; indeed, it is to this oil that the peculiar fragrance of that article is due. Formerly the highlander used the outerlayers for lighting purposes, and, before the invention of paper, the inner ones for writing upon. The sap is convertible into wine, vinegar and spirit; when fresh it form an agreeable beverage, and an intoxicating liquor when fermented. The wood is esteemed for light turnery work, and is at the present time largely employed in the manufacture of spools or cotton-reels.—*Gardening Illustrated.*

WOOD-WORKING PATENTS.

The following list of patents relating to the wood-working interests, granted by the United States Patent Office, December 15th, 1885, is specially reported by Franklyn H. Hough, solicitor of American and Foreign patents, 925 F. Street, N. W., Washington, D. C.

332,241—Lumber drier—O. A. Duke, Clanton, Ala.

332,273—Saw guide—P. Miller, Norwich, Conn.

332,365—Saw mill, band—S. Stephens, Indianapolis, Ind.

332,691—Saw mill, circular—H. Wright, New Lisbon, Ohio.

332,611—Saw mill, portable—H. Wright, New Lisbon, Ohio.

332,611—Saw sharpening machine—D. W. Johns, New Albany, Ind.

332,291.—Sawing machine, scroll—A. D. Goodell, Millers Falls, Mass.

PATENTS ISSUED DEC. 22.

332,817—Lathe attachment—W. Middleditch, Detroit, Mich.

332,806—Lathe tool holder—C. H. Kelley, Somerville, Mass.

333,016—Lathe, turning—O. Kromer, Sandusky, Ohio.

332,991—Lumber drying Platen—N. S. Bouton, Hyde Park, Ill.

332,864—Measure, lumber—E. N. Barber, Kent, Ohio.

332,714—Saw mill, circular—R. B. Holt, Guthrie, Ky.

333,092.—Saws, device for filing and jointing circular—A. Winkler, Oneonta, N. Y.

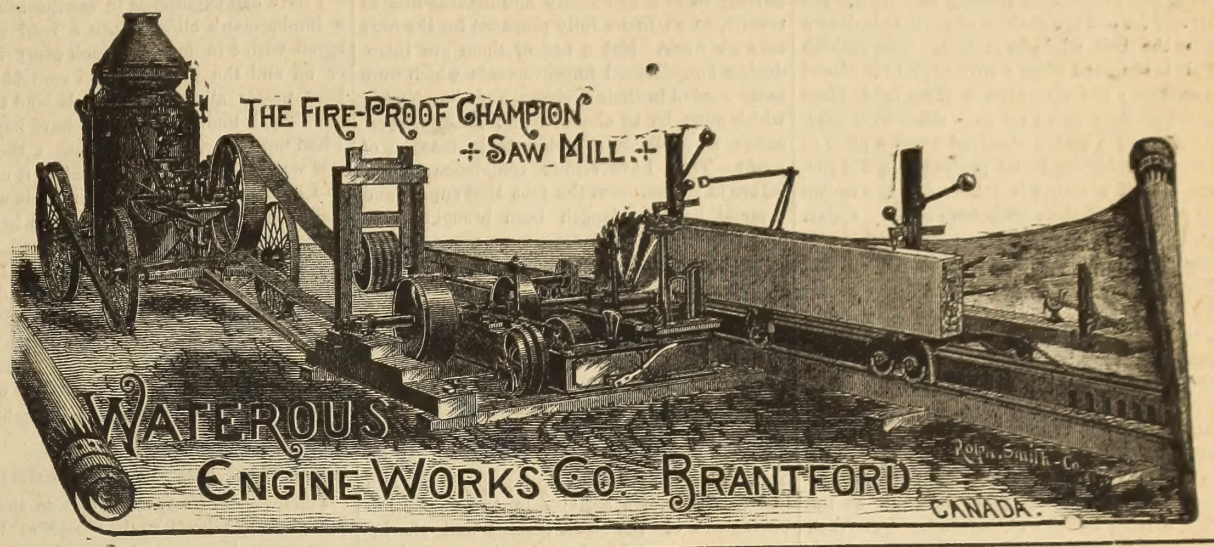
Shafting.

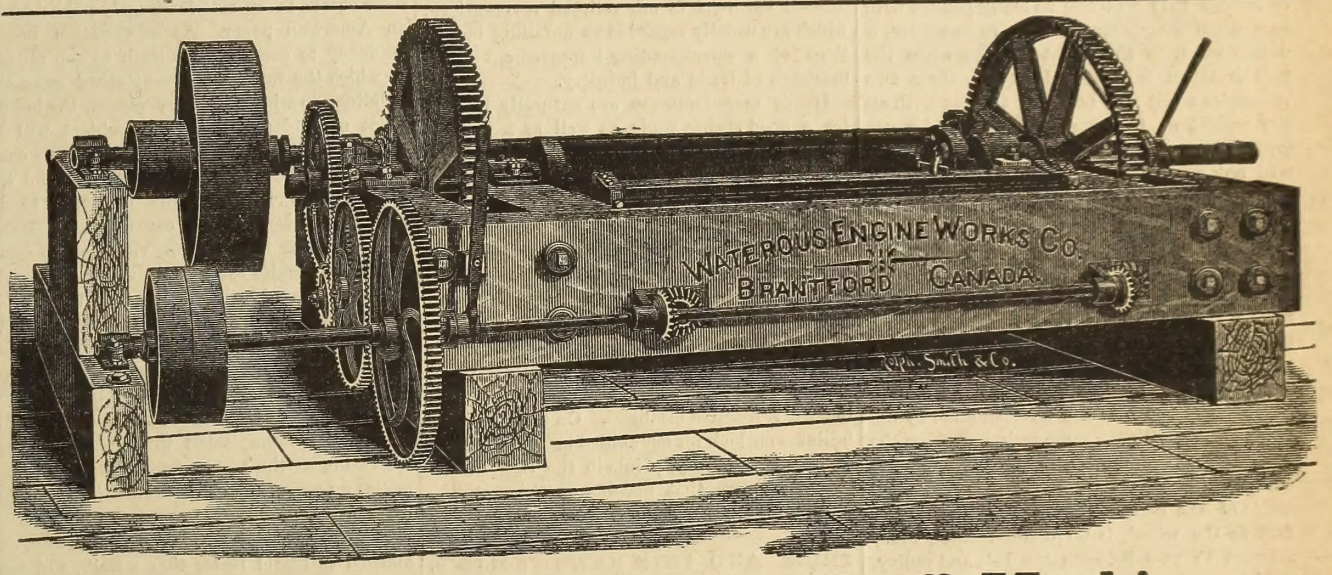
A firm which makes a speciality of the erection of shafting, states that its experience teaches that the loss of power due to improper conditions in the line shafting amounts to 50 per cent of the engine power employed, and that the defects most commonly found are as follows:—Shafting too light for the duty, crooked shafting, hangers too far apart, hanger bearings too short, pulleys too heavy and not properly balanced, hangers which are not adjustable and not self-adjusting and sometimes filled with spurious Babbitt metal, and improper proportion between two pulleys connected by the same belt.

Southwestern Lumber Pool.

In April last the railroads centreing in Chicago formed a pool on lumber, the provisions of which shut out the Kansas City markets and left the Nebraska markets open for competition. The arrangement was not so satisfactory to the Chicago road as was expected, for the Northwestern dealers floated their logs down the Mississippi to various points, where they were cut into lumber, and from these places the Burlington and Rock Island carried the lumber to market. It is estimated that Chicago lost 20 per cent of its Missouri lumber business by this arrangement.—*Lumber Trade Journal.*

PORTABLE AND STATIONARY
SAW-MILLS AND SAW-MILL MACHINERY





Cheese Box and Basket Stuff Machine

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Waterous Engine Works Co., Brantford and Winnipeg

The Clyde Shipbuilding Trade.

During the past month 13,480 tons of new shipping was launched from the Clyde shipyards, compared with about the same quantity in November 1884, and 43,700 tons in the same month of 1883. The aggregate tonnage placed in the water in the course of the eleven months has been 171,084, being 91,838 tons below that of 1883, and no less than 198,600 tons short of the tonnage launched in the corresponding period of 1883. It is gratifying to notice that upwards of 30,000 tons of new contracts have been placed in the past month; but even with this very important addition to present orders, some of the yards remain practically empty, and a number of others are but scantily supplied with work. First-class steel screw steamers are constructed at £27 a ton; ditto, iron, £26 15s.; second-class screws, £22; cargo-carrying iron screws, £10 15s.; first-class iron sailing vessels, £11 7s. 6d.; second ditto, £11 2s. 6d.; third ditto, £9 15s.—*Ironmonger.*

Mrs. Barnhart, corner Pratt and Broadway has been a sufferer for twelve years through rheumatism, and has tried every remedy she could hear of, but received no benefit until she tried Dr. Thomas' Eclectric Oil; she says she cannot express the satisfaction she feels at having her pain entirely removed and her rheumatism cured. There are base imitations of this medicine for sale; see that you get Dr. Thomas' Eclectric Oil.

NORMAN'S
ELECTRIC BELT
INSTITUTION.

ESTABLISHED 1874.

These Electro-Curative Belts, Insoles and Trusses are

SUPERIOR TO ANY OTHER REMEDY.

And will Cure when all other remedies fail.

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CONSTIPATION

Is entirely overcome by using NORMAN'S ELECTRIC BELTS. No injury can result, and they are pleasant to wear. Try one and be cured. Guaranteed genuine. Circular and consultation free. A. Norman, 4 Queen Street East, Toronto.

PETERBOROUGH, 29th September, 1884.

This is to certify that I have used one of Norman's Electric Shoulder Braces for my boy 7 years of age, for Spinal Curviture, with very beneficial results.

JONAS H. PASHLEY.

For Sale by J. D. TULLY, Agent for Peterborough.

SNOW DRIFT
BAKING POWDER
The Peoples' Favorite.

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Health is Wealth

DR. E. C. WEST'S NERVE AND BRAIN TREATMENT, guaranteed specific for Hysteria, Dizziness, Convulsions, Fits, Nervous Neuralgia, Headache, Nervous Prostration caused by the use of alcohol or tobacco, Wakefulness, Mental Depression, Softening of the Brain resulting in Insanity and leading to misery-decay and death, Premature Old Age. One box will cure recent cases. Each box contains one month's treatment. One dollar a box, or six boxes for five dollars; sent by mail prepaid on receipt of price. We guarantee six boxes to cure any case. With each order received by us for six boxes, accompanied with five dollars, we will send the purchaser our written guarantee to refund the money if the treatment does not effect a cure. Guarantees issued only by J. D. TULLY Druggist, Sole Agent for Peterborough.

THE ADHESION OF A BELT.

Air and atmospheric pressure must have quite an influence on the driving capacity of a belt if a pulley must be turned perfectly true and left smooth for no other purpose than to allow the pressure of the atmosphere to hold the belt on the face of the wheel with all the crushing force of vacuum, but this idea doesn't seem to agree with the practice of cutting holes, or stripping up the belt to make air spacing to ventilate the belt and let out the cushion of air that is drawn under the belt while in motion. This cushion of air is observed when a surface plate is placed on another; the air between them holds them apart and they move on each other with ease. The cling of a belt is observed when a piece of leather is moistened and pressed on a flat sur face, and if a string is attached in the centre the pressure of the atmosphere is made appar. ent, but it is doubtful if any such manifestations of aerial lubrication, or vacuummental adherence are to be seen with a driving belt. The surface plates that have such a treacherous movement while there is a thin layer of air between them, assume a different attitude when one of the plates is slid on to the other while in contact. The air is driven off from each plate by the other. The belt when at work meets the pulley, not by coming in contact with the whole arc of the wheel at once, but by rolling over its surface from one end to the other, driving out the air before it. The disk of leather that will rise so many pounds with ease when attachment is made in its centre, is drawn off with the slightest force when the pull is taken from its edges. On these two principles a belt can be made to cling with all the weight of the atmosphere, or held apart with an air cushion that the greatest tension will not expel, but these two elements cannot work together. If an inclosure is about to explode there is not much danger of a collapse. The air that is drawn under a belt is no doubt seeking for a means of escape so long as the layer is compressed, but when extended the reverse takes place and the influence of the atmosphereic pressure becomes known. To follow these elements through one turn of the belt it will be easily seen that along the driving stretch both sides of the belt are affected alike by the air and meets with the same resistence from the atmosphere, but when it comes in contact with the driving wheel, tht layer of air on the nside of the belt, which is moving nearly as fast as the wheel, is no doubt making every attempt to pass between the belt and pulley, but has only its inertia and surface friction for assistance with the tension of the belt to work against. The belt in passing from the tight to the slack side is relieved of a portion of its tension and is not inclined to lie as closely to the face of the wheel as it did at the beginning of the arc of contact, which must now feel the effects of the atmosphere, as there is a tendency for the air to find its way beneath the belt to fill the space that had become partially rarefied. A smooth-faced wheel has all advantages of coming in contact with the belt without entrapping a layer of air in every imperfection on the surface, and if there are any benefits to be derived from the atmosphere by resting with its whole weight on the outer surface of the belt it has the liberty to do so, but from experiments with belting under pressure, and in a vacuum, it is evident that not the difference that is shown by the surface plates or seen with the disk of leather, is manifested in the adhension of a belt.—*Boston Journal of Commerce.*

THE MANUFACTURING SITUATION

The general manufacturing situation is what might naturally be expected toward the close of the year, although in many respects it is an improvement on the condition of things a year ago. Most manufacturers, in view of the fact that prices of their goods were close down to the cost of production, have pursued a very cautious and conservative policy during the last twelve months, not only in studying the economies of their business, but also in avoiding any large and unwieldy accumulations. Hence their stocks are now in better shape than for many years past, and they are not under the necessity of forcing immediate sales, or of resorting to the loan market, in order to bridge over to the new year. Of course there is a little tendency to an accumulation in some lines of fabrics, as is always the case at this season; but it is so slight, and the demand from the trade for the spring business is so near at hand that it has no weakening effect upon the views of holders.

Many millowners are taking advantage of this dull, between-seasons period, in the way of putting in new machinery and making needed repairs, so as to be fully prepared for the next season's work. Not a few of them are introducing long-delayed improvements which were sadly needed in their business, and the effect of which must be to cheapen and facilitate processes as well as to widen their margin of profit. They have strong confidence in the future of values, from the fact that supply and demand have at length been brought to an equilibrium and that consumers are generally in better condition than for many years past. The large cotton, corn and hog crops give them assurance that our agricultural population will be able to take and pay for more than an average supply of manufactured goods.

They are also encouraged by the fact that but few goods will be carried over be the distributors, and that buyers will be early in the market to supply their immediate wants. Moreover, they see signs of returning confidence and increased business activity in the steady improvement of the stock market and the increased earnings of our railroad corporations, which are usually regarded as unfailing indications of a corresponding improvement in all branches of trade and industry.

Hence manufacturers are naturally looking for a good spring trade, as well as a gradual advance in prices of their products to a fairly remunerative point. Yet they do not propose to abandon their cautious policy, or to pile up goods in anticipation of the demand for them. Just now they are in the attitude of watching and waiting, watching the signs of the times as a basis for future business calculations, and waiting for orders for goods from early buyers, some of whom, from remote points of distribution, have already made their appearance, and bring favorable reports of the trade prospects in their respective localities. On the whole the business outlook for our skilled industries, if not entirely satisfactory, points in the right direction, and shows that matters on the mending hand.—*Manufacturers' Gazette.*

THICK AND THIN SAWS—SOLID v. INSERTED TEETH.

"F.McG" contributes the following remarks to an American contemporary:—

I have had experience with saws for the past ten years, saws thick and thin, with both solid and inserted teeth, and have learned that the first and most important point to attend to is to have the saw adapted to the mill. In fact the mill has as much to do with making the saw work successfully as the saw has with making the mill a good one.

With a large, solid mill, with ample and steady power, a thin saw can be run with excellent results. The teeth should be regulated by the amount of feed to be used to the revolution, with more teeth than would be necessary for a thicker one; but for a light mill, in which the power is apt to be unsteady, with slow feed, the saw should be thicker, with less teeth and hammered stiffer, and in every case the maker should know just what kind of a mill he is making the saw for, whether heavy or light power is required, and what the speed of mandrel and the feed is to be. Then if the mill is in proper shape, and the maker understande his business, the saw will give satisfaction

The mill is often to blame. A poor mill will spoil a good saw very quickly, and then the blame is too frequently laid to the saw.

My experience is that each tooth should cut away one-sixteenth of an inch of timber to work easily. I believe that a tooth will cut one-sixteenth just as easily as, if not easier than, it would cut half of it.

With regard to solid and inserted tooth saws, the latter surely have the advantage. Still I am a friend to a solid tooth when it is in good order, bnt it is hard to keep the teeth regular and in proper shape and, as it is worn away, the strain of the saw is being changed, which makes it necessary to have it hammered quite often. If an accident happens to a saw, if it has solid teeth, the operator has to go to work and modify the whole saw as well as the teeth that have been damaged, but if it has inserted teeth he probably puts in new teeth, increasing the size of his saw rather than making it less.

I have had experience in sawing iron. I ran a lumberman's clipper into a road spike full speed with 3 in. feed. It took every tooth out or off and the plate came in contact next; it bent nearly all the shoulders behind the teeth, and I don't know what would have happened if I had not reversed the carriage. I thought my saw was ruined, but I hammered it up as well as I knew how and on starting it it worked as well as, if not better, than ever. I have got in several other scrapes almost as bad with the same saw, and yet it is just as good and big now as ever. If it had bean a solid-toothed saw it would have been worn and torn all to pieces. The inserted tooth, without doubt, runs easiest, as the tooth can be made sharper or more pointed, so as to cut into the wood like a chisel instead of scraping or scratching their way.

ROTATION SPEED OF MACHINERY.

The method of arranging this so that it will not produce vibrations has been explained to some extent in an article recently published in an American paper. As a vibration has a tendency to communicate itself to the objects to which the machines are attached or to the buildings in which they are placed, the importance of understanding this subject will be apparent. Whenever such vibrations are communicated there is a loss of power, and the quality of the work done is liable to be reduced. A few common cases of the methods of preventing injury from vibration to other structures besides the mill in which the machines are placed will make this the better understood. Railway trains are required to stop before going under the bridges built across large streams. By this means the vibrating motion that is often apparent in a train moving at full speed, is allowed to cease, otherwise it would be communicated to the bridge, and, increasing as the train proceeds onward, commence a process that must eventually terminate in its destruction.

It is for the same purpose that teams are not allowed to travel faster than a walk, and that soldiers maching in a body must break their ranks when crossing long bridges. Whenever two or more steam-engines, or any number of machines that have their power applied, in part at least, by means of a reciprocating motion, are located in the same building, their tendency to communicate vibrating motions to it may be counteracted by giving them rotation speeds that vary so that they cannot keep step. The principle by which this could be accomplished was fairly presented in the article referred to, but the mechanical calculation or the purpose of applying it practically in arranging their speed under different conditions was hardly made plain. Take, for illustration, the first example: "Thus 96 and 100 would not do, for each is equally divisible 4, and two would come together on a stroke every 96x100 divided by 4 =2,400 turns." This is one of the processes for obtaining the least common multiple of the two numbers that represent their rotation speeds. But one travels faster than the other, and it cannot give the correct answer. Where two or more engines or machines are in use, and running at different speeds, the number of turns each will make from the time they start together on a stroke till they come together again may be ascertained by dividing the rotation speed of each by their greatest common divisor. In this way the 96 divided by 4 and the 100 by 4 gives 24 and 25 turns respectively. Where the engines or machines have rotation speeds which are "prime" to each other, that is neither of which are evenly divisible by any part of the other, they will when started on a stroke come together as often as each completes the number of strokes that represents its rotation speed, or with that at 99 and 100 they will come together when each has completed 99 and 100 turns respectively.

In arranging for the number of cogs in the cast gearing so commonly used for transmitting power, a factor should be taken into the account that bears some relation to the principle of running machines at different rotation speeds for the purpose of preventing the vibration that might result from allowing them to keep step.

That is the desirability of making their numbers "prime" to each other, whenever that is practicable, for the purpose of securing greater uniformity in the wearing away of the faces of the cogs, and of transmitting a steadier motion to the machinery driven. The relative speeds of wheels geared together are in proportion to the diameters to their pitch circles, and the calculations in regard to them are made from the number of their cogs. The common multiple of these, or the least common multiple, if they are not "prime," gives the number in each that will pass a given point between the time that two certain cogs starting together will come together again, and not the number of turns. That is ascertained for each wheel by dividing this result by the number of cogs. In the case given where one wheel has 288 and the other 256 cogs; the 288x256 divided by 32= 2,304, the least common multiple. Dividing this by the number of cogs in each gives eight and nine turns respectively. Where these numbers are used, each cog in the large wheel engages with eight in the small one, and each in the small one with nine in the large wheel, and these eight and nine cogs come together in some way at every turn, and never engage with any of the other cogs in either wheel. Where their numbers are "prime," like 99 and 100, 38 and 75, or 287 and 288, each cog in one wheel will engage with every cog in the other before it will come around to the one from which it started, and the number of turns made by each wheel in doing it will be equal to the number of cogs in the other. By applying the same principle the number of turns each of three wheels geared together will make from the time they start together till they come together again may be ascertained. Take, for example, three wheels having 99, 100 and 101 cogs. Multiplying these numbets together, and dividing their product by the number in each wheel, gives 10,100, 9.999, and 9,900 for the number of turns each will make.

Unless we can make our technical education capable of practical application, we might as as well continue to do our work by the old rule of "thumb."—*Timber Trades Journal.*

Lloyd's.

Application is intended to be made by the corporation of Lloyd's in the ensuing session of Parliament for an Act to extend and enlarge their powers as regards the "collection, publication, and diffusion of intelligence," and to provide that the publication and diffusion of any such intelligence shall be deemed to be a privileged communication from them. By other clauses power will be sought for to authorize them to establish signal stations and to erect signal houses, with all requiste telegraph and telephone wires, appurtenances, &c., "at such places on the coast of Great Britain and Ireland and the islands appertaining or belonging thereto as they shall think fit, and to maintain and work the same," such powers, however, together with the taking of lands or houses for the purpose, to exercised only with the approval of the Board of Trade.

How to Test Leather Belting.

We believe a considerable quantity of so-called "cheap" German belting is sent into this country and sold under various names. As regards testing leather belting the best test, of course, is that of wear, but to find out if it has been properly tanned the following method is recommended by M. Eitner:—Cut a small piece of leather out of the belt and put it in vinegar. If the leather has been perfectly tanned, and is therefore of good quality, it will remain immersed in the vinegar, even for several months, without any other change than becoming of a little darker colour. If, on the contrary, it is not well impregnated with tannin, the fibres will promptly swell, and after a short time become converted into a gelatinous mass.—*Timber Trades Journal.*

REVIEW OF THE LUMBER TRADE DURING THE PAST SEASON.

The Quebec *Chronicle* says :—Another shipping season is over and another winter has closed in upon us, and we may now offer a few supplementary remarks as we have gleaned them from manufacturers of square timber, merchants, mill-owners and others. To but few of these, as far as we can gather, has the season been a satisfactory one. Trade in England of every description has been very much depressed, and sales of timber during the past year have been very difficult to make and the prices obtained very meagre. Morever, timber manufacturers on this side held their rafts for full prices, so that sales of square and waney white pine were not frequent, and only for immediate wants. Square pine—with the exception of a few early rafts of new timber, which brought good prices, selling at much the same figure as last year, and large first-class waney a little higher. Most of the stock of pine is still in first hands. Hardwoods have been very dull of sale. In oak there has been but very few sales, and at lower prices than last season; the shipments of oak plank from United States ports on terms with which Quebec cannot compete has greatly damaged the prospects of this wood n our market. The production of square timber last winter was very much larger than anticipated at this time last year and was quite unwarranted by the reports from the various markets. Deals have been in good demand in Great Britain, and most of the mill-owners on this side managed to dispose of their produce at full prices to the shipping merchants. A larger quantity than usual came from Michigan and were shipped at this port and in Montreal. A very large quantity of deals are now shipped from Montreal, most of which should be shipped from this port, and we learn that even some birch timber and walnut were this year sent to Montreal by barge to be there loaded in a steamer, instead of being placed on board here as she passed outwards, owing to the fact that the Ship Laborers will not allow the steamers to use their steam winches to take such timber over the side. It is to be hoped that the outcome of the recent conference at the Board of Trade rooms will be the doing away of some of there regulations which tend towards the avoidance of this port and the aggrandizement of others at our expense. On the whole the season has been a very dull and unsatisfactory one, and we learn that since the close of navigation the accounts from Great Britain have been worse than before and a very dull time is looked for in the trade. This should have due weight with manufacturers both of timber and deals and prevent the blocking of the markets by over-production, which can only result in anxiety and loss to themselves.

FREIGHTS.

As compared with last year there has been a slight increase of tonnage at this port.

SAILING VESSELS.

1884.....499 vessels		380,147 tons
1885.....502 "		382,826 "
More this year.... 3		2,679 "

OCEAN STEAMERS.

1884.....238 steamers		427,834 tons
1885.....242 "		446,522 "
More this year.... 4		17,688 "

Rates of freight have been about on a par with last year, ruling rather lower towards the latter part of the season, and have been anything but satisfactory to ship-owners, and even at these rates masters had some difficulty to find cargoes when they came out seeking. A large quantity of deals were shipped in Montreal not only by the regular liners but by outside steamers which the scarcity of produce at that port forced into the deal-carrying trade.

The following is a statement of prices current during the season :—

May.	*Timber*	*Deals.*
Liverpool.....20s.	22s. 6d.	22s.
Montreal to River Platte		$13 p m ft. B. M.
Steam :—London.....		50s.
Montreal to Glasgow....		45s.
" Liverpool..		47s. 6d.
" Lon n....		50s.

June.		
London.....20s.,	22s. 6d.	50s. 52s. 6d
Liverpool.....20s.,	20s. 6d.	
Bristol.....		52s. 6d.
Greenock.....17s. 6d., 18s.,	18s., 18s. 6d.	
Cork 20s. 6d.,	21s.	52s. 6d., 52s.
Montreal to east coast range of ports.....		55s.
Steam :—Pierreville to London.....		50s.
Montreal to Liverpool.		50s.
July.		
Clyde.....18s. 6d.		
Fleetwood.....20s.		
Liverpool.....21s.		
Cardiff .....20s.		52s. 6d.
Belfast .....22s.		
Bristol ....21s.		
London 24s. 6d.,	22s.	47s. 6d., 52s. 6d., 50s.
Montreal to East Coast		52s. 6d.
" Liverpool..		50s.
Steam :— Montreal to Liverpool		50s.
Montreal to London...		50s., 51s.
Quebec to Bristol.....		50s.
August.		
Liverpool 21s. 6d.,	22s.	
Greenock .....23s. 20s.		
Newport .....20s.		50s.
Dublin.....22s.		52s. 6d.
London..... .....21s.		45s.
Montreal to River Platte.....		$13 p m ft. B. M.
Steam:— Quebec or Montreal to Liverpool.....		50s.
Quebec or Montreal to Bristol.....		50s.
Quebec or Montreal to London		45s., 47s. 6d.
Quebec to Sharpness Point		50s.
September.		
Cork... .....22s. 6d.		52s. 6d.
Belfast.....23s.		52s. 6d.
Leith.....21s.		52s. 6d.
London.....21s.,	21s. 6d,	45s. 47s.
Liverpool.....21s.		45s.
Greenock.....17s. 6d.,	16s. 9d. 17s.	
Dublin.....20s.		50s.
Cardiff .....17s.		50s. (longitudinals.)
Montreal to River Platte.....		$12.50 p m ft. B. M.
" Buenos Ayres		$12 p. m. ft. B. M.
Steam :—Montreal to Glasgow.....		45s.
October.		
London.....20s.		45s., 46s., 47s.
Swansea.....20s.		50s.
Liverpool.....18s.		
Greenock 16s. 6d.,	17s.	
Newport .....19s.		50s.
Bristol.....19s.		50s. (longitudinals.)
Belfast.....,...18s.		
Cardiff		50s. (longitudinals.)
Montreal to River Platte ...		$11 p m ft. B. M.
" Buenos Ayres		$12 p m ft. B. M.
Steam :— Montreal to London.....		50s.
November.		
Steam :— Montreal to Liverpool...		60s.
Montreal to London		55s., 57s. 6d.

A NASAL INJECTOR free with each bottle of Shiloh's Catarrh Remedy. Price 50 cents For sale by Ormond & Walsh druggists Peterborough

WEST'S WORLD'S WONDER or family liniment has proved to be one of the greatest blessings of the age. It is a never failing remedy for rheumatism, cuts, sprains and bruises. Call on J D. Tully f or a trial bott e and you will use no other

Advice to Mothers.

Are you disturbed at night and broken of your rest by a sick child suffering and crying with pain and cutting teeth? If so, send at once and get a bottle of Mrs. Winslow's Soothing Syrup for children teething. Its value is incalculable It will relieve the poor little sufferer immediately. Depend upon it, mothers, there is no mistake about it. It cures dysentery and diarrhoea, regulates the stomach and bowels, cures wind, colic, softens the gums, reduces inflammation and gives tone and energy to the whole system Mrs. Winslow s Soothing Syrup for children teething is pleasant to the taste, and is the perscription of one of the oldest and best female nurses and physicians in the United States, and is for sale by all druggists throughout the world Price 25 cents a bottle.

MIRIMACHI SHIPMENTS.

Mirimachi shipments of lumber abroad for the year ended 4ft December, 1885, verify the predictions of last year in showing a decided falling off. The shipments for the five years before averaged 131,4fi0,000 s. f. per year. They were as follows :—1880, 155,000,000 super. feet; 1581, 128,000,000 ditto and for the three following years 117, 149, 108 million respectively, while there were this year only 87 million feet. The timber shipments of this season have been rather larger than those of last year, the totals being, 1884, 3 974 tons, and in 1885, 4,944 tons. Palings to the number of 3,207,444; 71,900 broom handles, 720 shovel shafts and 12 bundles of shingles were shipped. According to the *Advance*, the deals ends, scantling and boards went to the following countries :—

	Sup. Feet.
Great Britain	47,239,692
Ireland	24,984,538
France.....	10 223,213
Australia.....	1,534 672
Africa.....	2,262,198
Italy.....	1,005,715
Total.....	87,250,028

Geo. McLeod and J. B. Snowball are the largest shippers this year, Stewart & Ritchie's firms coming next.—*Monetary Times.*

THE estimated cut for the year of the Eau Claire, Wis., mills is 228,550,000 feet of lumber and about 130,000,000 shingles, the smallest utput since 1881.

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TIMBER LIMITS & SAW MILL

THE MASKINONGE LUMBER COMPANY offer for sale their property consisting of Saw Mill at Maskinonge Bridge, P. Q., within quarter mile of N. S. Ry. Station, also good facilities for shipping by water. Capacity of Mill 50,000 feet per day, water and steam power; saws and belting all complete. Two hundred and forty square miles of limits situated about thirty miles from Mill, which are interseeted by a number of good driving streams, and are rich in Pine, Spruce, Cedar, etc. Satisfactory reasons for selling out.
For further particulars appiy to

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Notice to Contractors.

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for Public Buildings at Peterborough, Ont," will be received until TUESDAY, the 20th day of January next, inclusive for the erection of Public Buildings, for

THE POST OFFICE,
AND
THE CUSTOMS & INLAND REVENUE OFFICES
AT PETERBOROUGH, ONT.

Plans and specifications can be seen at the Department of Public Works, Ottawa, and at the office of J. E. Belcher, Architect, Peterborough, on and after FRIDAY, the 18th day of December next.
Persons tendering are notified that tenders will not be considered unless made on the printed forms supplied and signed with their actual signatures. Tender for each building to be separate, and forms will be supplied for each.
Each tender must be accompanied by *accepted* bank cheque, made payable to the order of the Honourable the Minister of Public Works, *equal to five per cent* of the amount of the tender, which will be forfeited if the party decline to enter in a contract when called upon to do so, or if he fail to complete the work contracted for. If the tender be not accepted the cheque will be returned.
The Department does not bind itself to accept the lowest or any tender.

By order,
A. GOBIEL,
Secretary.
Department of Public Works, Ottawa, 7th December, 1885.
3w50

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Send 10 cents postage, and we will mail you *free* a royal, valuable, sample box of goods that will put you in the way of making *more money* at once, than anything else in America. Both sexes of all ages can live at home and work in spare time, or all the time. Capital not required. We will start you. Immense pay for sure for those who start at once. STINSON & Co., Portland, Maine.

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THE SUBSCRIBER WILL SELL HIS TIMBER LIMITS and Saw Mill property, at Cowichan, British Columbia, and if purchased by a Company, will invest a large amount of price in shares.
The Limits are supposed to contain about two hundred millions superficial feet. (An estimate is now being made.)
The Timber is mostly Oregon Pine of an excellent quality. The average haul, only about half a mile to floatable water. The run thence to mill, 30 miles.
Full particulars furnished on application.

W. SUTTON
L20 Walkerton, Ont.

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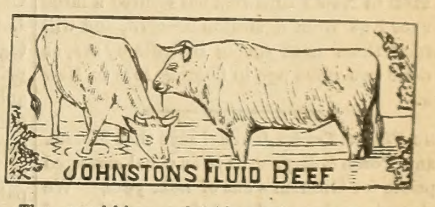

The nourishing, palatable and warmth giving qualities of Johnston's Fluid Beef has caused this invaluable preparation to before a favorite and fashionable beverage for the winter season. It is now obtainable on draught at the leading hotels and restaurants throughout the Dominion 1w7

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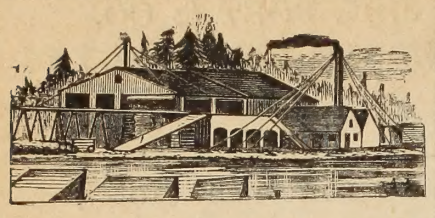

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Communications intended for insertion in the CANADA LUMBERMAN, must be accompanied by the name of the writer, not necessarily for publication, but as a guarantee of good faith. Communications to insure insertion (if accepted) in the following number, should be in the hands of the publishers a week before the date of the next issue.

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PETERBOROUGH, Ont., JAN. 1, 1886.

THE Rainy Lake Lumber Company, of Rat Portage, Ont., and Winnipeg, Man., have made an assignment.

THE schooner A. J. Ryan, laden with lumber from Toronto to Brockville, went ashore at Oak Point, during the snow storm recently. The lumber was shipped by the Rathbun Company.

A FIRM in New Brunswick has secured a large order for logs from a Boston concern, and will transport them next spring in rafts by sea, as was done two years ago in floating logs to New York.

THE *Timber Trades Journal* says that Messrs. Bryant, Powis & Bryant have as usual arranged the prices for Gilmour's cut of next year. We are given to understand that the quantities and specification of this celebrated pine stock will be about the same as last year.

AS a sample of the method of making money that has attended some of the pine lands traffic in Wisconsin and Michigan, a sale at Eau Claire is given. Thomas Carmichael paid $8,000 for a tract of 880 acres, four years ago, and has just sold it for $40,000.

YOUNG Canadians complain that this season, says the *Northwestern Lumberman*, they came over the line to work in the logging camps, expecting to get from $26 to $30 a month, as formerly, and are surprised to have but $16 to $20 offered, and must show a certificate of vaccination to boot.

BURNHAM & STILL'S mill, East Saginaw, Mich., together with 200,000 feet of lumber, was burned December 10th. The origin of the fire was supposed to be incendiary. The mill was valued at $22,000. The lumber was owned by different parties, and valued at $3,500. The mill was insured for $15,000.

MR. ANDREW ALLEN has been elected president of the Montreal Lumber Co., the annual meeting of which was held recently. Directors chosen for the ensuing year are:—Messrs. Andrew Allan, Hugh A. Allan, Andrew A. Allan, C. D. Brydges, Jackson Rae, John Molson and Mr. Morris.

A CLOSE estimate of the lumber on the docks about Muskegon Lake places the total amount on the docks at from 92,000,000 to 100,000,000 feet. This estimate is from reliable sources and can be relied upon, as the situation on December 1st, 1885.

THE schooner Joseph Souther, at New York from Satilla, reports that on December 6th she passed a wreck with two topmasts out of water, heels up, and hanging by rigging. Soon after they passed considerable wreckage, deals, planks, etce., which leads to the belief that a lumber-laden vessel has been totally wrecked.

THE output of the Chaudiere mills, near Ottawa, Ont., this season, was 227,000,000 feet. Good lumber has sold well, but coarse has been slow to move. The season's trade has, on the whole, been considered good. Small and coarse logs, once left in the woods, to feed forest fires, are now taking to the mills for sawing.

THE newspapers of Winnipeg and the districts to the westward frequently mention what they term the building boom that is prevailing in numerous towns. The wheat crop of the Canadian Northwest begins to tell on the improvement of the country. It is likely that next spring it will be found that a large amount of lumber will be wanted along the Canadian Pacific and its branches.

HERE is something of interest to parties who are operating, or propose to operate, in the Spanish River district of Ontario. The Sable & Spanish Boom & Slide Company has applied to parliament for an act to confer on the company named the right to attach booms to the shores at the mouth of Spanish River, at points south and east of Rock Island, and to construct and maintain piers from a point or points on the north shore of the river, to the island, and from the island south and east to the main shore, and to use booms in connection therewith. Of course the company asks the right to collect tolls on logs and timber run through the works.—*Northwestern Lumberman.*

CONCERNING the failure of the Rainy Lake Lumber Company, of Rat Portage, Ont., a Canadian financial journal says:—"The Rainy Lake Lumber Company, limited, of Rat Portage and Winnipeg, is one of the many enterprises of great promise which began with the golden area of the Northwest, and drooped with the waning fortunes of the boom. The capital was $350,000, in 3,500 shares of 100 each, of which $312,000 was understood to have been paid up. Among the chief promoters were Messrs. J. Ross, C. P. R., contractor; L. J. Dawson, M. P.; W. J. Alloway, and Hugh Sutherland. During the boom the assets of the company were estimated rounnly at $1,000,000, and the local bank that knew them felt proud that they could boast of such a customer. Mr. Sutherland, who was the president, retired some time ago. The company had been endeavoring for some time past to issue bonds, but without much success, so that the recent assignment took no one by surprise. To add to their troubles their hands struck last June, as their wages were somewhat in arrear. The liabilities are in the vicinity of $200,000."

OUR TIMBER RESOURCES.

DISCUSSING the proposal to increase the duty on logs exported from Canada, the *Lumberman's Gazette* says:—

"There would not be much gained by the adoption of such a prohibitory tax, except that the timber resources of the Dominion would be preserved. If there is any danger of such a tax being imposed Michigan men will cease purchasing Canadian timber limits and they will remain on the hands of the Government totally unproductive. The limits which Michigan men are purchasing are in a portion of the Dominion which will not very soon be brought under settlement unless the lumbermen prepare the way, which they will not soon do if the matter be left to the development of the Canadian lumbermen."

The *Gazette* has not an adequate conception of the energy of the men engaged in the lumber business in Canada, or of the capital invested, or capable of being employed in that trade. If it were a fact that the timber limits purchased by the Americans would remain unproductive if not sold to them, it would still be worth considering whether it would not be better to allow them to remain unproductive, or unremunerative, far the present, than to allow American lumbermen to drain our resources, to the disadvantage of our own manufacturers, while the timber resources of their own country were preserved and held until their value would be enhanced by the stripping of our limits.

But the position of the custom rates present the question in another light. The Canadian export duty on logs is half of the American import duty on lumber, which gives the American manufacturer who purchases Canadian limits and conveys the logs across the lines to be manufactured an advantage over the manufacturer who turns the logs into lumber in Canada and exports the manufactured article. The question is not, therefore, whether the limits are to remain unremunerative for a time, and increase in value, or be sold to Americans, but whether the Canadian authorities will so arrange the export duty on logs as to place the home manufacturers in as good a position as the Americans so that in the competition for business they will not, by custom duties, be placed at a disadvantage. The opinion that the timber limits will not be utilized at all, unless by Americans, is absurd in the face of the amount of capital employed in the lumber business in Canada, but even if the limits would not be stripped as quickly if left to Canadians alone the country would receive additional immediate benefit by having the lumber manufactured here and the prospective advantage of the increased value of the standing timber.

The *Northwestern Lumberman* states that the stumpage is higher in Michigan than in Canada. This, if correct, would appear to neutralize the disadvantage of paying duty on lumber were the Michigan lumbermen to manufacture only the timber in their own state, but when they cut timber in Canada the stumpage is the same and when they carry the logs to Michigan and cut them there the duty is less.

This a question which should receive ample consideration and immediate attention, as it is not only the lumbermen themselves that are interested, but the whole country. As the lumbermen are primarily interested, however, they should take the initiative in endeavoring to have the disadvantage under which they are placed at present removed, either by increase of the export duty on logs or by some other means.

In this connection the result of the negotiations for reciprocity will be awaited with interest.

LUMBER AND TIMBER.

The outlook for sawn lumber is by no means unpromising. American advices show some good features. Building has been very active in American cities. Brooklyn, for example, has built 3,665 houses in eleven months of the present year against 3,050 in twelve months of last year. The tone of the Chicago market is firm and inquiry still frequent; but the abrupt closing of the season of navigation makes it nearly certain that the year's receipts will fall below those of last year. The *Northwestern Lumberman* predicts that values will remain steady till the February trade begins. Respecting the Saginaw Valley the same authority says: "This fall find the logs in the Au Sable which will be hung up in 'pickets' and 'jams' less than 15,000,000 feet. Last year there was hung up, when the season ended, over 80,000,000 feet. This, of course calls for a large cut of logs the coming winter. Besides a small amount of logs to commence on next season, the docks contain not over 45,000,000 or 50,000,000 feet of lumber, being over 20,000,000 less than last year."

Demand for white pine in New York continues good, both for local use and export. House-builders and furnishers there are very busy, and buy in large quantities. Prices for yellow pine are very low and the trade being done in that article is small compared to the total capacity of the market. Lumber stocks in Albany are fairly assorted, but are estimated at a fourth below that of last year. A prominent dealer of that city places the November distribution from that city at 20 per cent. over the same month of 1884. Dealers are feeling confident, prices are not only sustained but advancing. In Boston, too, according to advices second week of the present month, the increase in price is felt more perceptibly every day.

We hear from Ottawa that Gilmour & Co. have made definite arrangements for the disposal of the coming season's cut of their deals at satisfactory prices and we are told of one or two other mills which have arranged a basis with buyers for their whole "mill run." A topic of current conversation in lumber circles at the capital is the sale, now said to be about consummated, of the Levi Young estate to G. A. Grier, of Montreal, and R. A. & J. Stewart, of Newry, Ireland, and St. John and Miramichi, New Brunswick. The price mentioned is $600,000. Application for incorporation as a joint stock concern has been made in the proper quarter by Messrs. Bronson & Weston, well-known Ottawa mill men. It is stated, besides, that another long-established concern in the manufacture of wood goods will follow suit before long.

The timber market is at present comparatively stagnant; the season having closed, but little indication is given of present activity or enhanced prices. There is, however, in the minds of well-informed persons, a feeling that the spring will witness an improvement, This view is strengthened by the recent advance in the value of iron. The supply at Quebec is, besides, said to be distinctly less than in former seasons. Hardwood timber and lumber remain unchanged in price. The feeling is upward in maple, basswood and black ash, which are used for furniture making, but no change in price will be made till after the first of January proximo.—*Monetary Times.*

CUTTING PRICES.

Cutting of prices is a suicidal policy for all concerned; it never does any one any good, not even the purchaser, for he more than loses in the quality of the goods the small amount of cash that he is supposed to make on the purchase. Generally, however, the laborer that produces the goods is the first one to lose in this process. The manufacturer feels that he is obliged to lower his prices in order to compete with his rivals, and, as the cost of the goods is already as low as it possibly can be to allow any degree of profit, he find that the easiet way to come out whole is to reduce the wages of his workmen, and this is the process usually employed. The only safe plan is for our manufacturers to combine and arrange a basis of rates for goods, according to the cost of production, allowing a reasonable profit, and then to stick to it. This is the safe plan, but we are afraid it will be a long time before they can be made to realize the destructiveness of the present plan to all concerned sufficiently to abolish it.—*The Furniture Worker.*

Improved Machinery.

Never before were the wood workers and lumber manufacturers of New England more anxious to secure the latest improvements in wood-working machinery. Future profit in the manufacture of lumber must consist in the most intelligent working up of the odds and ends, in reducing the bulk of the sawdust heap and the slab pile, and in the employment of such machinery as shall show the minimum labor bill and the maximum quality manufactured. The saw mills of the East are far behind those of the West in economical appointments and in actual capacity for business. The successful woodworker of the future must keep abreast of the practical improvements of the day.

It is Simply Marvelous

Mrs. Theron Burr, of Adrian, Michigan, writes that West's World's Wonder or Family Liniment cured her daughter of Rheumatism which she had been afflicted with from childhood. It is infallible. Price 25 and 50 cents per bottle. And sold by J. D. Tully.

HARRIS, HEENAN & Co.

124 AND 126 QUEEN STREET, - - MONTREAL.

Patent Stitched–Steam Power Pressure Stretched–Oak Tanned

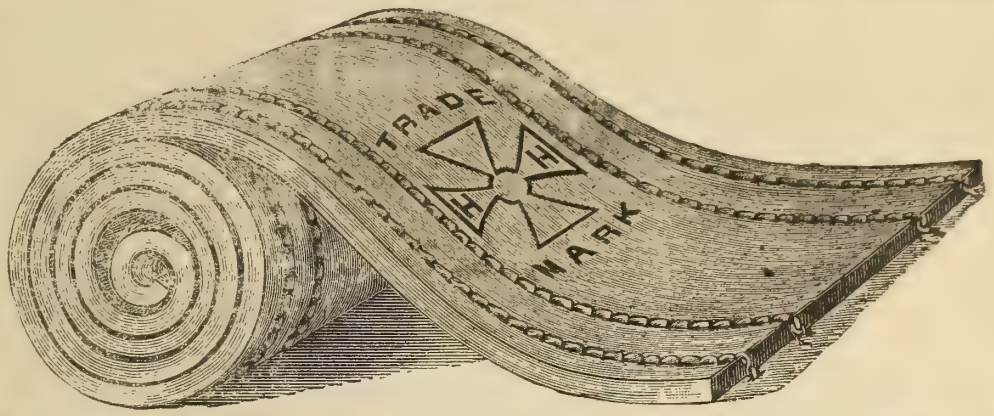
TESTIMONIAL

IRA GOULD & SONS, CITY MILLS, Nov. 13th, 1884.

Harris, Heenan & Co.

DEAR SIRS.—Your Patent Sewed Belt has been in use in our "City Mills" for some time. We are thoroughly convinced of its superiority over any belt, American or Canadian, we have used in an experience of over 35 years. It stretches so little, and gives so little trouble, that compared with riveted belting, the sewed belt saves double its price in time and laces saved. We heartily recommend it to manufacturers as the cheapest and most satisfactory belt in the market.

Yours respectfully,
W. C. MARSHALL,
Mills.



TESTIMONIAL.

PECK, BENNY & CO., CANAL HORSE SHOE AND NAIL WORKS, MONTREAL, 15th Nov. 1884.

Messrs. Harris, Heenan & Co., Montreal.

I have pleasure in recommending the belting manufactured by Messrs. Harris, Heenan & Co., of this city. After thoroughly testing it, I find it greatly superior to any belting that has come under my notice and fully equal to all they claim for it, and certainly without an equal for cross or double belting.

CHAS. R. ELLACOTT.
Supt. H. S. & H. N. Dept

LEATHER BELTING!

The Best, therefore the Cheapest, Belt in the market.
Replaces, when used, all others.
More Pliable and Durable, especially at the splices.
Stretches but little, always retains it original wid h.
Superior for Cross or Double Belts.
Runs sraight and true, does not start at the laps.
Single equals medium double.

25 per cent Stronger, 33$_1$ More Lasting, and 12$\frac{1}{3}$ Heavier, than any other Leather Belt.

TIMBER RESOURCES OF BRITISH COLUMBIA.

The extension of railways into wild and remote regions is the most practical way to develop their resources, whatever they may be. One country has a surplus of what another often very much requires, and the easy and rapid transit by railway enables commercial men and capitalists to visit places where the material they require, or the markets in which to sell, may be abundant. Lines of railways crossing over plains and mountains frequently save to the traveller thousands of miles, and reduce to the consumer the prices of commodities, that under other conditions would be very dear. In this moralizing the writer has before his mind the three or four great lines crossing the continent of America, the largest and most direct of them being the Canadian Pacific Railway, which traverses entirely British territory, and extends from the Atlantic to the Pacific ocean, a distance of 3,500 miles. In its course this great road cuts through many mighty forests, especially in the comparatively unknown timber country northwest of the noble Ottawa, and along the banks of the picturesque Rainy river, where our "only General" made his first reputation. The lumbering resources of this vast area are very great, and to some extent will doubtless before long be utilized; but compared with those further on in British Columbia they are almost insignificant. Unfortunately where there is an abundance of anything there is also a tendency to waste, and certainly that is the case with timber in all parts of Canada, more of it being burned and otherwise destroyed than reaches the market. England receives yearly from Germany, Sweden, Norway, and other European countries, large quantities of manufactured timber goods, which, with the cheap and easy transit there is now to the Atlantic coast, and then by rapid steamers to different points in the United Kingdom, might be readily supplied from the so-called waste of Canadian forests.

We are next summer to have in London a great Intercolonial Exhibition, and doubtless any idea calculated to increase the volume of trade between England and her dependencies will at this great gathering, from all who are interested, receive due consideration. Canada is keenly alive to every thought and circumstance likely to be to her interest, and this question of manufacturing the goods rather than sending the raw material, is one to which she will probably give some attention. It is, however, with the almost limitless forests of British Columbia and their giant timber, that in this article we chiefly intend to deal. The entire length of that salubrious, but comparatively unknown Province, is now traversed by the Canadian Pacific railway, which, from the fertile prairies of Manitoba and the Northwest, crosses the Rocky Mountains, and enters British Columbia on its eastern border, descending the western slope to Port Hardy, on the Pacific Ocean. The iron horse now screeches through British Columbia forests, the timber of which is the largest on the surface of the globe, logs frequently squaring 40 inches at the Port Moody Mills. The following extract is from a popular workon this lumber:—"It is a tough, strong wood, well adapted for heavy beams, but it is also good for planks and deals. It makes excellent masts and yards, and is used for shipbuilding and housebuilding. It grows to the height of from 150 to 250 feet, and attains to a thickness of six to nine feet, and carries its size well up. Dressed masts of from 36 to 45 inches in diameter, at one third from butt, and with proportions for the required length, have been supplied from the Douglas fir forests of British Columbia. In Australia, New Zealand and Great Britain, this timber is known as Oregon pine, though Oregon does not export it to those markets. At present the chief seat of its export is British Columbia and Puget Sound, on the opposite shore of the Gulf of Georgia and on the bays and indentation along the Straits of San Juan, which a few years ago were in dispute between England and the United States, but on the award of the present Emporer of Germany, then King oi Prussia, was given to the latter country. This magnificent timber is chiefly found on the outside or Pacific coast front of the western range of the Cascade Mountains, as it would seem to require for its growth the warm, moist and salubrious climate peculiar to the sea line of those mighty hills. The Douglas pine forests are now difficult to explore, but being tapped by the railway, together with the general advance of progress, will doubtless soon overcome that difficulty. The railway will carry the manufactured lumber to the east of the Rockies, where it is very much wanted by settlers, who are now rapidly filling up Manitoba and the vast plains of the Northwest. Hitherto the product of British Columbia could only be brought to the eastern markets of America or to Europe by ship, coming around Cape Horn, or through the straits in the extreme south of Magelan, but now the Canadian Pacific railway is a direct communication between the forests of the Pacific coast province and the Atlantic ports, as well as to all the markets of Canada and of the United States east of the Rocky Mountains. In the valley of the Fraser, the largest river in British Columbia, there are many kinds of timber, but up to the present, commercially, they were of little value, simply because there was no outlet except by ships to countries on the other side of the Pacific ocean or to Europe. Now, however, a deal of this timber, which consists of oak, ash, spruce, cedar and fir, will be taken by the railway to the Manitoba plains, where it is much wanted, and some of it may even reach Quebec for shipment to England. To anyone anxious to preserve the world's timber supply, how sad to see its rapid destruction, often wantonly, by squatters and others in those countries where it is now so abundant. The great thing is to clear the soil, and a settler who may take up land on which there may be heavy timber, will often get rid of it the following cruel but somewhat ingenious fashion: He will take a large auger, and bore two holes into the heart of the giant tree, one hole slanting up, the other down, and meeting inside in the great trunk. Then he will fill into the upper one small pieces of an inflammable substance and set fire to them. The tree will soon catch, and the lower auger hole, acting as a blast pipe, will cause the fire to hiss and roar in the body of the doomed tree until it is destroyed. Let us, however, hope that the rapid settlement of population on the fertile prairies of Manitoba and the Northwest, and the growing requirements of civilization, will find other uses for this article so necessary for homes and comfort rather than in such a merciless way reduce it to ashes. With the depression existing in almost every branch of English trade, many a young fellow with a little capital, and a knowledge of the timber business, would do a worse than take a trip to British Columbia to see if its mighty forests do not offer a field for profitable investment in the near future.—*Timber.*

QUEBEC CULLERS' OFFICE.

The following is a comparative statement of Timber, Masts, Bowsprits, Spars, Staves, &c measured and culled to date:—

	1883.	1884.	1885
Waney White Pine..	3,781,742	2,198,547	2,876,753
White Pine.....	7,405,523	3,707,159	2,820,045
Red Pine.....	498,111	327,735	73,766
Oak.....	1,916,322	772,260	1,566,968
Elm.....	309,531	657,919	1,018,932
Ash.....	262,448	451,984	287,595
Basswood	2,244	4,544	95
Butternut	1,118	2,134	3,265
Tamarac.....	37,736	19,289	3,622
Birch & Maple.....	138,803	202,446	381,085
Spars.....	— pcs	41 pcs	17 pcs.

JAMES PATTON,
Supervisor of Cullers.

Quebec, Nov. 20.

Advice to Mothers.

Are you disturbed at night and broken of your rest by a sick child suffering and crying with pain and cutting teeth? If so, send at once and get a bottle of Mrs. Winslow's Soothing Syrup for children teething. Its value is incalculable It will relieve the poor little sufferer immediately. Depend upon it, mothers, there is no mistake about it. It cures dysentery and diarrhœa, regulates the stomach and bowels, cures wind, colic, softens the gums, reduces inflammation, and gives tone and energy to the whole system Mrs. Winslow s Soothing Syrup for children teething is pleasant to the taste, and is the perscription of one of the oldest and best female nurses and physicians in the United States, and is for sale by all druggists throughout the world Price 25 cents a bottle.

LIVERPOOL STOCKS.

We take from the *Timber Trades Journal* the following Comparative Table showing Stock of Timber and Deals in Liverpool on Dec. 1st 1884 and 1885, and also the Consumption fo the month of Nov. 1884 and 1885 :—

	Stock, Dec. 1st. 1884.	*Stock, Dec. 1st. 1885.*	*Consumption for the month of Nov. 1884.*	*Consumption for the month of Nov. 1885.*
Quebec Square Pine	315,000 ft.	236,000 ft.	144,000 ft.	151,000 ft.
" Waney Board	425,000 "	455,000 "		
St. John Pine	25,000 "	28,000 "	8,000 "	4,000 "
Other Ports Pine	76,000 "	84,000 "	12,000 "	8,000 "
Red Pine	57,000 "	31,000 "	3,000 "	1,000 "
Pitch Pine, hewn	502,000 "	419,000 "	46,000 "	91,000 "
" Sawn	305,000 "	562,000 "	127,000 "	110,000 "
Planks	51,000 "	96,000 "	4,000 "	8,000 "
Dantzic, &c., Fir	59 000 "	89,000 "	40,000 "	1,000 "
Sweden and Norway Fir	63,000 "	65,000 "	7,000 "	13,000 "
Oak, Canadian and Amerioan	277,000 "	333,000 "	32,000 "	73,000 "
" Planks	177,000 "	204,000 "	71,000 "	71,000 "
" Baltic	9,000 "	5,000 "	0,000 "	0,000 "
Elm	22,000 "	45,000 "	15,000 "	14,000 "
Ash	41,000 "	26,000 "	3,000 "	7,000 "
Birch	64,000 "	162,000 "	26,000 "	64,000 "
East India Teak	35,000 "	172,000 "	36,000 "	9,000 "
Greenheart	28,000 "	115,000 "	3,000 "	2,000 "
N. B. & N. S. Spruce Deals	27,574 stds.	21,411 stds.	0,000 stds.	0,000 stds.
" Pine	1,026 "	440 "	6,727 "	9,056 "
Quebec Pine Deals & boards	6,717 "	7,761 "	3,756 "	3,259 "
Do. Spruce	866 "			
Baltic Red Deals, &c.	3,895 "	4,553 "	779 "	878 "
Baltic Boards	51 "	325 "	89 "	18 "
" prepared Flooring	2,959 "	1,624 "	766 "	524 "

TIMBER FOR SINGLETREES.

The *Wheelwright* says:—It is exceedingly important that buggy singletrees should be sawed properly, especially if they have been turned green. If the sawing is not done preperly the ends will be all kinds of sizes and shapes. In fact not the ends only but the whole singletree will shrink in sersoning so as to make a variety of shapes and sizes. Many of them will be ill-shaped, scarcely resembling the original design. The grain should be uniform, that is, it should cross each singletree the same way. If this point is not attended to the shrinkage tending so much more to decrease the circle of the grain than to contract the grain will have results known to the trade. It is better to have the grain cross each singletree in the same direction even if they are to be seasoned before turning. We do not attempt to say they will be stronger through the arrangement referred to, but it will certainly prevent much warping and twisting if the grain is either square across, what is better known as bastard, or if the grain crosses the singletree thin way up and down.

Singletrees for buggies and carriages, especially second-growth timber, should not be kiln-dried to season it. Yet it is necessary to use a kiln for a day or two unless these pieces can be loosely cross-piled in the open air protected from the sun and rain. If the temperature is not summer heat, or the timber has been cut some little time, it will stain, giving the all-white wood a reddish cast so strongly resembling the red or heart wood as to be so classified by the inexperienced. One or two days heat will not injure the fibre, but to thoroughly season the singletree in a kiln, with dry heat, will surely deteriorate the strength. The older and brasher the fibre the greater the injury, especially if overheated a little. The injury is sustained even if from a young and thrifty second-growth tree, but possessing superior vitality, it is less noticeable. In the rapid processes for seasoning lumber, steam or other means of artificial dampening is always adapted. This is practically impossible with a class of goods where the moisture would stain and injure the wood. Kiln drying will not injure the fibre if the heat is kept at a mild summer heat, but with this temperature it would require several weeks, whereas the modern way seems to be to take the timber from the log and ship it out bone dry in one weed's time. This quick seasoning simply means to crust over the outside and bake the exterior until its life is seriously injured, often almost totally destroyed.

Singletrees are graded into three qualities—second growth, mixed second growth,, and forest. The mixed secondgrowth is a half-red and white or all red, but second growth many of them more serviceable than the all white. The forest is a common grade of timber not thrifty enough to be classified with the two better grades. Some manufacturers grade their singletrees second-growth, select forest, and forest; the second growth grade will take the half-red and white and the choicest of all-red that are strictly second growth. The selec forest differs from the mixed second growth only in taking in what the name implies, a "select forest," but not second growth. In classifying as second growth, select forest and forest, the distinction is not made as clearly and justly as in substituting mixed second growth for the select forest. Selecting the best of the forest can but weaken the forest grade. The mixed second growth are sold at a price dividing the difference between the second growth and forest. When turned from green timber the warpidg, twisting and springing form no small per cent. of the whole. The percentage is greater with small, young, tough, thrifty growth than with the larger trees and an ordinary growth. This percentage is farther increased by careless sawing. The grain crossing the singletree diagonally makes a very undesirable singletree, especially if turned green. These singletrees that have sprung out of shape in seasoning need not be thrown away, but can be straightened by using the singletree as a lever with the fulcrum at the centre of the point needed to be straightened. With a quick pressure exert sufficient strength to force the singletree to or a little beyond a straight line, and the wood will retain this shape. If badly sprung and a very tough fibre it will be necessary to first steam the singletrees. This discolours the wood somewhat and takes the additional time. Singletrees and spokes that are practically dry will spring to some extent if stored or exposed to an unnatural or excessive heat.

Waggon-makers or repairers can save their stock from worms by oiling with linseed oil. Singletrees, doubletrees, neck-yokes, spokes and cross-bars that are of white hickory and are kept in stock for a year or more will be eaten by worms or kept in a dark place or protected as above. Coal and kerosene oil are good also, and the expense of applying is but little. Linseed oil is preferable, as it acts to some extent as a wood filler, filling the pores, thus aiding the painting which follows in its proper place. A boy can take a rag dipped in the oil and go over a large number of pieces in a day's time or a vat can be used long enough to admit of several dozen at a time being put in and picked out one at a time, and put where they can drip for one or two minutes. The expense of this is much less than those who have not had the experience might imagine, and far less than the loss of stock by worms. Some manufacturers oil all their white hickory stock before shipping, it being applied with a belt similar to other belting processes. The flat part of the buggy singletree is left unbelted by some factories to give the carriage-maker more timber to work on. This is a good plan aside from the unfinished look of the goods. But it will never do to ignore look even if they do cost something.

JONATHAN BOICE, of Grand Rapids, Mich., lately purchased of O. P. Pillsbury & Co., a tract of pine in Roscommon county, same state, estimated to cut 50,000,000 feet, at $210,000. The logs will go into Muskegon river, and be floated to Muskegon for manufacture.

MAINE TIMBER.

Lumbering operations have been prosecuted vigorously for years in Maine and the impression is quite general that the forests of the state are quite denuded of merchantable timber. But year after year large amounts of logs are run down the stream, and we believe the Penobscot has contributed about 300,000,000 feet to the general stock this year. The hardy lumbermen of that state are again in the woods lifting up their axes against the trees, and a paragraph in the Bangor *Commerciat* states that "there will be more lumber cut on the south branch of the Dead river the coming winter than ever before in one winter." The names of a number of lumbermen and the amounts they will cut are given, and the *Commercial* adds:—"One can judge of the density of our Maine forests, by considering that this whole amount of lumber, viz.: From 15,000,000 to 19,000,000 feet, will be cut from a strip about 12 miles long and seven miles wide." Michigan contains forests which are capable of turning out a good deal more lumber from an equal extent of territory, but it cannot be denied that the Dead river country is a pretty good lumbering district, considering that Maine has been extensively lumbered for 50 or 60 years. If Michigan shall be capable of doing as well after she has been undergoing the process so long, it will be very fortunate for those who inhabit the state a quarter of century hence. It will be able to do so if care is taken not to destroy the young pines, and the advance of agriculture does not result in bringing under cultivation too great an extent of forest land. Maine has been favored by having a large amount of forest land that could not be profitably cultivated and the forests, left to nature, have been rehabilitated. Michigan has some, but not so great an extent of such land; it might be fortunate if she had more.—*Lumberman's Gazette.*

QUEBEC SHIPPING INTERESTS.

A comparative statement of the number and tonnage of sailing vessels and steamers which entered at Quebec, inwards and outwards for the years ending December 31st, 1884 and 1885, which was prepared by Mr. L. G. Belleau, is published by the *Chronicle*. The exhibit for 1885 shows a slight increase in the volume of business done when compared with the figures of the previous year. In 1885, sixteen more vessels visited Quebec than in the preceding shipping season. The total amount of tonnage in 1884, was 646,365 against 667,112 in 1885, making a difference in the way of increase of 747 tons. In 1834, on the contrary, the decrease over the returns of 1882 was 139,407.

In British ships arriving in Quebec, we may note a total of 306 in the year lately closed, as against 317 in the year 1884,—a loss of 11 ships From the United States, Italy, Belgium and Austria we had no ships last year, but there were sent us one from France, 28 from the German Empire, 239 from Norway and Sweden, one from Denmark, three from Russia, one from Holland, and one from the Argentine Republic. The increase in the number of Norwegian and Swedish ships arriving here in 1885, as compared with the number returned in 1884, was 35; there is also an increase in the tonnage from the German Empire, of one vessel over that of the previous year. Russia, which sent us four ships in 1884, sent us only three in the season just closed. A decrease may also be mentioned in the tonnage from France, which sent three vessels last year, and only one this year,—and Denmark which sent us three in 1884 and but one in 1885. The number of men employed in 1884 was 17,080, as against 15,990 in 1885,—a decrease of 1,090 men.

Mr. Belleau's statistics also show the date of the opening of navigation at the port of Quebec in each year since 1830 to the present time, as well as the date when navigation closed. In 1885, the first Montreal steamer of the season arrived here on the 7th of May, while vessels from sea reached this port on the 5th May. The last ships sailed for sea on the 21st of November. The return shewing the number of vessels entered inwards and outwards at this port from 1849 to 1885, inclusive, is instructive and worthy of attention. In 1885, inwards 580; outwards, 479.

WHEN TO BLOW OUT.

Our Rothsay correspondent propounds this question: "Is it adviseable to blow out a boiler under 35 or 40 pounds pressure?" and doubtless engineers throughout the State will give sufficient answers. It is to be remembered first of all that the steam boiler is subject to expansion and contraction, and under an established and known margin of safety both these operations, incidental to the working of a boiler, will regulate themselves without giving anxiety to those in charge. Every engineer should have definite information regarding, not only the average capabilities in ordinary service of the appliances he uses, but also of whatever extra strain they will bear or energy they may be required to exert, under unusual circumstances. Thus it may be frequently found necessary to blow out mud from the drum of a boiler, and this must sometimes be done without reference to steam pressure. It is done with from 30 to 45 pounds pressure. An accumulation of mud in the drums is to be avoided; unless removed it will dry up and form a crust or cake which will prove injurious. Experienced engineers advise blowing out under these circumstances. On the other hand, when it is intended to shut down for the purpose of cleaning out the boiler, the practice of blowing out under such pressure should be avoided. It should never be forgotten that a steam-boiler requires careful handling, and a careful engineer would not blow out under excessive pressure, because he ought to know that when a boiler is subjected to sudden contraction it will be injured to a more or less extent. No absolute rule can be made; the thing to do is to know all that can be known and follow one's best judgment.—*Wood and Iron.*

A TIMBER LADEN SHIP ON FIRE

QUEBEC, Dec. 11.—Captain Simpson, of the ship Coringa, from London, at New York, reports on November 17th at noon in lat. 43.57, long. 33 20, sighted a bark in the northward, showing signals of distress; lay to until he ran down to us, proving to be the bark Nora Hansen, from Quebec for London with deals, 28 days out. She was dismasted, had seven feet of water in the hold; the pumps were broken, and the captain wished to be taken off as the ship was becoming water-logged. The crew, consisting of 18 men all told, came off in their own boats. I sent men back in the boat and boarded the bark to get all the provisions we could from her, and then as night was coming on and the wind and sea increasing, set fire to the wreck and proceeded on our course. The bark Nora, Capt. Hansen, cleared at the Quebec Custom House on the 19th October for London with the following cargo by Messrs. Bryant, Powis & Bryant: 7,206 bright pine deals, 1,320 spruce deal ends, 22,023 spruce deals. The Nora was 958 tons burden, built in 1857 at Alton, Germany, and hailed from Drammen, Norway, where she was owned by G. Samuelson and others, and partly insured.

The Greatest Inventor.

In reply to "A Pupil," we should certainly say by far the most prolific inventor in connection with wood-working machinery was the late Sir S. Bentham, whose patent specifications of 1791 and 1793 are marvels of their kind, and either describe or foreshadow nearly all the wood-working operations in vogue at the present day; in fact several of his inventions have been patented again during the last twenty years. In point of fact there is little doubt that Sir Samuel Bentham was a most remarkable man, although he does not by any means occupy that "niche in the temple of fame" to which his inventive genius undoubtedly entitled him.—*Timber Trades Journal.*

LATE figures in the Toronto *Globe* make it appear that receipts of lumber at that point this year had been 11,000,000 feet less than in 1884. A correspondent to the same paper explains the apparent deficiency by the fact that receipts this year for local consumption, not being reported with receipts for shipment, have been sufficient to raise the total to about that of last pear.

Chips.

IT is reported in Eau Claire that H. C. Putnam has sold 880 acres of pine land on the Red Cedar, to Thos. Carmichael, for $40,000.

LUMBER to the amount of 15,000,000 feet has been shipped from Duluth this season that passed out of Lake Superior by way of the Sault Ste. Marie canal.

IN some of the camps in Michigan vaccination is being required. In Thompson Smith's Sons' camps, Cheboygan county, a physician went the rounds and treated all the arms that had never before been sore.

THE receipts of Lumber at Oswego, N. Y., in November amounted to 18,500,000 feet, an increase of 6,000.000 feet over the same month last year, and 170,000,000 feet have been received since the opening of navigation, being 20,000,000 feet less than during the same period last year.

GEN. SMITH, of the Barnhart Lumber Company, at Duluth, has been instrumental in the breaking up and arrest of a gang of thieves, who stole lumber from the companies piles, ran it off in small boats, and sold it, and committed other depredation of a larcenous character.

A SPECIAL timber agent has been investigating the Northern Pacific and the Manitoba Improvement Company timber trespass cases He reports to Commissioner Sparks that these corporations have caused to be cut from the public domain 45,100,000 feet of lumber and bridge timber, 84,744 railway ties, 15,400,000 shingles, 32,035 cords of wood, and 20,000 cedar posts, valued in all at $613,400.—*Winnipeg Commercial.*

A FOSSIL oak has been discovered in the bed of the Rhone—dark as ebony, hard as iron; supposed to have been 3,000 years in the bed of the river. This tree is 150 feet high, 58 feet cube, and considerably over 120,000 pounds in weight. This reminds one of other phenomenal tree. As, for example, the oak of Allouville, bearing a chapel in its branches; the chestnut of Ætna, covering 30 horsemen; the tree of Augustus, in the hollow of which Caligula gave a dinner to 40 guests; the plantain of Xerxes, which sheltered himself and 100 guardsmen; the plantain of Cos, whose trunk measures 30 feet in circumference, and whose branches are propped up by marble columns. In the churchyard of La Haye de Routot, in Normandy, there is an immense yew that once covered the whole cemetery. It is 1,80 years old and grows every day.—*Laclede, in Montreal Gazette.*

As the schooner Mercury, lumber laden, was making the passage from Ludington to Chicago, during the great snow storm and gale of last week, the deck load was washed overboard, but the vessel was kept on her course, and stood up well. About midnight, John Anderson, one of the crew, was swept overboard by a huge wave. It was impossible to round to and pick the man up, and the schooner was kept on her way, though the cries for help of the unfortunate sailor could be heard above the howling of the sea. The captain was at the helm, and after a few minutes had elapsed he was astonished to see Anderson hanging on to a fender and trying to climb on board. He was quickly rescued from his perilous position. He had at first been swept some distance from the schooner, but little ahead, and managed to swim until he could get hold of the fender. His escape in such a sea seems like a miracle. The Mercury arrived at this port after a perilous passage.—*—Northwestern Lumberman.*

SHINGLES AS SUBSTITUTES FOR SIDING.

"Why are the walls of all these old houses in Nantucket and, for that matter all along the coast, covered with shingles instead of clapboards?"

"Probably because they have such high winds here and the shingles are warmer; I suppose most likely they are cheaper, too."

"At any rate they are perfectly lovely to look at, so delightfully quaint and old-fashioned."

"I think they are just horrid. They make all the houses look like poverty stricken pigpens."

We do not see fit to set the speakers right either in the interests of building or of esthetics. As a matter of fact the reason given for the use of the ancient shingles instead of the modern "siding" or clapboards, were almost the only ones that could have been hit upon that were not correct. In itself a covering of shingles is not as warm or impervious to the stormy winds that rage along the New England coast as a layer of clapboards properly put on and well painted. The reasons for the change in this particular item in building are not of much practical consequence now but the change itself is interesting as an instance of the natural evolution that obtains in building as in everything else.

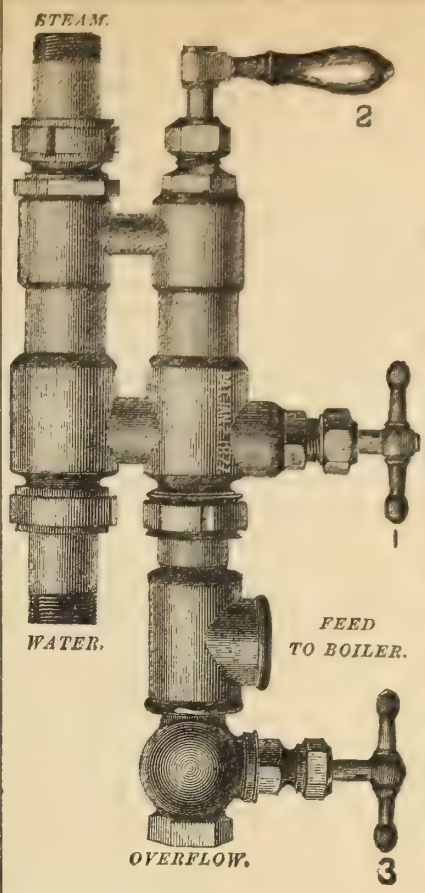
Hands were made before forks or saw mills, and shingles were doubtless used in former times because they could be made "by hand." The cross-cut saw with a man at each end was the first and for a long time the only saw mill extant. It was much easier to cut logs across the grain into short blocks, split the blocks into thin pieces, and with a "draw shave" on a rude horse reduce them to the tapering shape required, than to saw the logs into long thin boards one man above the log and the other in the saw pit beneath. Moreover after the boards were sawed, unless they were well seasoned and painted, they would split and check when exposed to the weather. There was no time to wait for lumber to season and paint was among the luxuries. In the case of the shingles, too, it was of less importance what kind of wood was used, anything that would split true and freely and shave easily would answer, although the latter quality was of less consequence, for muscle was cheap in the old times. Only a few years ago in hill towns of New England, chestnut shingles were made—they may be still for all we know—and served an excellent purpose, barring their propensity to stain the work below them and to kick up at the corners, the latter habit imparting a roughness to their appearance that might now-a-days be reckoned a merit rather than a defect.

These old shingled walls are far more common along the seaboard than inland for which there is doubtless a natural reason. Among the hills in the fresh water regions, there is hardly a mountain brook large enough for a three years old trout to turn around in that will not be found at some part of its course bestridden by the ruined skeleton of a primitive saw mill, in which the "up and down" saw in its unwieldy frame impelled by an "overshot" or some other kind of shot-wheel, made frantic plunges through the rough log at the rate of one stroke every second, more or less, according to the size of the log through which the jagged teeth were knawing their way and the flow of water. Along the coast and especially on the islands this local motive power was lacking and transportation from the interior was by no means as easy as in the present year of grace.

Doubtless shingles will last longer than clapboards, especially if both are unpainted, but it is not to be assumed that our venerated ancestors took this durability into account. These same ancestors of ours had so many shining virtues that it is not necessary or fair to ascribe to them more than their due. It was stern necessity, not pure wisdom that prompted them to use shingles. In applying clapboards the nail heads are left exposed while the overlapping courses of the shingles cover them; perhaps this exposure of the iron to the salt atmosphere has been one reason why the old fashioned outer garment has been maintained along the coast, but this is more probably the result of the imitation and conservatism that make certain styles of architecture and modes of buildings seem to be indigenous in certain localities.

Finally and in conclusion, sawed shingles—sawed by machines each one of which does the work of 100 men—cost somewhat more than the usual cost of horizontal siding; other things being equal they will last longer, if they are well lined with building paper.

As for the respective merits of the two materials in point of looks, that question is respectfully referred to the speakers who began this discussion, and to others whose opinions are equally well-founded.—*The Builder.*



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TORONTO

WARE ROOMS

86 King Street East

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MONTREAL, QUE.

CEDAR.

It occurs to us that if red cedar was properly introduced in this market, and its merits once thoroughly known to the consumer, it would become a very important factor in the lumber interests of the city. It is a matter worthy of comment that red cedar fence posts and red cedar dimension is in less demand in this market than in any other of the country; and this, too, in the very face of the fact that, of all timber that grows, there is none possessing such lasting, such imperishable properties, if you please, as red cedar for fence posts. We recognize the fact that it cannot be secured in this market, so as to be sold to the consumer at anything like the prices for which white cedar is offered, but we see no economy in paying 15 cents for a white cedar post that will last but five years when for 30 cents a red cedar one can be had that will last a generation of years.

We were not a little surprised to know that some time since a couple of Tennessee gentlemen shipped a car load of red cedar posts to this city, and came in person to dispose of them and, if possible, lay a foundation for future trade, but their experiment resulted in a deplorable failure, not only to receive a consideration for them that justified them in bringing them to this market, but in making any arrangement for future trade.

We cannot understand why it is that a wood possessing such valuable merits, not only for posts, but for the building of clothes-closets in dwellings, is so little in demand. Where cedar is used in interior work vermin and moth will be unknown, and it is susceptible of beautiful finish that adds to its value as a wood for house-building purposes.—*Lumber Trade Journal.*

Market Reports.

TORONTO.

From Our Own Correspondent.

DEC. 24.—The lumber trade during the last two weeks has been nearly as brisk as during the summer months. Owing to the fine open weather building both in brick and wood have gone on with but little diminution, but during the holidays we do not look for much trade. The amount of lumber piled off at the railway yards has not varied much for the last month past, except in some particular lines. Good cull boards are tending upwards in price. The quantity here now is much smaller than when I wrote you last, and no large stock remaining at any of the mills north of this place. The demand for this grade of lumber is good, owing to the number of speculative buildings in course of erection. The most difficult class of lumber to make sale of at present, on this market, is the coarser grades of shipping cull boards. The cause for this is obvious, builders can use a good grade of mill culls to as good advantage, and save from two to three dollars per M by so doing. I feel convinced, however, that on the opening of the spring of 1886, it will be found that we have no overstock of any kind of lumber, above the legitimate requirements of the trade on our own local markets, of course it will be understood I refer to that already cut and in stock. It would be premature at the present time to speculate as to the probable cut of logs during the present winter; this much, however, is certain, that owing to the lack of sufficient frost to harden the swamps, thus far hauling has been slow and unsatisfactory, and but small progress has been made up to the present time, so that the crop of logs for next season's cut may not prove as large as anticipated.

Efforts will be made by the lumbermen here to get the shunting of cars made free during the next season to all sidings westward of the points of arrival. This concession should certainly be granted, as it is manifestly unfair on the part of the railroad companies to perform the same service eastward free, and charge from $1 to $2.50 for a similar service westwards. In fact I have never heard any defence made by the railway companies in regard to such charges, and most certainly no reason that will bear discussion can be made, and in the interests of dealers and consumers alike it is to be hoped that this concession will be granted.

Mill cull boards and scantling	$10 00
Shipping cull boards, promiscuous widths	12 00
" stocks	13 00
Scantling and joist, up to 16 ft	13 0
" " " 18 ft	14 00
" " " 20 ft	15 00
" " " 22 ft	16 00
" " " 24 ft	17 00
" " " 26 ft	18 00
" " " 28 ft	19 00
" " " 30 ft	20 00
" " " 32 ft	21 00
" " " 34 ft	22 50@22 50
" " " 36 ft	24 00
" " " 38 ft	27 00
" " " 40 to 44 ft	30 00
Cutting up planks to dry	20 00@25 00
" boards "	20 00
ound dressing stocks	16 00@18 00
Picks Am. inspection	30 00
Three uppers, Am. inspection	35 00@40 00

B. M.	
1½-inch flooring, dressed	25 00@30 00
1½ " " rough	14 00@15 00
1¼ " " dressed	23 00@25 00
1¼ " " undressed	14 00
1 " " dressed	16 00@20 00
1 " " undressed	12 00@14 00
⅜ Beaded Sheeting, dressed	18 00@20 00
Clapboarding, dressed	12 50
XXX sawn shingles, ℔ M	2 75@ 2 90
Sawn Lath	2 25
Red oak	20 00@25 00
White "	25 00@30 00
Basswood, No. 1 & 2	18 00@20 00
Cherry, No. 1 & 2	50 00@60 00
White ash 1 & 2	25 00@30 00
Black ash 1 & 2	20 00@25 00

OTTAWA.

The *Canadian Journal of Commerce* says:—Now that the sawing season may be said to be practically over, it is possible to estimate correctly the amount of business done this season by the Chaudiere mill proprietors. Most of these mills have been working for seven months, one having started as early as the 28th of April; and, though the count in the various offices is not quite complete, it is gleaned that the total cut will foot up about 277,000,000 feet. Thus it is somewhat less than last year, but it is stated notwithstanding, that sales have been fairly good.

Lumbermen on the Chaudiere say that, in this season's sales, quality has largely regulated the market; first-class stuff going off steadily at good figures, while poorer qualities were slow, and only saleable at figures much lower in proportion. Knotty and rough lumber has not been in such demand as last year, and consequently the net cash returns have not been so great; but good first-class lumber has been readily disposed of at satisfactory figures. An examination of the percentage of good and rough lumber shows that, on an average of all the season's cut, not more, and perhaps not so much, as 30 per cent. can be classed as first-class, while the remainder is divided into lower grades. The season's trade has been on the whole good, and dealers claim that the outlook for a good season next year is promising, unless some unforseen event should mar the prospect.

CHICAGO.

AT THE YARDS.

The *Northwestern Lumberman* of Dec. 26th says;—It would be unreasonable to look for numerous orders and heavy shipments this month, and especially in the heel of it, when the members of the trade are divided in their minds and their time between closing up the year's business and the holiday festivities. Yet there are dealers who are inclined to complain because there is not a lively demand and heavy shipments. It is safe to say that there was never a time in the history of the Chicago trade—not even in the booming year 1882—when shipments to the country were not comparatively meagre in the last half of December. The current month is no exception to the general rule. And yet there is a considerable movement of lumber. The local requirement is being to a great degree maintained by the late moderate weather.

But the city and suburban demand is not taking all the lumber that is now being sold. There are good trains pulled out of the district every day, loaded with lumber bound for all points of the compass. Though rates to eastern points are high, they do not operate as a complete bar to eastward movement.

It can, however, be intimated this season that it is quite possible that trade will take an earlier start than has been usual in former years. Conditions are a little peculiar. Last year the yards in the southwest were loaded up on a 5-cent rate Kansas city and common points The result was that the spring trade in that direction was to a large extent anticipated, for the retail yards in Kansas and Western Missouri were filled up with stock that was carried over the winter. This year there has been no loading up in the southwest or anywhere else. It is thus likely that the spring trade will start earlier than common; a condition that will be emphasized if the winter should continue so open as to permit of outdoor consumption of lumber. Dealers can keep their weather eye on this view of the situation, so as to be ready to jump into the breach when it is open; but they should not jump too soon.

It is also possible that the retail dealers of the interior may send in their orders for the spring trade unusually early, for fear that there may be a rise of prices later on. This will depend on several things that may appear after January 1st. If it shall then be seen that the aggregate of stocks is larger than was anticipated, that the logging season promises a full crop, and that the general outlook is not favorable, there will be a continuance of the hesitating, hand-to-mouth manner of buying. But, on the contrary, if the open winter should promise a limited log crop, the lumber in sight should be less than was anticipated, and railroad building loom larger for the year to come, everybody holding lumber would tighten his grip on prices, and buying of stock for the spring trade would evince an anxiety to put in supplies before a possible advance in values.

It is claimed by some of the wholesale dealers that the expectation of break in freight rates throughout the fall prevented many heavy retail yards from stocking up in November. The break did not come, and there was no extraordinary movement of lumber. If this outcome is to be regretted, because there is more stock remaining in the yards here than there otherwise would have been, some consolation can be extracted from the fact that what lumber was not moved in November will have to go forward after January 1st.

During the week two strikes of Chicago, Burlington & Quincy employes have slightly interrupted the handling of cars in the Twenty-second street district. There was a little strike of the engineers, and another of the switchmen. Both faired off quickly, and the pulling and the switching was resumed after a brief stoppage.

STOCK ON HAND NOV. 1.

	1885.	1884.
Lumber & timber	665,050,130	688,057,336
Shingles	386,319,180	321,961,925
Lath	75,214,168	70,742,042
Pickets	2,789,250	1,830,118
Cedar posts	537,435	400,805

EASTERN FREIGHT RATES.

FROM CHICAGO AND COMMON POINTS ON CAR LOAD LO OF HARD AND SOFT LUMBER.

IN EFFECT NOV. 1.

To New York	35c.
Boston	40c.
Philadelphia	33c.
Baltimore	32c.
Washington	32c.
Albany	32c.
Troy	32c
Buffalo and Pittsburgh	20c.
Shenectady	32c.
Wheeling	20c.
Suspension Bridge	20c.
Salamanca	20c.
Black Rock	20c.
Dunkirk	20c.
Erie	20c.
Toronto	20c.

ALBANY.

Quotations at the yards are as follows:—

Pine, clear, ℔ M	$53 00@55 00
Pine, fourths	48 00@50 00
Pine, selects	45 00@47 00
Pine, good box	22 00@33 00
Pine, common box	11 00@13 00
Pine, 10-in. plank, each	00 42@00 45
Pine, 10-in. plank, culls, each	00 23@00 25
Pine boards, 10-in	00 28@00 32
Pine, 10-in. boards, culls	00 16@00 20
Pine, 10-in. boards, 16 ft., ℔ M	28 00@32 00
Pine, 12-in. boards, 16 ft	28 00@32 00
Pine, 12-in. boards, 13 ft	28 00@00 00
Pine, 1½ in. siding, select	40 00@43 00
Pine, 1½-in. siding, common	15 00@18 00
Pine, 1-in. siding, select	40 00@42 00
Pine, inch siding, common	13 00@15 00
Spruce, boards, each	00 00@00 16
Spruce, plank, 1½-in., each	00 00@00 20
Spruce, plank, 2-in., each	00 00@00 30
Spruce, wall strips, each	00 12@00 12
Hemlock, boards, each	00 00@00 14
Hemlock, joist, 4x6, each	00 00@00 32
Hemlock, joist, 2½x4, each	00 00@00 14
Hemlock, wall strips, 2x4, each	00 00@00 11
Black walnut, gook, ℔ M	100 @120 00
Black waluut, ⅞ inch	80 00@90 00
Black walnut, ¾ inch	00 00@85 00
Scaymore, 1-inch	28 00@30 00
Scaymore, ⅞-inch	21 00@23 00
White wood, 1-inch and thicker	38 00@40 00
White wood, ⅞-inch	28 00@30 00
Ash, good, ℔ M	40 00@43 00
Ash, second quality, ℔ M	25 00@30 00
Cherry, good, ℔ M	60 00@85 00
Cherry, common, ℔ M	25 00@30 00
Oak, good, ℔ M	40 00@43 00
Oak, second quality, ℔ M	20 00@25 00
Basswood, ℔ M	25 00@30 00
Hickory, ℔ M	40 00@40 00
Maple, Canada, ℔ M	28 00@30 00
Maple, American, per M	26 00@28 00
Chestnut, ℔ M	38 00@40 00
Shingles, shaved, pine, ℔ M	0 00@ 6 50
" 2nd quality	0 00@ 5 00
" extra, sawed, pine	4 30@ 4 50
" clear, "	0 00@ 3 00
" cedar, mixed	0 00@ 3 30
" cedar, XXX	0 00@ 0 00
" hemlock	2 25@ 2 3[illegible]
Lath, hemlock, ℔ M	0 00@ 2 25
Lath, spruce, "	0 00@ 2 13

BUFFALO.

We quote cargo lots:—

Uppers	$45 00@46 00
Common	17 00@18 50
Culls	12 50@13 00

OSWEGO, N.Y.

From Our Own Correspondent

Dealers are busy piling up late receipts. The demand is very light, and business is almost at a standstill.

Three uppers	$42 00@46 00
Picking	32 00@35 00
Cutting up	24 00@26 00
Fine Common	22 00@25 00
Common	14 00@18 00
Culls	11 00@14 00
Mill run lots	16 00@22 00
Sidings, selected, 1 in	30 00@35 00
" 1½ in	32 00@36 00
Mill run, 1x10, 13 to 16 ft	16 00@21 00
Selected	21 00@24 00
Shippers	14 00@16 00
Mill run, 1½x10	17 00@20 00
Selected	21 00@30 00
Shippers	14 00@16 00
Mill run, 1 & 1½ in, strips	15 00@18 00
Selected	22 00@30 00
Culls	11 00@13 00
1x7 selected for clapboards	25 00@35 00
Shingles, XXX, 18 in. pine	3 10@ 3 50
XXX Cedar	2 20@ 2 35
Lath 1½, No 1	1 80@ 1 90
No 2	1 00@ 1 25

TONAWANDA.

CARGO LOTS—MICHIGAN INSPECTION.

Three uppers	$42 00@44 00
Common	18 00@24 00
Culls	10 00@13 00

LIVERPOOL

The *Timber Trades Journal* of Dec. 12th says:—Although the recent excitement consequent upon the elections is rapidly waning, if indeed it be not practically dead, there has been, so far, no evidence of any desire to return to business on the part of buyers, whose unwillingness to give out any orders of importance is as strongly marked this year as it has recently been. Niether do the merchants on the spot here, if we may judge from the auction sale held on Wednesday appear inclined to speculate in any extensive buying at present.

Fortunately the arrivals of timber and deals continue light, and with only a small quantity on the quays there is no necessity for putting on undue pressure to effect sales.

Should the early part of the new year bring with it that resumption of good trade which all have so long hoped was near at hand, but which has been so disappointingly deferred, we ought to see some advance in prices, especially in spruce deals and other leading articles of the trade, as the stocks, though sufficient for the demands likely to be made upon them at the present rate of consumption, are not above an average.

The only public sale held since my last communication was that of Wednesday, the 9th inst., above referred to, when Messrs. Farnworth & Jardine offered the cargo of spruce and pine deals now landing ex Annabella, from Dalhousie. The company present was limited in number, few buyers from the country being present. The proceedings were very slow, and though the auctioneer went through the catalogue twice, his patience was not rewarded as it ought to have been, and about one-half the spruce deals were withdrawn, as were also the 3rd quality pine deals, the pine scantling and pine deal ends.

The parcel of birch timber withdrawn at the last sale from the cargo per Henriette, from Cape Breton, consisting of 873 logs, was again brought forward, but no acceptable bid was made for it; but we believe a line of it was subsequently sold on private terms.

LONDON.

The *Timber Trades Journal* of Dec. 12th says:—There was really nothing fresh to report in Wednesday's sale. The bulk of the goods were offered under reserve, of which, as far as we could make out, only a couple of lots were sold.

Of the unreserved parcels there was nothing particular to attract attention. The pine boards, ex York City, in small lines, excited some competition, but, we consider, without much advantage to the price, each bidder drawing the line at previous values for similar goods. The goods ex Queen of the North also hung at prices which similar realized a short time back; in fact, the cautious way that goods are now bought at public sales is strongly indicative of an overdone market.

Though Canadian wood is not heavy in the market, pine, in batton and board sizes, comes in contact with North of Europe wood in the better qualities, and these selling for almost nominal values has an unfavorable influence on Quebec stuff.

With the feeble prices Archangel sold at last week, £14 15s. for 1½x7 Quebec 1st pine is by no means a bad price. The various little odd lots sold low, and 4th Gefle 1x7 yellow at £5 5s. is about 20s. under cost. Some Wyborg submitted, 1st quality, 2x8, at £0 15s., seemed about level with prices of a month ago. In one of the Noxember sales 2x7 fetched £6, so that the present would rather incline toward an improvement. These small parcels are, however, very unsafe guides to market changes; but 3x11 Wyborg at £7 10s. is not so bad.

Of the St. John's yellow pine sold at Messrs. Churchill & Sim's sale on Thursday we need hardly make any comment, the low prices realized speak for themselves, and 3x11 to 15 in., in lengths from 10 to 22 feet at £6 10s. is significant of the low estimation the wood was held in.

BRISTOL.

The *Timber Trades Journal* of Dec. 12th says:—Quebec sawn longitudinals are mostly imported this year, instead of railway timber. This is an advantage to the merchants, as the slab trade was very injurious generally. Stocks all around are moderate, there not being apparently a great excess of any class of goods. A cargo of Stettin oak (mostly butts) has arrived, and met with a very fair sale.

TYNE.

The *Timber Trades Journal* of Dec. 12th says:—The past seven days show a very short list of arrivals, and none of them call for any special comment. The weather has been extremely stormy, a very severe frost having come on, followed now by a snow storm of some severity, the two combined being amply sufficient to stop all outdoor employments, and in consequence thereof business has been practically suspended. Most of the saw mills are only partially employed, many of them working three-quarter time only. With the advent of winter in its severest form, a great number of men are out of employment, and the distress reported is very great. If not so great as last year, it is certainly sufficient to excite the sympathy of the more fortunate, and already in the city and neighborhood relief committees are being formed to cope with it if possible.

No ships of much importance are reported as being due, and in all probability we shall not have many more during the present season.

LEITH.

The *Timber Trades Journal* of Dec. 12th says:—The arrivals of wood cargoes during the week have not been numerous, but they include a cargo yellow pine timber, deals, etc., per Almedia, from Quebec, for Messrs. James Duncan & Co., and a large cargo pitch pine timber per Lanarkshire, from Pascagoula, for Messrs. Ferguson, Davidson & Co. The Almedia is the last cargo expected at this port from Quebec this season.

Business continues very quiet, and the trade from the yards is very restricted, the keen frost which has prevailed for the last few days being rather against orders being received from the builders.

Messrs. Wm. Thomson & Co. held a public sale on Tuesday, 8th inst., at which they offered the balance of the yellow pine timber, oak, elm and birch, recently landed ex Alagua, from Quebec, and thereafter a varied assortment of Baltic deals and battens. There was a fair attendance of buyers, but a great lack of competition in the bidding, and the waney board yellow pine was with difficulty cleared out at an average price of 2s. 5d. per cubic foot.

GLASGOW.

The *Timber Trades Journal* of Dec. 12th says:—A public sale of deals, result of which is given below, took place here on the 9th inst. The catalogue comprised large parcels of Michigan and Quebec pine deals, Dalhousie pine and spruce deals, California redwood, also birch and whitewood logs, &c. There was a numerous company, but very little disposition to bid was shown, and of the large variety of goods offered only a small portion was sold. Some transactions, however, were made privately at the close of the public sale. The trade, it is likely, will be better prepared for purchasing at the opening of the year.

Recent deliveries of deals and planks from Yorkhill yards, Glasgow, show a falling off compared with last year, the figures being: October and November, 1885, 163,271 pieces, and October and November, 1884, 194,447 pieces.

Cargoes from Canada have now all arrived here for the season, the import list for the past week comprising the closing arrivals from Quebec, viz., those per Magnificent and Choice. Other imports at Greenock for the week have been a cargo of teak and one of pitch pine. The Glasgow arrivals consist chiefly of birch timber and spruce deals. Considering the stock on hand, the import of birch is in excess of the market's requirements.

AUCTION SALE.

On 9th inst., at Glasgow, Messrs. Singleton, Dunn, & Co., brokers:

	per c. ft.
Quebec 3rd pine deals—	
13 ft. 11×3	1s. 2d.
Dalhousie, N. B., pine scantlings—	
9 to 22 ft. 4/6×3	11½d.
Dalhousie, N. B., pine deal ends—	
8 ft. 7/12×3	10d.
5 to 7 " 7/12×3	9d. to 9¾d.
3 & 4 " 5/13×3	7¾d. & 8¼d.
Dalhousie, N. B., spruce deals—	
9 to 20 ft. 11/13×4	10¼d.
12 to 22 " 9/10×4	10½d.
9 to 22 " 7/9×4	10½d.
9 to 23 " 13/15×3	10½d.
9 to 24 " 7×3	8½d.
Dalhousie, N. B., spruce battens—	
10 to 21 ft. 7×2½	8d.
Dalhousie, N. B., spruce scantlings—	
9 to 21 ft. 4/6×3 & 2½	8d.
Dalhousie, N. B., spruce ends—	
3 to 8 ft. 4/15×3	7½d.
Cambelltown, N. B., pine deals—	
9 to 23 ft. 7/15×3	10d.
Campbelltown, N. B., spruce deals—	
15 to 18 ft. 11×3	10d.
10 logs Quebec whitewood (weathered)—	1s. 2¾d. to 1s. 9d.

BOARD OF TRADE RETURNS.

The following are the returns issued by the Board of Trade, for the month of Nov. 1885, and also for the 11 months ending Nov., 1885:

MONTH ENDED 30TH NOV., 1885.

	Quantity. Loads.	*Value. £.*
Timber (Hewn).		
Russia	14,770	27,922
Sweden and Norway	34,400	49,567
Germany	10,919	32,871
United States	4,540	17,168
British India	2,796	37,746
British North America	27,249	110,419
Other Countries	31,746	43,865
Total	126,420	319,558
Timber (Sawn or Split, Planed or Dressed).		
Russia	114,682	238,165
Sweden and Norway	125,194	256,195
British North America	112,378	288,355
Other Countries	13,709	46,507
Total	365,963	829,222
Staves, (all sizes)	11,152	50,026
Mahogany (tons)	2,981	25,336
Total of Hewn and Sawn	492,383	1,148,780

ELEVEN MONTHS ENDED NOV. 30TH, 1885.

Timber (Hewn).		
Russia	252,351	425,948
Sweden and Norway	515,534	724,540
Germany	279,558	663,977
United States	132,482	447,998
British India	37,392	505,878
British North America	244,269	1,063,133
Other Countries	375,882	521,033
Total	1,837,628	4,379,002
Timber (Sawn or Split, Planed or Dressed).		
Russia	1,156,320	2,493,715
Sweden and Norway	1,671,508	3,500,698
British North America	928,834	2,286,082
Other Countries	312,937	937,803
Total	4,069,599	9,218,298
Staves (all sizes)	115,732	430,339
Mahogany (tons)	53,606	467,173
Total of Hewn and Sawn	5,907,227	13,597,300

Catarrh—A New Treatment.

Perhaps the most extraordinary that success has been achieved in modern science has been attained by the Dixon treatment for Catarrh Out of 2,000 patients treated during the past six months, fully ninety per cent. have been cured of this stubborn malady. This is none the less startling when it is remembered that not five per cent. of the patients presenting themselves to the regular practitioner are benefitted, while the patent medicines and other advertised cures never record a cure at all. Starting with the claim now generally believed by the most scientific men that the disease is due to the presence of living parasites in the tissues, Mr. Dixon at once adapted his cure to their extermination; this accomplished the Catarrh is practically cured, and the permanency is unquestioned, as cures effected by him four years ago are cures still. No one else has ever attempted to cure Catarrh in this manner, and no other treatment has ever cured Catarrh. The application of the remedy is simple and can be done at home, and the present season of the year is the most favorable for a speedy and permanent cure, the majority of cases being cured at one treatment. Sufferers should correspond with Messrs. A. H. DIXON & SON, 305 King street west, Toronto, Canada, and enclose a stamp for their treatise on Catarrh.—*Montreal Star.* 1y22.

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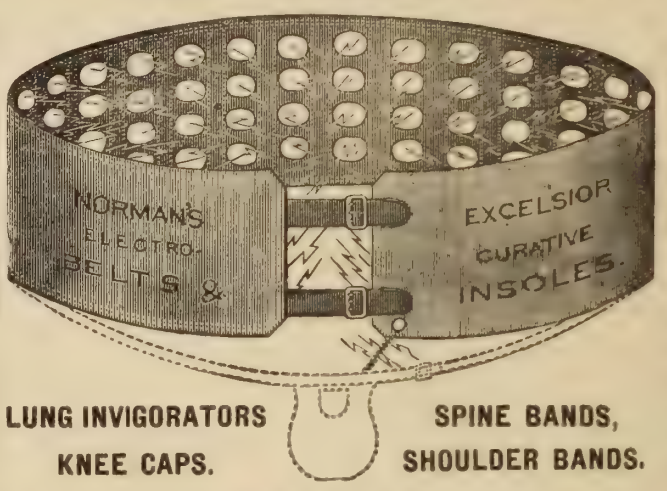

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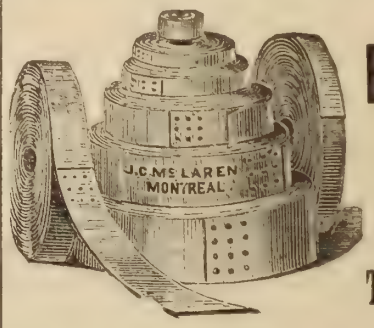

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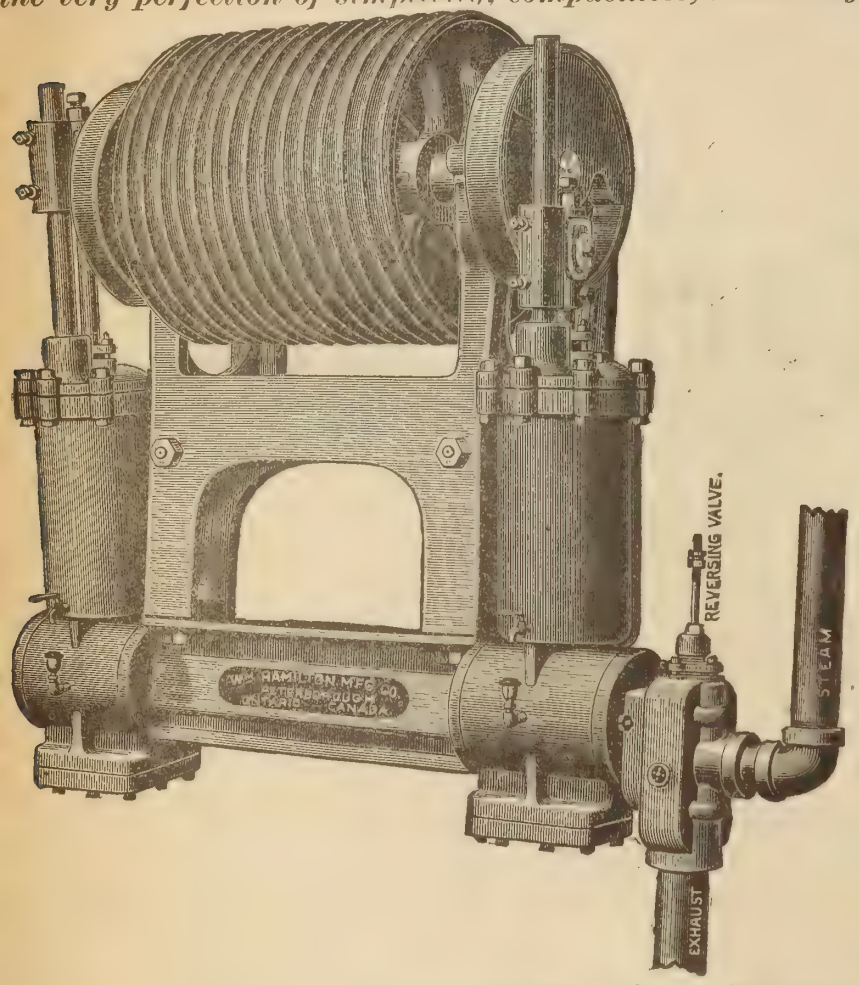

The above engraving illustrates the Twin Engine, 10x16, for Rope Feed, for Saw Mill Carriages. The spool is 27 in. diameter, 30 in. face, is grooved 2 in. pitch for 1½ in. rope. The shaft is steel, 4½ in. diameter, with disk cranks. No connecting rods, eccentrics or valve rods to get loose and out of order. The ports are in the trunions, and worked by an oscilliation of the cylinders, and are held in their place in the downward motion by a steam cushion below. The sawyer's valve is a perfect balance, and by moving this valve the engine can be reversed, stopped or started almost instantaneously if necessary, as the sawyer has perfect control of it by his lever either to go fast or slow. Should the sawyer let go of his lever either by mistake or any other cause, it is balanced so that the valve will come to the centre and cut the steam off both cylinders and stop the feed. When standing, the lever is locked or fastended, so that is is impossible for it to start off itself. The engine stands upright below the carriage, and bolted to two upright beams, placed on the mill for the purpose. When a rack is preferred in place of the rope, we put on a steel wheel 30 in. in diameter, and the engine placed high enough to work into the rack on carriage bar, or if the beams come in the way, an idler wheel can be used between engine and rack segs; or, the engine can be placed at a distance and have a shaft from it to the carriage; or it can be placed in the engine room, where it is under the control of the engineer for oiling, thence by shaft and pinion to carriage rack bars. These engines are well adapted for cutting long logs, or where the logs are mixed, the advantage of this feed will be apparent to mill men. When the carriages are used in two or more sections, the coupling and uncoup ling of each section is quick and simple.

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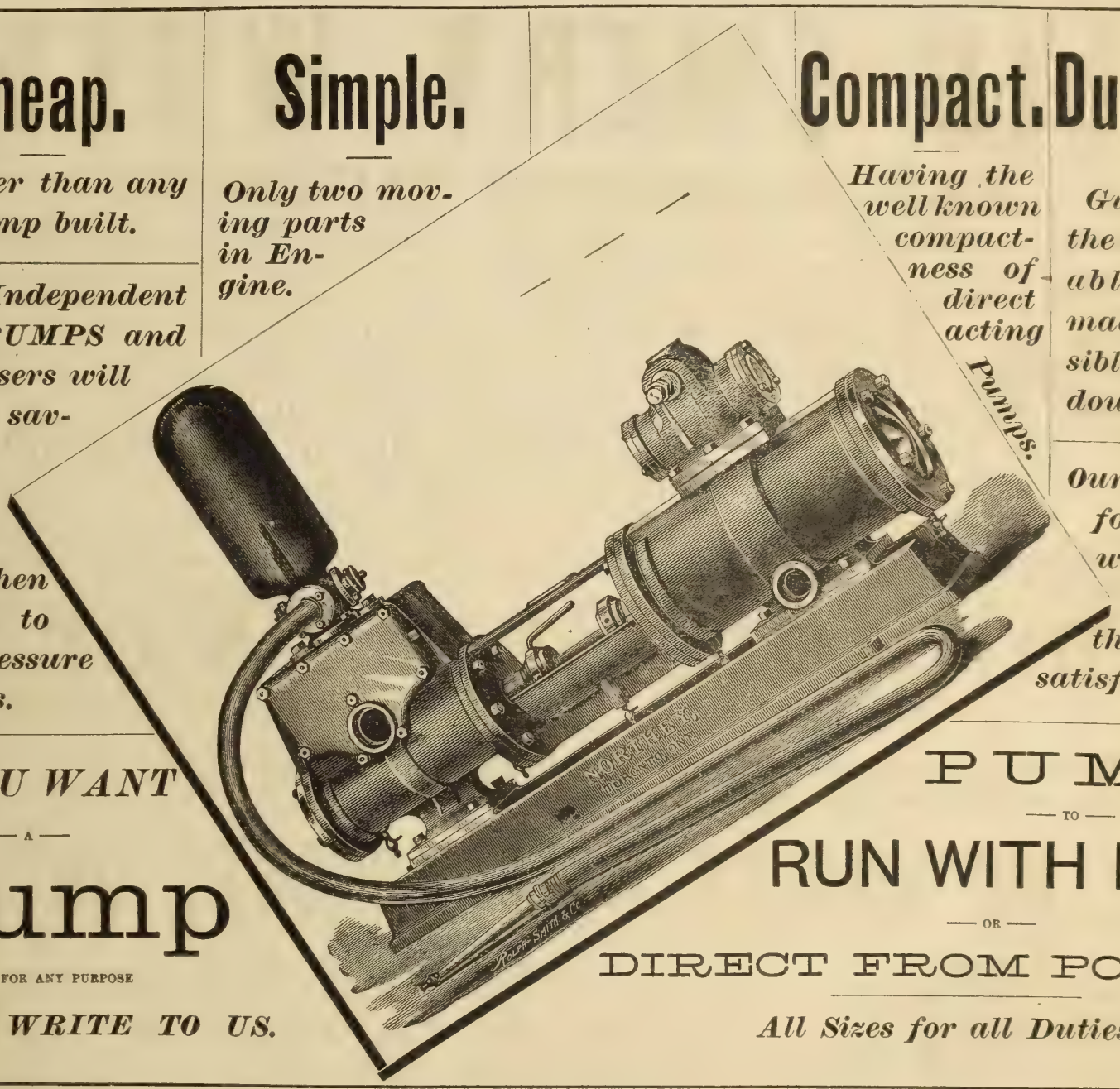

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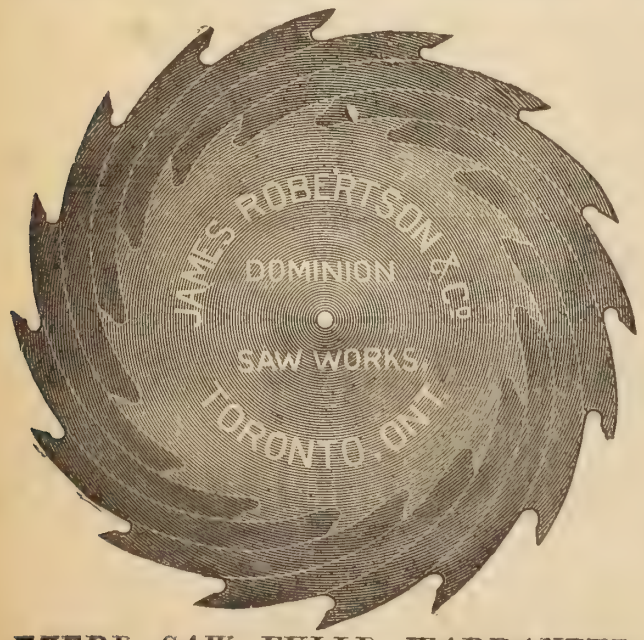

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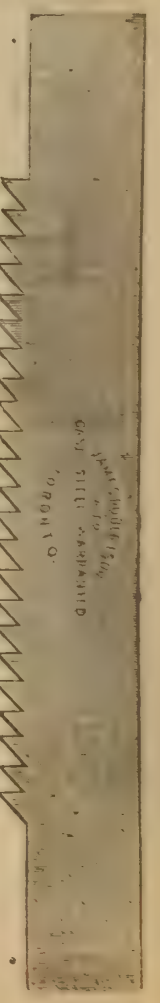

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VOL. 6. PETERBOROUGH, ONT., JANUARY 15, 1886. NO. 2.

ON THE INFLUENCE OF FORESTS UPON CLIMATE.

At the meeting of the Royal Meteorological Society, held on Wednesday, Dec. 16th, a paper on the above subject, by Dr. A. Woeikof, was read, of which the following is an abstract:—The existence of an influence of forests upon climate has often been contested, and the question remained for a long time unsettled, because meteorologists were content with principles of too general a character. The first step towards a scientific investigation of the subject was taken by the establishment of the Bavarian Forest Meteorological Station, the results of which have been published by Professor Ebermayer. The excellent example of Bavaria was soon followed by Germany, France, Switzerland, Italy, and other countries. As a general result it was found that during the warmer season (1) the air and earth temperatures were lower in the forest as compared with contiguous woodless places; (2) their variations were less; and (3) the relative humidity was greater.

The following details, referring to the amounts of evaporation from April to September, are quoted as being of special importance:

	In the Open. Ins.	In the Forest. Ins.	Percentages.
Eastern France....	16·23	5·20	312
Alsatian Mountains	13 19	6.26	211
Bavaria.....	14·85	6·22	239
Brandenburg.....	15·71	6·42	245
Eastern Prussia...	9·93	4·73	210
Silesian Mountains	10 52	4.17	250

It will therefore be seen that the evaporation from a free surface of water in the open was everywhere more than double, and even above three times that in the forest. In Bavaria, the evaporation from soil saturated with water was observed. This amounted in the same seven months to 16 7 in. in the open, 6·26 in. in the forest without dead leaves, and 2·44 in. in the forest with them. This experiment shows that the evaporation in the open is 6½ times as much as in the forest with the covering of dead leaves. The influence of the forest on the diminution of evaporation from water and ground is so great that it cannot be explained by the lower temperature of the warmer months only by greater humidity, or even by the shade; one influence which has hitherto been too little regarded is especially important in effecting this result, viz., protection from the wind by the trees standing closely together. This last cause is probably more important in its effects than all the others put together.

The diminution in wind force which is caused by the presence of trees is well known, although we have unfortunately no numerical data with reference to it; but it could easily be investigated by the erection of anemometers. It follows also, from the laws of Mechanics, that if this diminution of the wind by forests is especially evident in the lower strata of the air below the tops of the trees, it cannot cease above them, but owing to the so-called viscosity of the atmosphere must extend to a considerable height, so that the motion of the air is weakened up to five or even ten times the height of the trees. This indicates the extent of the favorable influence which forests must exert in maintaining the humidity existing in air or soil; and naturally the denser the forests and the higher the trees the greater is this influence. But if this question is incontrovertible, the same cannot be said of influence of forests upon rainfall, etc.; an influence which is as often asserted as it is denied. Hitherto there has only been one series of observations giving comparable values and maintained a sufficient length of time, viz., that in the neighborhood of Nancy. These observations indicate a considerable influence of forests on the increase of rainfall. The explanation appears to be that in winter the effect of forests upon rainfall should be unimportant in the climate of Central Europe –the difference of temperature and humidity between forest and field being very small, and the amount of vapor in the atmosphere inconsiderable. The observations, however, show that during this season the forests receive much more rainfall, &c., being accounted for by the following facts:—(1) In winter the clouds being of a lower level than at other seasons, the obstruction caused by the forests to the motion of the air must then considerably affect their motion; the air will consequently be forced upwards, and at a time of great relative humidity a small ascent suffices to produce condensation of the vapor. (2) In winter damp winds are more frequent, and the rainfall is of longer duration; hence the greater importance of forest influence In spring and early summer the effect of forests upon the increase of rainfall is much diminished, because at these seasons there is considerable evaporation from the surfaces of fields and meadows; probably more water evaporates then from a given extent of field than from an equal surface of forest, taking into account the evaporation both from the crops and the soil. Towards the end of summer and the beginning of autumn the soil of the fields is considerably dried up, corn is ripe and evaporates but little, while the surfaces of the leaves in the forest still evaporate freely. Conditions then are more favorable to an increased humidity of the air in the forests, their immediate vicinity, and hence to more copious and frequent rainfalls. Other kinds of condensation of vapor for which forests are especially favorable exist. In winter large quantities of hoar-frost collect upon the pine trees, which as the air gets warmer and damper so n falls, increasing the amount of snow on the ground. In warm and moist climates, especially in the tropics, dew collects so freely on the surface of leaves as to fall in large drops and wet the ground. In this manner a considerable amount of the water evaporated during the day returns again to the earth in the form of dew the following night.

Forests retain the water from rain or melting snow much better by the covering of dead leaves, mould and moss, and only allow a portion to run off superficially when larger quantities of water fall; the remainder percolates gradually, and much of it is utilized in evaporation from the trees. Although forests, especially the dense, luxurious forests of the tropics, cannot, of course, exist without a certain supply of water, yet the time when they receive it is of little import to them. A good instance of this is the Lencoran Forest, on the west coast of the Caspian Sea, where vegetation is more luxuriant than in any other part of Europe; for a mass of climbing plants encircles the trees so that it is always humid in the forest, and yet here the rain curve is a subtropical one, very little rain falling in summer, but large quantities in autumn and winter. The water is stored up in the forest, so maintaining vaporation during summer droughts.

In Upper Assam also, during the four months November to February, little rain falls, but the evaporation of the forests keeps the air damp. It would appear that the influence of thick forests of warm regions upon rainfall is such that, if the general climatic conditions are opposed to rain no rain falls, even where extensive forests exist. This is the case when the wind is constantly descending, or blows from cooler and dryer quarters—as from November to February in Assam, when northeast winds prevail. If there is a strong wind from warmer and damper quarters, and especially if it has an ascending motion, the conditions are favorable for rain, whether forest, field or steppe predominates. Weather types are very far from being always so strongly defined. Frequently, in the vicinity of the equator, the winds are variable or local; or calms prevail. Under such conditions dense forests must be favorable to raintall for offering an obstacle to the wind's movement; they cause the air to ascend; since it is already damp, condensation ensues. With the same direction of wind there would be little or no rain in woodless regions. During calms and clear weather, after a long drought, the ascending current over forests is much more humid than that over unwooded districts where the ground is dried up, and vegetation withered. Hence there are conditions again more favourable for rain production; in the former case even calms alone may cause rain with an ascending current; an example of this may be quoted in the case of the frequent afternoon thunderstorms in well-protected Alpine valleys. The correctness of the above remarks is proved by the frequent earlier commencement of rain in the tropical forests.

These considerations show that in the western portions of the Old World extensive forests materially influence the temperature of neighbouring localities. and that the normal increase of the temperature from the Atlantic Ocean towards the interior of the continent is not only interrupted by their agency, but they cause the summer to be cooler in regions situated further in the interior than those nearer the sea.

Hence forests exert an influence on climate which does not cease at their borders, but is exerted over a greater or less district, according to the size, kind, and position of the forests. Hence it naturally follows that man, but clearng forests in one place and planting others in another, may considerably effect the climate. Many incline to the idea that, as forests increase precipitation, it would only be necessary to plant in order to remove deserts from the earth's surface. A person familiar with meteorological questions will, of course, not assume such an extreme position. If the forest economizes rainfall, stores it up for a long time, and even to a certain extent increases precipitation, many parts of our earth are nevertheless too dry to support them, forest vegetation requiring much water. On the other hand, thin forests and such as consist of an excess of waxy trees which diminish evaporation, are certainly able to survive in dryer climates than those consisting of trees closer together, which evaporate more freely; but the former have less effect in moderating heat and drought than the latter. On the other hand the widespread opinion that no forests can exist where none existed at the time of the appearance of civilized man is open to doubt. The success of forest culture in the Stepps of Southern Russia, the prairies of North America, and the Pampas of South America sufficiently prove the untenability of this opinion. If afforestation has not hitherto assumed large dimensions, it is more as a question of economy rather than one of climate.

Other growths, such as corn, or the use of the land for pasture, &c., have been more remunerative to private individuals—human life being of but short duration as compared with that of trees.

If there be only a certain amount of rainfall, no matter at what time of the year it occurs, forests flourish. Even long periods of drought are much less injurious to forests than to meadows and fields; and the impossibility of forest culture in a country is not due to the occurence of rainless periods, provided that copious precipitation falls in other months.—*Timber Trades Journal.*

A LOGGER by the name of Johnson, working in a camp near Ogontz bay, upper peninsula, Mich., was accidently shot for game by a fellow workman named Lewis Gotlip. Johnson was hit in the back of the head and died instantly.

BRITISH TRADE.

There is a general admission of a bad trade, and the Government returns to some considerable extent corroborate it, as these columns have had to record; but whence its source no one seems able to determine, nor from what quarter relief is to come. All eyes are at present turned towards America, because it is understood that business is really reviving there, and it has heretofore been found that the state of trade on one side of the Atlantic, whether for good or evil, when a change comes, is soon reflected on the other. But we must not forget that the rival industries of America are in a constant process of development, and that with each returning year she exports more of her own manufactures and imports less of ours; so that we are bound to entertain only subdued expectations from that quarter of the world. Nor is there any steady upward movement as yet discernable in sympathy with the repnted revival of business in America. On the contrary, evidence of unabated depression continue to force themselves on our notice.

The latest is a report of the shipbuilding trade in Glasgow for the last as compared with the two previous years, and it confirms as far as that enterprising port or entrepot of northern trade is concerned the view now so univer sally prevailing, that even in favored localities our national industries continue to lose ground. We learned from the Glasgow *Herald* on the 19th that during this year 241 vessels of a total capacity of 193,458 tons were launched, as compared with 296,854 last year, a falling off in this important Glasgow industry of 103,396 tons, which is suggestive of a loss of employment to thousands of artizans, as the deficiency would mean the discharge of as many men as could build within the twelve months more than 100 ships of over a thousand tons each, as well as so much loss of trade to those who supplied last year the materials, steel, iron, timber, &c., &c., to construct such a fleet. Yet this would have been considered an immense business as lately as 1879, when only 174,750 tons were launched on the Clyde. But in 1883 the tonnage supplied there reached 419,764 tons, of which the present return is short more than half.

Notwithstanding this decline in the trade, the boiler-makers' and shipwrights' societies of the Tyne and Wear sent their delegates to a meeting last week, in reference to a notice of a 12½ per cent. reduction of wages being given by the employers, and it is stated that it was unanimously resolved not to submit to any further reduction, either on time or piece work, so that another strike and disorganization of the labor market may be looked for in that quarter shortly. Two and six pence in the pound seems certainly a rather formidable reduction on a week's wages at one slap. But the men might be sure it signifies one of two things: either that the masters have not sufficient work on hand to keep the men employed at a profit to themselves, or that their returns will not justify their going on at their present rate of expenditure; and neither case is the wisdom of a strike very apparent. The slate quarrymen at Llandulas have a better chance of obtaining a concession from the masters, because slate can only be obtained from certain districts; but shipbuilding interrupted in one port flies to another. The housebuilding trade, all over the country, also depends very much on the slate quarries of North Wales, and the owners, or those who work the quarries at a royalty, may by and by reimburse themselves fer an advance of wages by raising their prices, if the strike continues long enough to produce a brisk demand, but this does not apply to shipbuilding, where the stoppage of the work for any length of time may destroy the reputation of the port, and cause it to be shunned by shipowners, who want vessels for a special purpose, to be completed in a specified time.

And if we look to the East, instead of the West, there is not much to reassure us. The news from Burmah is not quite so favorable to a speedy opening of a large trade on the Irrawaddy as it looked when the great success achieved by General Pendergast and our troops by capturing the King and apparently putting an end to the war was first published. There appear now to be some further difficulties, and armed insurgent bands, by land and by water, have to be put down before much regular business can be established on the upper reaches of the river, and our supply of teak is not likely to be either increased or cheapened for some months to come. Perhaps the reverse, for it always happens that while a people are in a disturbed and unsettled state the industries of the country are greatly interrupted and neglected. No doubt we see only the brightest side of the picture at this distance, as it is presented to us by the victors. There is evidently a great deal of work to be done by our generals and diplomists out there before trade will be established on a good working basis. Even Rangoon may depend for much of its supplies on the native craft, or lumberers, bringing the teak down the river; and though every facility will doubtless be afforded by British cruisers, native confidence will probably be wanting till the administration is settled. If the native merchants are not afraid of British interference with the river traffic, they may be doubtful of marauding parties composed of their own people, for public disorder and political revolutions are the opportunities of desperados in all communities.

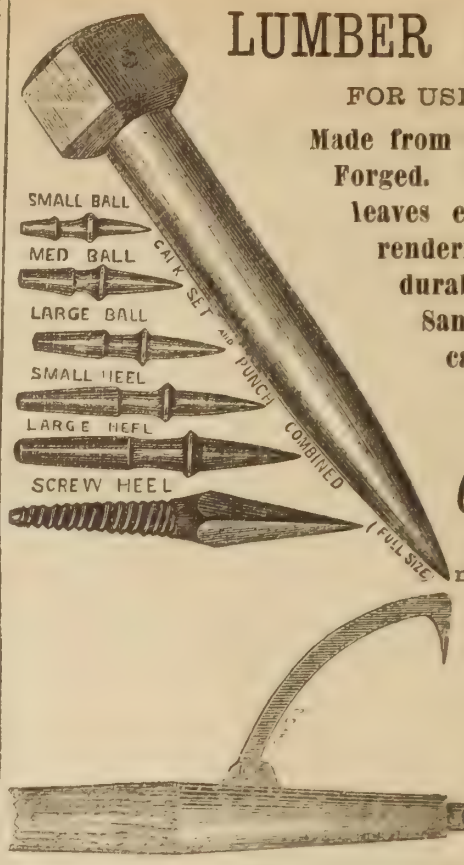
The close of the year being now upon us, and the Christmas holidays, at this present issue, in full festivity, the timber and building trades have settled down into their customary quietude at this season. On all sides we are admonished that the year's work is done, and nothing new in the way of business will be undertaken till 1886 puts in its appearance, and imparts new hopes to those who have despaired of a trade revival during 1885. It is not yet time to reckon up the business of the year, but we may take a survey of the distribution of our timber imports up to the end of November, as these form a good index to the state of business in the various parts of the kingdom to which they refer themselves, and altogether form a body of useful information to be obtained, for the moment, in no other work, not even from the Board of Trade publications.

Though the imports up to the end of November exceeded by 154,933 loads the supply of timber goods at that date last year, very little of the excess had found its way to great depots of the trade.

London, the Leviathan of the realm as a swallower up of cargoes, is not accountable so far for a stick of the excess. For the month of November, it is true, it took in some 43,000 loads more than the November preceding; but in the total reckoning for the eleven months it is more than 30,000 loads short in the comparison. It must not on that account be concluded that we are without a sufficient supply here. On the contrary, though keeping within such reasonable limits, London is as well prepared for a better demand, probably, as any part of the country. Liverpool in like manner is well within bounds. It has only just turned the corner by less than 2 000 loads, and cannot therefore be accused of overtrading in timber. One year (1877) Liverpool imported more than half as much as London, but never since. The difference now between these two great emporiums is about in the proportion of 13½ to 6. But London apart, there is no other port that approaches the timber trade of Liverpool. Hull which is next in dignity, has also to acknowledge a slice of the surplus over its last year's import, up till the end of November; till which return it was in arrear. Now it stands in advance by about 30,000 loads. But this is more than off-set by Cardiff, which is above 40,000 loads behind. The greatest spring appears to have been made by Grimsby, which if not a chief timber port seems to be fast becoming one, and fully alive to all the local advantages it possesses. Of the excess aforesaid, Grimsby has seized the huge cantle of 63,000 loads—like a young Hercules throwing a bullock across his shoulders, and walking off with it, as if there was nothing remarkable in the circumstance. Hartlepool just maintains its ground modestly, as if in no hurry to put forth its strength. It is even about 17,000 loads short of last year, and finds itself nevertheless in tolerable good case to meet any improved demand likely to take place when the days get longer. Newport (Monmouthshire) has its trade well in hand too, as if doing a steady business a little within the mark by abont 4,000 loads less than twelve months ago. If not a spring Grangemouth may at least be said to have taken a long, a very long stride, that is, from 127,000 to 174,000 loads. But Grange mouth has a heavy duty to perform, as Glasgow looks to it for its east country timber goods, and therefore 40,000 loads more or less is no great object to that small but ever busy port of the Firth of Forth. Sunderland has gone ahead by 7,000 loads; and Swansea has fallen in the rear by 10,000, while Greenock has taken a cut in of 17,000 loads, and increase rearly of of nearly 20 per cent. on the figures of last year, and Leith 13,000 loads. Montrose is perhaps flooring trade in better heart for 10,000 loads of the surplus have gone there. Newcastle, suffering from the general complaint of poor trade, and not at above letting us know it, has, nevertheless, taken a small surplus of 8,000 loads to carry on with. It is one of those places which are always busy, but which in the busiest time delights to complain that it has not half enough to do. Thus its figures do not always correspond with its lamentations.

Most of the Scotch ports, besides those we have mentioned, have imported short, and likewise all the Irish ports of any note except Waterford and Dublin. Even Belfast is 6,000 loads in arrears, and has dropped far astern of the capital with which in the timber trade it used to compete. Dublin up to date has imported more than four times as much as Belfast, and the southern ports look very small indeed in the comparison. It will be seen that already the total import up to November 30th, wanted but a trifle of 6,000,000 loads; and it needs no divination to forecast that the December returns are not likely to fall far short of those for the same month last year, as to the timber trade, so that the supply is pretty sure to be a full average one, upon the whole. And it is greatly to the credit of the trade that with so large an importation, on a very dull year, it goes on just as steadily as if the business to be done was as good as ever. But it has at least provided itself with the means to do a good trade, and though, as we have said, few signs of it present themselves to us on the surface, they may work upwards in a short time, and be palpable to us all. According to American ideas, we ought to congratulate ourselves that the bank raised its rate of discount from 3 to 4 per cent. last week. They argue that a cause of dull trade is a cheapness of money. This does not quite conform to the experience of our own country; but if we find that the rise of bank rate is no check to business, we shall be half inclined to adopt their theory.

Four per cent. may possibly be the happy medium, the palladium of trade, the talisman of safe business. To be very high at, 6 or 7 per cent., we *know* is bad, and at under 2 per cent. our cousins over there say it is so. Between these two extremes there is possibly a middle term in which trade especially rejoices. Let us hope that our great financiers will hit upon it ere long, and that the trade of the new year may be more prosperous than that of the one which is now taking leave of us. It will yet be something to be thankful for if we find it no worse.—*Timber Trades Journal.*



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333,295—Dove tailing machine, automatic switch for—C. Graff, Logan, Utah Territory.

333,228—Sash fastener—J. Hutch, Canton, Ohio.

333,240—Sash or door fastener—C. Longbottom, Bradford, County of Cork, England.

333,191—Sash weights, chill mould for—B. Anderson, Urbana, Ohio.

333,438 — Sash, window— L. L. Arnold, Buffalo, N. Y.

333,339—Saw guide—H. W. Roberts, Duncan City, Mich.

333,244 — Saw mill, set works for— T. J. Leacy, Milwaukee, Wis.

PATENTS ISSUED JAN 5.

333,604—C. M. Stevenson, Syracuse, N. Y.

333,664— Saw mill carriage— T. W. Peck Milwaukee, Wis.

333,843—Sawing machine, fire wood—I. Gill more, Dewitt, Iowa.

333,562—Saw table gauge—D. W. Standeford, Oakland, Cal.

333,777— Saw Buck—H. Palmer, Banon, Conn.

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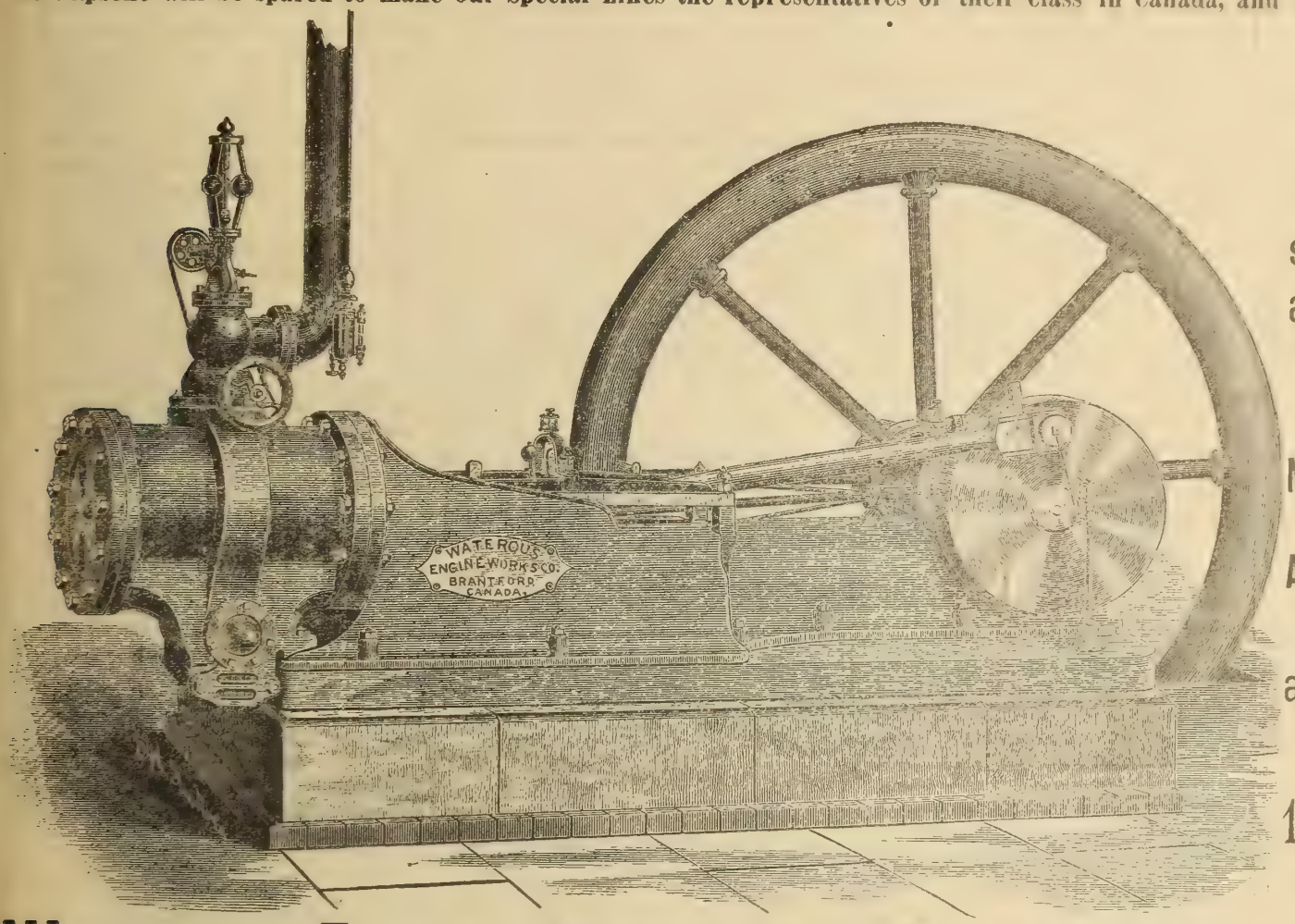

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LIGHTNING'S AMONG THE TREES.

All who have been in a forest during a thunder-storm have witnessed the pranks of lightning among the trees. An English engineer who spent several years in this country thus writes on the subject: During surveys in the forests of the United States, when I necessarily lived under canvas, I often had the opportunity of witnessing the effects of lightning on the trees, and my experience lead me to believe that trees are only destroyed by lightning when they have been previously wetted by the rain.

A sojourner in the woods, whether he is taken in pursuit of game or with the object of prospecting for timber, minerals, and land, is always careful to erect his tent under a short thick tree in order to escape the danger of lightning or of trees falling and bringing down others in their way on him; and it was often while thus situated I noticed after stormy nights when thunder and lightning were accompanied by rain that many trees had fallen. The report of the snapping of the trunks would remind one of that of the firing of a cannon, and when lightning and thunder were not accompanied by rain (in the immediate locality of our camp at any rate) no trees had been struck. I infer from the same observations that the lightning always strikes the tallest trees, whatever their species may be, for the taller white pines and poplars were most often seen destroyed and the shorter maples, linden, birch trees, etc., rarely so; also that the sap between the wood and the bark of the tree does not increase the chance of its destruction.

A gentleman connected with the new botanical gardens suggests that the mete-rological offices in different countries collect reliable data embodying the observations of different persons as to the particular circumstances attending thunder storms during which more or less injury has been done trees. He states as the result of his own observation that certain kinds of trees are much more likely to be injured by lightning than others, which goes to show that they are very poor conductors of electricity. The condition of the tree in regard to age and vigor has also, in his opinion, much to do in making it a good or bad conductor. In a communication to a London paper he says: The comparative conductibility of different trees is not wholly, in my opinion, a question of species. The same species at different stages of growth, and growing under different circumstances, will exhibit widely different degrees of conductibility.

Doubtless the hardness of the wood and the character of the grain, and also the character of the ramification, have much to do with that resistance to the electric fluid which results in damage to limbs or trunk. Hence, probably, why the oak, which is remarkable for the general closeness and hardness of its grain, and the ruggedness and contortion of its ramification, so frequently suffers, while soft-wooded trees, like poplars, escape. But younger oaks under the same circumstances might escape, while the older and harder and drier trees would be broken by the electric fluid. A mistake commonly made is to speak of certain trees being "struck" by lightning, the word "struck" being only applied to those trees that are injured by lightning. Thousands of trees are struck during every thunder-storm that takes place over woody country; but, being struck noiselessly and without resulting injury, they are not noticed. It is doubtless the superior or inferior conductive power of a tree which subjects it to, or exempts it from, harm from lightning; but it is the greater or less moisture of the branches and trunk which regulates the conductive power.

The form of a tree, too, has much to do with its exemption from hurtful strokes. The Lombardy poplar is about the best form, because its branches, pointed upward, are like so many lightning conductors. The oak is about the worst form, because its branches and limbs are nearly always (in those trees which are mostly damaged) placed across the course of the electric fluid. The Lombardy poplar also is of much moister and softer substance than the oak, and consequently gives freer passage to the electricity.

The best conductors of electricity are not those that are "struck" by a discharge from a cloud, but those which silently convey it to the earth without being shattered or injured in any way. That many trees do this seems certain. In all probability trees whose leaves present many sharp points are the best conductors of electricity. Each point attracts electricity, and is the means of directing it through the branch and trunk to the earth. The amount conveyed by each is so small that no part of the tree sustains any damage. Leaves like those of the holly tree are admirably formed for attracting electricity. The points on the foliage of fir are of the desired shape to attract electricity, but the resin in the fir tree serves to make it a poor conductor.

In a flat and nearly level country like our western prairies lightning does not always "strike" the highest objects. It sometimes enters the side of a building instead of discharging itself on the chimney, the highest place on the roof, or other projecting point. The presence of suitable trees next a house, or at some distance from it in the direction toward the course of the prevailing thunder clouds, would serve to protect the dwelling. Trees that are better conductors than the materials of which buildings are composed would protect them as well as metal rods.—*Chicago Times.*

OPPORTUNITIES FOR WASTE.

In a large establishment where several batteries of boilers are at work to supply the steam consumed, we are waiting for shutting down time to commence work upon the engine. Strolling around the building a large drop of very hot water upon the neck compelled attention to a large valve overhead, from the stem of which issued a jet of steam which would have been a decided improvement upon the performance of some safety valves we know of, together with numerons drops of the hot water aforesaid. Moralizing upon this outlet for the escape of heat without the performance of useful work, our thoughts went out over the long line of opportunities for waste which exist in the ordinary steam plant. One of the most prolific of these is the blow-off. Leading as it usually does by closed pipes to some concealed drain, a very serious leak may exist at this point without attracting the attention of an unobservant attendant. Our first experience in this line was in a printing office, where the boiler and engine were in charge of the pressman. One day the boiler worked badly. The fire was driven and coal shovelled with commendable energy, but frequent stoppages had to be made for steam. The state of affairs baing called to the attention of the manager, he declared the boiler to be dirty, ordered the fire hauled, and to show his practical acquaintance with the subject shut down his roller top desk, stripped off his coat and bathed in soot, ordered the boys about and raised a general hubbub for half an hour, when the boiler was pronounced all right. Meantime the writer had noticed that the pump was running although the draught of steam from the boiler had stopped, and that when the pump was stopped the water lowered in the glass. The blow off valve appeared to be closed when tried, but the pipe beyond the valve was hot, showing that hot water from the boiler was passing the valve. The valve was opened wide, then closed tightly, the water stood stationary in the glass, and the continual drain of heated water, caused probably by a bit of scale under the valve, being stopped, the boiler did its work nicely when started up, to the infinite delight of the manager who of course laid it to his clearing.

Another favorable opportunity for hidden waste is in those establishments where the circulation of pipes for heating is connected so that the exhaust may be used in it. If the exhaust valve is not tightly closed when live steam is on the building it will find an open passage through the exhaust connections into the open air.

About the engine are two little opportunities for waste, the first of which should be on its face so apparent that its frequency is surprising; that is the practice of allowing the drip cocks to remain open while the engine is running. Although it must be apparent to the operator that an opportunity is thus afforded for steam of the cylinder pressure to blow directly to waste, it is a very common practice with the runners of small engines. The second is more occult and less liable of detection, though we have met with a number of instances of it. We allude to the exhaust valve being late in closing, so late that it does not close until after the steam valve has been open for some time, allowing, of course, the live steam to blow through the exhaust port and out.

Another source of waste lies in the uncovered pipes which abound in places where the heat which they radiate is rather an annoyance than a desideratum. Every square foot of this surface is radiating heat uselessly into the atomosphere instead of retaining it to be conveyed to the engine, and converted in part, into useful work, and how much steam may be condensed in a long whistle pipe exposed to the weather and allowed to stand full of steam instead of being shut off as it should at the boiler.—*Boston Journal of Commerce.*

SHAFT BEARINGS.

In numberless instances, says *Iron Age*, shafting is found small in diameter in proportion to its length, even as regards the distance apart of its supports, and far more so regarding the shaft as a single rod, which from the method of uniting its separate lengths, it becomes. Such a bar, even before pulleys are put on, is anything rather than straight. The load of the pulleys puts it still more out of true, and then finally come both the dead-weight of half the belting driven by it and also the diverging strains of the loads on the driving sides of the belts. All these make a length of shafting serpentine, and this is increased in proportion to the distance of this or that pulley from a bearing. Hence it follows that the bearings must and do suffer; so also does the oil bill and the coal bill. Another source of friction and brass-cutting is to be found in the methods sometimes observable of fixing the hangers or brackets, such as bolting to joists or flooring overhead, either of which is subjected to constant variations of load and consequent alterations of line, or bolting to the members of an iron roof or its supporting columns, which are in perpetual movement by expansion, contraction or from wind stresses. In many cases there is no better way practicable, but then the evil can be met by putting up shafting in independent lengths, each having its own pair of supports and transmitting the rotation power by universal joints, or the simpler expedient of cross-ends plain on one end and "taken on to" by studs or pins fixed on the other cross end. It is probable that not one steam user on a large scale in a hundred can tell how much power is absorbed in overcoming preventable friction in his shafting. Yet it could easily be ascertained. We may also point that brass is used far more freely than is necessary for lay shaft beams. Hardwood, such as hornbeam or beach, is much better and cheaper when the loads are not too heavy. Wood bearing will run for years. They soak up oil and come to a beautiful surface, and they never cut a shaft, as brass will do. The virtues of wood are not understood as they ought to be.

THE POPLAR.

In an article on "The Future of the Poplar," a contemporary observes: As is well known, for a nation of shopkeepers a large number of packing cases have to be annually made, and as, in most instances, these cases are only used once, cheapness and lightness for carriage are great essentials, and these the poplar possesses in eminent degree. For cases in which very heavy weights have to be packed, such, for instance, as tin plates, where a cwt. of metal goes into a box about 20 in. by 14 in. and less than 2 in. deep, it is not so suitable as the elm, as it lacks its strength and will not stand such hard knocks. When it is considered that the tops and bottoms of these cases go at three boards in thickness to the inch this will not be greatly wondered at. There are, however, vast numbers of cases wanted in the drapery, grocery and similar trades, and for such purposes the poplar seems peculiarly suited, as, in addition to the qualities of cheapness and lightness of which we have spoken, it is very white and clean in appearance, and has no properties in it likely to cause injury to the articles packed within it. For such uses there need not be an atom of waste, since left to grow on naturally, and it is not attacked and lopped by the pruner's knife and saw, the poplar produces sound timber and free from knots, and there is no appreciable difference between the heart and sapwood, and the limbs are practically as good as the bole itself; under these conditions it is a very economical tree to cut up. Besides being useful for the packing-case maker, it is suitable for the turner, not perhaps for the more elaborate or lasting work, but for rollers, so extensively used in what our American friends would term "dry goods stores." The same qualities which recommend it for packing cases would be equally applicable here, and no imported wood possesses them in the same degree. Another use to which it is occasionally put is for benches and tables for leather cutters. For this its softness is a great advantage, but in the matter of grain there are woods more suited; but as they are scarcer, and consequently dearer, they have to be dispensed with in favor of the poplar.

THE INVENTOR OF THE CIRCULAR SAW.

In a lonely, secluded spot in the northwest corner of the cemetery, near the ever beautiful little village of Richmond, Kalamazoo county, Michigan, the reader can find, on a pure white marble slab, nearly concealed from view by a large cluster of lilac bushes, engraved the simple inscription "Benjamin Cummings, born 1772, died A. D. 1843." And who was Benjamin Cummings? He was the inventor of the circular saws now in use in this country and in Europe. Nearly sixty years ago, at Burtonville, New York, and Amsterdam, this man hammered out, at his own blacksmith's anvil, the first circular known to mankind. He was a noted pioneer in Richmond; a first cusin to one of the presidents of the United States; a slave owner in New York state; a leading mason in the days of Morgan, at whose table the very elect of the great state of New York feasted and drank freely of his choice liquors and wines; a vessel owner on the North River before the days of steamboats; a captain in the war of 1812, where, after having three horses shot from under him, with one stroke of his sword he brought his superior officer to the ground for insult, and because he was a traitor and a coward; and after being court-martialled, instead of being shot, he was appointed Colonel in his stead. In this lonely grave are the ashes of the man who, nearly 70 years ago, took up and moved bodily large brick buildings, and, to the wonder and admiration of the world, constructed a mile and a half of the Erie Canal through a bed of rock, and who also built, on contract, those first low bridges over the same. He also aided in the construction of the first ten miles of railway built in the United States, and founded both the villages of Esperence and Boatonville, on the old Schoharie, near Amsterdam. The study and aim of this man's life appeared to be to do that which none other could accomplish, and when the object sought was accomplished, he passed it as quietly by as he could the pebbles on the sea-shore.—*Ex.*

A Good Week's Log-Making.

AYLMER, Dec. 30.—The following work done by one gang of four men, under the management of Mr. George Guertin, in one week on the limits of N. E. Cormier, on the south branch of the Petewawa river, is worth noting. These four men, Moses Thibault, Cyrille Jeauvine, John Renaud and Alfred Perrier cut in six days beginning Monday, Dec. 14th. the following saw logs: Monday, 160; Tuesday, 166; Wednesday, 170; Thursday, 173; Friday, 171; Saturday, 168; total, 1,008 sawlogs, average diameter 16½ inches. The same 1,008 logs were laid up on ten rollways (besides making the rollways) in three days by two teams driven by O'Rooke, Guertin and Tom Guertin, 1st day, 356; 2nd, 307; 3rd, 345; total, 1,008.

DECEMBER 25th, during a thick fog, the British bark Arabella, lumber laden from Montevideo, South America, while in tow of the tug Pilot, went ashore on the rocks at Trail Island, a few miles from Victoria, B. C. Both vessels stuck fast, and the Arabella became a total wreck. She had 500,000 feet of lumber on board.

Chips.

WILD land in Franklin county, N. Y., which a local paper in that state describes as "some 7,800 parcels," was sold lately for $600,000.

DAVID GEROU was instantly killed on Jan. 1st, near Blenheim, Ont., by the limb of a tree striking him and breaking his neck.

THE E. B. Eddy Manufacturing Company, of Hull, P. Q., have made application to Parliament for a charter through Messrs. Gormully & Sinclair.

FOREST fires have lately raged in Pope county, Ark., and considerable damage has been done to pine and other timber, especially on the hills and mountains.

AN addition of about forty feet is being built to the south side of Mr. Peter McLaren's circular sawmill at Carleton Place. The new building will contain the necessary machinery for manufacturing dressed lumber.

THE bark Arabella, lumber laden for Australia, while in tow December 25th, went ashore on the rocks off Trial Island a few miles from Victoria, B. C. At last reports it was thought that the vessel would be a total wreck, but that a portion of the cargo might be saved.

FOLGER BROTHERS have purchased the charcoal works at Sharbot Lake, Ont. In the property is included 2,000 acres of woodland.

THE Port Arthur Lumbering Company, at Port Arthur, Ont., has been exempted from paying taxes for five years by a by-law of the municipality.

WE understand that Messrs. Bryant, Powis & Bryant, Limited, have acquired the well-known business of Messrs. Carter, Tyer & Parker, of 15, Canada Dock, Liverpool, and intend to carry it on at the same place, under the title of the London firm as a branch house.

NEVER put resin on a rubber belt. If it is a new one, it will cause the rubber to stick and accumulate on the pulleys, and eventually ruin the belt, and further, when resin has been applied for some time it will form a glazed, hard surface, causing the belt to slip out more than it did before the application was made.

THE operators in cedar, says the *Northwestern Lumberman*, are the men who seriously feel the effects of an open winter. Cedar has the habit of growing in swamps mostly. An early freeze, before snow gets deep, is a great advantage to the cedar industry. There will be a good demand cedar next year, and soft weather a large part of the season may serve to stiffen the market. There is, however, generally cedar enough to supply the demand.

IT is stated in a foreign exchange that a company is about to establish large works in St. Petersburg, for the purpose of making rails from paper. The paper is subjected to great pressure, and it is said that the material is extremely durable, and can be produced at one-third the cost of steel rails. A further advantage would be in their lightness, not only on account of the saving of the cost of carriage and laying, but also because they could be made in longer lengths than is the case at the present time, therefore the number of joints will be fewer, and consequently less oscillation to the carriages, and the wear and tear to both permanent way and rolling stock reduced to a minimum. A greater adhesion also would be offered by these rails to the driving wheels of the engine, and the working expenses reduced accordingly.

THE St. John, N. B, *Globe* says that Mr. H. R. Robertson has invented a new description of raft, differing from any at present in use. This raft in shape resembles a cigar, being round and brought out to a point at both ends. He has got out patents for it in Canada, the United States and in several countries across the Atlantic. Several New York lumber dealers confident that the raft will be a success, have made arrangements with Mr. Robertson to ship their logs by this means, and Mr. Robertson, with that end in view, has contracted with Mr. B. B. Barnhill to have the raft constructed at Two Rivers, N. S. It will be ready for launching in May next. The raft will contain about four million feet of timber, composed of piling, piece sticks, spars and poles, about 800,000 feet of hardwood suitable for wharf logs. Everything that enters into the construction of the raft can find a ready market in New York, and so no danger is anticipated in towing. Mr. Robertson expects to make a big thing out of it.

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The Best Article Ever Offered to the Trade.
I have much pleasure in drawing attention to my **WROUGHT IRON COOKING STOVE**, for Shanty, Hotel and Boarding House use. These stoves are made of **Heavy Sheet Iron**, the top and lining of the fire-box being of **Heavy Cast Metal** and all the connecting parts of substantial **Wrought Iron Work**. The dimensions of these Stoves are as follows:
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Top surface contains six 10-inch holes, with ample room between, and one oven 28 x 24 x 19. Fire box takes 28-inch wood.
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The Double Oven has a top surface containing twelve 10-inch pot holes, with two ovens, each 28 x 24 x 19. One fire-box of suitable size for area to be heated. Below will be found Testimonials from some of the leading Lumbermen, who have used my **Wrought Iron Cook Stoves** since I commenced manufacturing them. They are the names of gentlemen who are well known and reliable, and will carry more weight than any recommendation of my own could do.
The Best Stove I have ever Used.
PETERBOROUGH, May 31, 1880.
ADAM HALL, Esq., Peterborough. Dear Sir,—I have used your Wrought Iron Cooking Stove in our lumbering operations since its introduction here, and have no hesitation in saying that I prefer it to any other. For durability, economy and efficiency, where a large number of men are employed, it is the best stove I have ever used. You can, with confidence, offer it to hotels, boarding houses and lumbermen.
Yours truly, THOS. GEO. HAZLITT.
The Stove for Lumbermen.
PETERBOROUGH, June 1st 1880.
ADAM HALL, Esq., Peterborough. My Dear Sir,—We have used your Wrought Iron Cooking Stove and find it is very satisfactory for lumber operations, especially so on drives. We can recommend it highly.
Yours truly, J. M. IRWIN
In addition to the above I can refer you to the following lumber firms who use my Wrought Iron Range exclusively in their camps:—
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Communications intended for insertion in the CANADA LUMBERMAN, must be accompanied by the name of the writer, not necessarily for publication, but as a guarantee of good faith. Communications to insure insertion (if accepted) in the following number, should be in the hands of the publishers a week before the date of the next issue.

The CANADA LUMBERMAN is filed at the Offices of MESSRS SAMUEL DEACON & CO., 154 Leadenhall Street, London, England, who also receive advertisements and ubscriptions for this paper.

PETERBOROUGH, Ont., JAN. 15, 1886.

MR. CHARLES SERENY, an Ottawa lumberman, is believed to have been drowned in Lake Nipissing on Jan. 6th.

THE Morrison mill, at Fredericton, N. B., s being rapidly rebuilt. The main building is 42x125 feet, and the annex 14x90. The boiler house is 33x75.

JAS. DOLLAR, of Bracebridge, has purchased from the Muskoka Mill and Lumber Co. all their half of the township of Perry, containing 41¾ square miles.

THE Gibson tannery in New Brunswick will probably be started up next year, when the hemlock lands on the Nashwaak have been rendered accessible by the Miramichi Valley Railway.

THE lumber dealers of New York city are endeavoring to form a lumber exchange. It is said that the yearly trade of the port (in lumber we presume) reaches the large total of $60,000,000.

THE Minden, Ont., *Echo* says that some big work is being done in the shanties this winter. A few days ago five of Irwin's men, for scorers and a hewer, made 900 feet of board timber in one day. Mr. Joseph Hughes, of Anson, is the man that done the hewing.

MAITLAND N. S., ship yards turned out during 1885 eight sea-going vessels, five of them being barges averaging 1,100 tons, the others a barquentine and two brigantines. There are two now on the stocks at South Maitland, 1,200 and 1,800 tons respectively.

INCLUDED in the improvements to be made at Coal Harbor, the terminus of the Canadian Pacific railway in British Columbia, is the clearance of 60 acres of land, which is so heavily timbered that it will cost $200 an acre The company is also to let contracts for furnishing 45,000 ties and 2,800 piles. There will be lively times among the timber men at that point as a result of the operations of the railway company.

IT is reported from Duluth that Osterhout & Fox are making arrangements for the purchase of 60,000,000 feet of pine on the south shore of Lake Superior, contiguous to Duluth. This pine will be logged for stocking the firm's mill at Duluth.

THE total length of railway laid in the United States during 1885 was 3,113 miles, 700 miles less than the new mileage of 1884, but more than was predicted at the beginning of the year. The larger proportion of the new mileage was branches and extensions.

As an example of a novel mode of transporting lumber by water on the Atlantic coast, we have aireadly referred to the raft building by Mr. B. B. Burnhill at Two Rivers, N. S. It is 400 feet long, 30 feet wide at the ends and 50 in the middle, 28 feet deep. It will draw 20 feet of water. The cost of towing the raft to New York is estimated at about $6,000. Its building, including getting out the timber, will give employment to a hundred men for the winter.

G. S. C. writes in energetic terms to ask "if it is possible that Canadians send to Indiana for such things as toboggans." because he has seen advertised outside of a shop door in Toronto "Indiana hickory toboggans," and wonders at Canadians letting Yankees run away with such a peculiarly Canadian branch of manufacture. Our patriotic correspondent may calm himself; the goods he refers to were made in Hamilton; the hickory may be Indianian, but the toboggans are Canadian. Our people are not likely to be surpassed by the Americans in such goods as appertain to our winter sports and their costume.—*Monetary Times.*

ON Jan. 7th an accident occured at James King's shanty, near Mud Lake, by which one man lost his life and another was seriously injured. Two men, James Mangan and another whose name is unknown, were felling a tree, when it lodged. In attempting to get it down, a heavy limb was in some way detached and it fell with terrific force, striking Mangan on the head and his companion on the shoulder. Mangan's head was so terribly crushed that he ouly lived twenty minutes after the accident. His companion was paralyzed on one side, but is still living. He may possibly survive although it is doubtful.

HINTS TO SAW MILL MEN.

In these times of close margins, stagnation of business and low prices, the mill-men have had to work hard to make both ends meet. All kinds of business men have suffered by the dull times more or less, but few as keenly as the saw mill trade. The smaller mills not having the capital needed to buy at the lowest figures, and, being for the same reason unable to atone by large sales for the narrow margins of profit, have suffered much more than the large factortories, and it is to the owners of these small mills that this article is particularly addressed

It is with great difficulty that the poor mill owners can obtain a poor subsistence, pressed and harassed as they often are with notes due, and maturing for this and that, and the other. But "It's an ill wind that blows no one any good." The pressure brought upon the saw mill men has had its effect, and to-day many of them are in better shape than ever before to make money, as soon as there is a revival in business circles. The continued low prices have taught the thrifty mill-men, how to produce lumber much cheaper than would have seemed possible to them a few years ago. "Necessity is the mother of inventions," is a saying that has proved very true in the saw milling business the past year or two. There has been no alternative. It was a necessity to produce cheaper or sell at an absolute loss. Mill men h ve had to put on their "thinking caps" and study how to cut off and shut down expenses. It was a little here and there and everywhere, but the aggregate saving is wonderful.

Belts that have been rejected, thrown one side as past service, are now unearthed from some pile of rubbish, the best pieces cut out and trimmed up and made over, and so good, serviceable belts are produced at very little expense. The stretch is out of them, and in this respect they are preferable to new ones. Files that were worn out and left anywhere around the mill, are now gathered up and re-cut, reducing the file bill 50 per cent. There is place a to keep the old file now, that a value is atached to them. In one corner is found a lot of old saws of all sizes, shapes and conditions. They have taken up valuable room for years, but the time has come when they are to be classified and cleaned up. Many of them are worthless, but quite a number need only re-teething, and a gauge or two ground off from them to make excellent saws for small work. The hole possibly may be too large for the small mandrels, but the slight expense of a bushing is nothing in comparison with the expense of a new saw.

Among this miscellaneous lot of old relics are found two or three large saws with a crack in them three or four inches deep. There is not a drill-press or machine shop within miles, but there should be a good rachet, and a small hole drilled through the saw where the crack stops, will prevent it going any further, and with care the saw can be made to do good work. Several of these old saws have the teeth filed nearly off them and need gumming badly, or more properly re-teething. One or two are "buckled" badly, and are waiting for some time when they will be sent to the shop. Quite a number are thrown out into the scrap pile, and the entire lot classified and disposed off, with the result of saws enough for the entire mill for a year or two, at a small expense of repairing, straightening, re-toothing, etc. It is not the purpose of this article to recommend putting dangerous saws into service, as that is not true economy, but it is still a fact that with care a damaged tool may often be made almost as good as new.

Lacing is picked out from short and rejected pieces of belts oiled to soften it and used again In another corner of the mill are found old cant hooks which in some way became unserviceable. There are two or three axes without handles; one has the eye split beyond use. This corner has been a cemetery for broken and disabled tools and machinery, for as sure as an article was once thrown into it, it was practically buried without even a tombstone to mark its whereabouts. Truck wheels, old pulleys, pieces of belt, scraps of chain, short pieces of rope, a disabled wheel-barrow, a few remnants of T rail, and a pinch bar or two, are all lying together in this corner. And with but slight expense, many of these old tools could be made serviceable. All this truck is taking up valuable room, and in a short time it becomes a fixture and necessitates going around a pile of trash where much time could be saved could this room be utilized.

And many mill men have discovered this They have also learned that journals that jump up and run hot, can be babitted and adjusted Belts too light for the work required of them are replaced by those more suited for the work expected. Loose belts are tightened and made to do full service. Belts with many pieces are made over, thus avoiding the jump that numerous laps will make. Loose pulleys are babbitted when needed, and not allowed to rattle. These little details are all receiving the closest attention. The tendency is to save and utilize that which has been bought and paid for, and so reduce expenses.

Piece work is brought into use where it is possible to do so. The logs are cut, hauled, or bought at the bottom figure. More care is used in the selection, to reduce the common and increase the better qualities. Special bills receive closer attention, so that the proper quality may be furnished and the sizes kept exact. It is poor economy to ship, especially long distances where freight is high, any material to take chances upon. If it is sawed too large, re-saw it again. Don't ship it, paying freight upon worthless material and excessive weights, which make the lumber undesirable for the consignee and unprofitable for the shipper. Strange as it may seem a reckless way of sawing and shipping in the past has cost the mill men many dollars. But he is giving points closer attention now, learning the wants of the customer and trying to supply just those wants.

He is looking into the market more to find ways to work his lumber up more advantageously.

New machinery has been investigated, its merits enquired into and compared with the old in use. Dull as business has been, the only way to lessen expenses materially is to keep up with the latest improvements in labor-saving machinery. No push and hurry expended on poorly constructed machinery will enable the mill man to keep pace with competitors who are better equipped. The "thinking cap" must be kept on to keep pace with a progreasive age. Now the saw mill men are not all loose in their mode of doing business, but many of them can but admit that there was a time when they were, and that it was chiefly the dull trade of the past two years which brought them up to a better standard. They have learned economy and the lesson fits them for better times, and if the lesson is not forgotten, prosperity will surely attend them.—*E. B. Chester in Saw Mill Gazette.*

IN BY-GONE DAYS.

Mr. W. H. Murphy relates the following lumbering incident which it will be seen ocurred a good many years ago. "Fifty year ago just about this season of the year I was employed getting out timber on the Eardley mountains. We were short of pork and as I had some business in Bytown, now the city of Ottawa, I was commissioned by the boss to call on my way down at Mr. Egan,s office in Aylmer and have some pork sent up. I saw Mr. Egan and a day was set that I was to call and take the pork on my return. On the day appointed I was on hand and Mr. Egan informed me that I was to take a horse and tram, three barrels of pork and a large sack of oats. I started with my load over the Eardley hills and arrived at what is now and has been for many years known as Breckneredyes' place. There was then a stopping place kept by a Mr. Moor. I put my load under the shed which was then just about where Mr. Breckneredyes' hou e now stands. Mr. Moor's house was on the opposite side of the road and has long since, no doubt. dissappeared. I had not been long in Mr. Moor's when a large gang of portageurs who had been deleriving supplies to concerns further up, came along. In those early days it was usual to travel in gangs, as there was often trouble with ice and snow storms. The teamsters would come in in threes and fours as they passed along, but they did not stop. The horses understood their business, and would follow along. When the last of them had passed, I thought I would take a look at my load, and it was well I did so for my sack of oats dissappeared. There was no way it could go other than some of the teamsters had thrown it on to their sleighs. I acquainted Mr. Moor of my loss, He could, of course, suggest nothing. Here I was in a fix. I could not take the horse to the shanty with nothing to feed him, and besides, it would be a standing joke on me that I could not bring a load from Aylmer without losing a part of it. I could see the last of the teams slowly wending their way up the hill. My determination was soon taken, and I started after them. When I got up to them I jumped into the last tram, turned it round, and brought it back to Mr. Moor's. I got back and asked Mr. Moor if he had a gun, all I wanted was my property and they could have theirs. The suggestion to take back the tram to return the oats did not meet my approbation. I had made no allowance for that on my programme, which was to hold the horse till I got my oats. Seeing that I was determined they thought the better way was to return the oats, so starting back for them in a short time they returned with the sack. I gave them their horse and tram. As I handed Mr. Moor his gun he remarked, "Well, that's the best I've seen done in these parts."—*Ottawa Free Press.*

An Age of Discovery.

We certainly ought to appreciate the fact that we are living in an age of progress and discovery, this is especially appreciated by all persons that have been afflicted with rheumatism, as West's World's Wonder or Family Liniment is a positive cure for rheumatism. It is invaluable for cuts, sprains, bruises, burns, scalds and all diseases requiring external application. Sold by J. D. Tully at 25 and 50 cents per bottle.

HARRIS, HEENAN & Co.

124 AND 126 QUEEN STREET, - - MONTREAL.

Patent Stitched–Steam Power Pressure Stretched–Oak Tanned

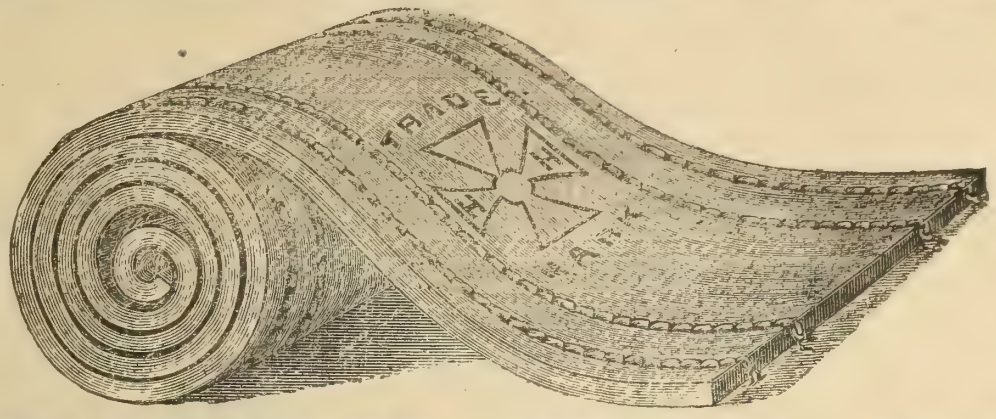
TESTIMONIAL.

IRA GOULD & SONS, CITY MILLS,
Nov. 13th, 1884.

Harris, Heenan & Co.

DEAR SIRS,—Your Patent Sewed Belt has been in use in our "City Mills" for some time. We are thoroughly convinced of its superiority over any belt, American or Canadian, we have used in an experience of over 35 years. It stretches so little, and gives so little trouble, that compared with riveted belting, the sewed belt saves double its price in time and laces saved. We heartily recommend it to manufacturers as the cheapest and most satisfactory belt in the market

Yours respectfully,
W. C. MARSHALL,



TESTIMONIAL.

PAGE, BERRY & Co., CANAL HORSE SHOE AND NAIL WORKS, MONTREAL, 15th Nov. 1884.

Messrs. Harris, Heenan & Co., Montreal.

I have pleasure in recommending the belting manufactured by Messrs. Harris, Heenan & Co., of this city. After thoroughly testing it, I find it greatly superior to any belting that has come under my notice and fully equal to all they claim for it, and certainly without an equal for cross or double belting.

CHAS. R. ELLACOTT,
Supt. H. S. & H. N. Dept.

LEATHER BELTING!

The Best, therefore the Cheapest, Belt in the market.
Replaces, when used, all others.
More Pliable and Durable, especially at the splices.
Stretches but little, always retains it original wid h.
Superior for Cross or Double Belts.
Runs sraight and true, does not start at the laps.
Single equals medium double.

25 per cent Stronger, 33⅓ More Lasting, and 12½ Heavier, than any other Leather Belt

MAPLES ELM AND OAK.

Maples, elms and oaks, generally classed as deciduous trees, formed the subject of a recent talk by Prof. A. S. Bickmore to the public school teachers at the American Museum of Natural History. The lecture was the second of a series on the vegetable Kingdom. The science of forestry, it was said, began first to be studied in Germany and to-day Germany leads all other countries in that particular. Her wooded territory has been carefully surveyed, and maps have been arranged showing the kinds of trees found in various quarters. All the forests are under the immediate protection of Government. Only a limited number of trees are allowed to be sacrificed each year, and an officer of the Government directs the particular trees to be felled. The same condition of things exists also in France, and as a result the income from the forests is increased. The public interest taken in the preservation of forests in Germany and France was contrasted by the professor with that taken in our own country.

The extreme northern limit of territory where deciduous trees are found in the country was fixed as the St. Lawrence river and the region about Lake Superior. There is a broad area of deciduous forestry extending southward across the United States, bounded on one hand by the Atlantic ocean, and on the other by the prairies. A comparatively narrow strip stretches from Lower California up the Pacific slope. The structure of the leaves of these trees was explained in detail, showing how they act as breathing organs to the trees in a manner closely analogous to the working of the lungs in the human body. The sap of the tree rises from the roots between the bark and the solid trunk, circulates through the branches and thence through the twigs to the stem of the leaf. From this point it is spread throughout the leaf in the veins. The fruit of the tree is engendered by the falling of grains of pollen from the male flower upon the stigma of the fertile flower.

The white oak, Prof. Bickmore said, is the kind generally used in manufacturing furniture and in commerce. Its elasticity and durability is what gives it value. Cork is simply the the bark of a species of oak which grows in the vicinity of the Mediterranean. In oak forests where bark is cultivated, a series of circles are cut about the trunk when the tree reaches its 15th year. The circles are connected by longitudinal cuts, and the bark is then pried off in large sheets. The first crop is of little value, but a second coat of bark comes, which is of a finer quality. Trees may have the bark removed half a score of times and lives to the age of 150 years before decay sets in.

Attention was called to the veneration for the oak which has been shown in times past by the Druids and others. The Druids worshipped in oak groves, if, in fact, they did not worship the trees themselves. This veneration was accounted for the fact that the trees, aside from their natural beauty, were exceedingly useful. They furnished food for man and the lower animals, and material for boots and bows. In a certain part of Palestine, it was stated, may still be seen an old oak tree which is said to be the oak of Abraham. "I can't say that the tree actually existed in Abraham's time," said Prof. Bickmore.—"It is hard for a scientist to believe that any tree now in existence dates back so far." The oak family includes the chestnut, beech, and hazelnut trees, and both oaks and elms are a sub-order of the nettle family.

The most beautiful, graceful and dignified tree in all the vegetable kingdom was said to be the elm, and the professor expressed pleasure at the fact there were so many of them in Central park.—*New York Times.*

SHIP BUILDING ON THE MERSEY.

The shipbuilding trade on the Mersey during the year now closing has been comparatively slack; and, so far as present appearances go, the prospects for next year are not encouraging. Messrs. Laid Bros., Birkenhead, have built the following vessels this year :—The steel paddle steamer Ireland, 1,951 tons gross register and 850 horse-power; the steel twin screw steamer Britannia, 1,524 and 250 horse-power; the iron twin screw steamer Stormcock, 372 tons and 300 horse-power; and the iron screw steamer Blackcock, 220 tons and 200 horse-power. In addition to building the above vessels, Messrs. Laird Bros. have effected several heavy repairs and alterations in ships and machinery. Messrs. R. & J. Evans have built the following vessels :—The iron sailing ship Westgate, 1,920 tons; the iron sailing ship Alliance. 993 tons; and the iron lightship Star, 195 tons. Messrs. W. H. Potter & Sons have constructed the following :—The iron sailing ship Marlborough Hill, 2,578 tons builders' measurement; the iron steamship Hecate, 1,350 tons; the iron twin screw steamer Alarm, 250 tons; the iron sailing ship Langdale, 2,150 tons; and the iron steamer Medusa, 1,350 tons. Messrs. Thomas Royden & Sons have the following list :—The iron steamer Britannia, 3,129 tons gross and 1,400 horse-power; the iron sailing ship Queen of England, 2,119 tons; the iron sailing ship Glenesslin, 1,821 tons; the iron sailing ship Buccleuch, 2,054 tons; and the iron sailing ship Glenericht, 2,400 tons. Messrs. Cochran & Co., of Birkenhead, have built a large number of lighters, launches, steam tugs, &c., the total gross tonnage being over 2,000.—*Timber Trades Journal.*

A MUCH USED BUT LITTLE KNOWN WOOD.

"Did you ever wonder what knife-handles are made of?" asked a dealer in fancy woods of a New York *Tribune* reporter as he hauled out a shapeless block from his store of spoils from many tropical forests. "Outside of bone and tortoise shell and pearl, so called, which every one recognizes, the majority of knife-handles are made out of a close, fine-grained wood, about the name and pedigree of which 9,999 out of 10 000 persons are ignorant. It is known to the trade as cocobola wood, and it comes in large quantities, millions of pound a year, from Panama. It is of special value for knife-handles because of its close texture, freedom from knots and flaws, and consequent disinclination to split. Many well-known kinds of wood require varnishing and polishing and filling up of crevices before they attain the beauty for which they are famous. Of course that sort of thing cannot be done in the case of knife-handles, and something must be used which doesn't require fixing up. Cocobola is rarely used for cabinet-making, because, being a gummy wood, it doesn't glue well. The same qualities that make it of use in the manufacture of knife-handles render it valuable for the making of wind instruments like the flute. It comes to us in chunks, not in strips and planks like other woods. Sometimes these pieces will weigh 500 and 600 pounds, but generally much less than that. It costs 2½ cents a pound now, but before freights went down and the isthmus was opened up so thoroughly it used to cost double that price."

WORTH MORE THAN GOLD.

The eyes of the northern mill men are turning eagerly to the comparitively virgin forests of the south, and heavy sales of timbered land are constantly being announced. If the ravenous saw must be fed, and no better and cheaper material than wood can be devised, then the people of the south should not dispose of their heritage for a mere pittance of its actual value. These huge tracts of yellow pine can be converted into yellow gold, and should not be sacrificed as a worthless possession. We should make the most of our opportunities, and not yield too rapidly to the pressure of greenbacks. These huge areas of undisturbed trees are daily enhancing in value and importance as the supply in the North and West diminishes. It is idle to talk of the "inexhaustible" forests of the South, when Mr. Little of Montreal, an authority on the subject, estimates that the sawing capacity of the North is sufficient to consume the merchantable pine of this state in less than a year. The South posseses mines of wealth in her noble forests, and they should not be disposed of carelessly, and without a full appreciation of their true and real value.—*Florida Herald.*

NEW BRUNSWICK INTERESTED.

To the Editor of the Canada Lumberman.

SIR,—I took notice in your valuable paper of the 15th Dec. two very sensible written letters, —one by Manufacturer, and the other by Hon. H. G. Joly. Manufacturer shows in plain language our lumber manufacturers are in danger of being drifted on lee shore, by allowing the Americans to take the wind out of our sails; allowing them to cross the boundary and float away our lumber unmanufactnred to their own shores to be manufactured, encouraging labor and capital to help build up their country out of our material, and charging us $2 per M feet duty if we attempt to compete with them.

I trust not only manufacturers, but farmers, laborers, mechanics, and men of all classes will put their shoulder to the wheel and cry out against the unfairness of the Dominion to allow Americans yearly to rob us of our staple article, with no restriction or recompense, for one and all are interested in the matter, and if we allow Americans to follow up with impunity a few years more, to cross the lines and slaughter our forests, one-half of our manufacturers of lumber will be driven into bankruptcy, and their fine costly establishments closed and decaying Labor is the wealth of any country, and so long as we allow our forest to be snatched from us to go on the American side to be manufactured, just so long we are giving Americans a premium to oppose our lumber industry, and unless our manufacturers' advice is at once taken by our Dominion to put on the same export duty on our raw material going out of the country to the American side to be manufactured, that they charge for our manufactured article going into the United States, we may expect to be left on the lee shore, and our lumber trade stranded in a very few years.

I may remark that its not only Ontario that is in danger now, all above the Grand Falls, in New Brunswick, American and English capitalists have, and are contemplating building mills to cut our cedar and what few spruce we have left. Inside of five years there will be but little if any worth cutting if they go on at the rate they are now cutting. And in Nova Scotia they strip it of its lumber by building immense large rafts and tow them with powerful tugs to the United States ports to be manufactured.

The Hon. Mr. Joly's remarks on forestry are worthy of particular attention, and every man owning an acre of land should plant more or less of some sort of trees, and report for the benefit of humanity, and try to cultivate a taste to improve tree growing and forest protection, nd demand of our Governments to put a stop American capital coming over to slaughter our forest as we want it all for Canadians. And we cannot wonder at the American press saying our Dominion politics does more to drive emigration to their shores than all their own politicians and emigration schemes yet been tried.

It has been customary with our politicians to lock the door after the horse has been stolen, and likely the same old groove will be followed for the future.

Most respectfully yours,
P. O. Byrom.

Madawaska, N. B., Dec. 1885.

THE FORESTS OF SIBERIA.

The Russian journal of *Finance Minister* has published a long article on the forests of Eastern Siberia, of which the following are the principal passages:—"The immense forests of pines, larchs, cedars, birches, aspens and limes which form almost the exclusive wealth of this region, belong for the greater part to the State. During a great number of years this source of wealth was almost entirely unproductive. It is only since 1869 that a more or less regular administration of forests has been established, and at the present time the extent of the forests in Eastern Siberia are estimated at 72,335,230 deciatines (about 11 square yards each.) These are divided between Tobolsk Tomsk, Semipalatinsk, and Akmolinsk. Of these forests, 21,355,760 deciatines have been accurately surveyed, and 50,979,570 have been valued very approximately One hundred and five forests have been conceded to the peasants, and they have an extent of 7,068,240 deciatines. In comparison with their enormous extent the forests of Eastern Siberia give at the present time but an insignificant revenue. The want of means of communication, and an insufficient population, greatly hinder its development. Still, the revenue is increasing, for in 1876 it was only 40,000 roubles, and in 1884 it was more than 111,000. The chief centre of the trade is in the town of Tomsk, and then Tumen, which is point of departure for the river traffic."

QUARTERED OAK.

For the past two years quarter-sawed white oak has gradually been grown in favor, and the present demand is largely in excess of any previous demand for years. The thickness most used is inch, and it is worked into flooring and general house finishing. The furniture manufacturers are using quite an amount for dining tables and sideboards, and the manufacturers of desks and chamber sets use limited amounts. The beauty and value of quarter-sawed oak is in the figure, and takes more than ordinary sawyer to cut the log to the best advantage. Only the largest and best logs should ever be quartered, as a most desirable feature in such stock is to secure clearness and width. The eastern market will take quartered oak, five inches and up wide, but the buyers also place the value on a car load by the amount of lumber that is over 12 in. in width.

The best length to cut quartered oak is 14 feet, although there is a demand for more or less 16 feet, and for such a good price is easily obtained. The demand for thick oak is limited, and the price is usually from $3 to $4 per M. more than for boards.

Quartered oak should always be square-edged, and piled in such a manner as to dry out perfectly straight. An eighth of an inch should always be allowed in the sawing, so that the boards will dry out to full thickness.—*Timber.*

QUEBEC TIMBER AND LUMBER EXPORT.

"The past season has been one depression in all branches of commerce, and the lumber business of this port forms no excep ion." Such is the opening sentence of Messrs. J. Bell Forsyth & Co.'s lumber report for 1885. The circular states that the arrivals from sea of both steamships and sailing vessels show a slight increase over last year, while the tonnage from the lower ports is also in excess. The total supply of timber measured, by the returns from the supervisor of cullers, was as under:—

SUPPLY.

Year 1885.....9,000,000 feet.
" 1884.....8,250,000 "

EXPORT.

Year 1885.....10,500,000 feet.
" 1884.....9,000,000 "

STOCK WINTERING.

Year 1885.....11,750,000 feet.
" 1884.....12,250,000 "

These figures show a great falling-off during the past ten years when the average export of white pine alone was over 12 million feet. In deals, taking pine and spruce together, the export has been slightly under that of the previous year and the stock wintering rather more.

The accounts from Great Britain show a considerable reduction in the consumption of Canadian timber, and the imports, though light, have been more than ample for the requirements; from all quarters a dull market is reported.

WHITE PINE.—Waney board—The quantity measured, some of which has been in the coves for a year or more, show a heavier supply than last year, and the stock on hand slightly in excess of that wintering a year ago. Fresh timber of choice quality has been in good demand all season at our highest quotations while old or inferior has been entirely neglected. The stock comprises some choice girthy wood, also a larger proportion than usual of old, small and inferior.

DITTO SQUARE.—The supply has been the lightest since 1879, when it was reduced to 2½ million feet, the export light, and the quantity wintering, though less than last year, about an average of the past five. A fair demand existed during the early part of the season especially for choice or new rafts, some of which were placed at high figures, while for old and inferior wood there were no buyers except at greatly reduced rates. Towards the autumn enquiry almost ceased, the shipping houses manifesting no disposition to add to their light stocks. The rafts on hand are to a greater extent than usual held on manufacturers' account, though only three or four new lots are comprised in this list.

When we issued our last circular a number of rafts, the production of 1883 and 1884, were laid up on the Ottawa in readiness for the spring market; these have reached the coves, as well as the manufacture of the past winter, so that the stock now wintering—which includes much inferior wood—is all that can be counted on as available for the spring fleet. From latest advices the production will be extremely light this winter.

	Supply. 1885.	Export. 1885.	Stock. 1885
Square	2,820,045		6,651,604
Waney	2,876,753	6,758,240	2,588,603
	Supply. 1884.	**Export. 1884.**	**Stock. 1884.**
Square	3,707,159		7,501,529
Waney	2 199,867	6,047,680	2,399,001

RED PINE.—The supply has been almost nil, owing to the scant demand and low prices of past years, the export fair and the quantity on hand less than one-third of the usual average with a good deal of old and inferior wood in stock.

	Supply.	Export.	Stock
1885	73,766	644 160	473,136
1884	327,738	614,280	1,012,426

OAK —The supply has been double that of 1884, the export greater and the quantity wintering more than sufficient for all early requirements. Prices opened steadily, with a downward tendency and a weak market towards the close of the season. The only wood now readily sold in this market is choice in quality and make, and manufacturers cannot be too particular in this respect. The quantity wintering at Garden Island is small. Sawn oak exported from the United States to Great Britain is in many ways now taking the place of square timber.

	Supply.	Export.	Stock.
1885	1,566,968	1,526,400	1,078,051
1884	772,250	1,212,520	837,715

ELM.—Notwithstanding the difficulty in securing standing timber the production last winter was heavier than usual, the export larger and the stock on hand greater than for some years. The demand has been fair but the closing prices easier, owing in a great measure to the heavy stock. It is estimated the manufacture this winter will be greatly curtailed.

	Supply.	Export.	Stock.
1885	1,018,932	884,160	560,453
1884	657,919	658,000	114,961

ASH.—The receipts and exports have been light and the wintering stock heavy. It contains a large amount of old timber unsuitable for shipment and useful only for sawing up for local consumption. Good wood is held at our highest rates, while inferior is unsalable and neglected.

	Supply.	Export.	Stock.
1885	287,595	262,480	428,635
1884	451,984	360,080	389,358

BIRCH.—The shipment has been large, the quantity wintering very light. Prices have been fairly maintained, and for parcels of good average there has been a fair demand.

	Supply.	Export.	Stock.
1885	379,059	457,160	22,138
1884	194,346	241,120	23,038

STAVES.—This branch of the Quebec business which once formed so important an item of export will disappear from our stock list altogether if the decrease continues in the same ratio for the next few years.

The present stock of pipe is equal to the export of the last two seasons, while that of puncheon is considerably less.

	Supply.	Export.	Stock.
1885—Pipe	144	152	349
1885—Puncheon	186	469	310
1884—Pipe	96	183	379
1884— Puncheon	261	700	474

DEALS.—Pine has been in good request, especially for specifications containing fair proportions of first quality and broads, which have been scarce all season, and have commanded extreme rates. The enhanced quotations for all the higher grades of lumber in the United States will not only curtail the shipments of Michigan deals to the St. Lawrence, but must also attract a larger proportion than usual of choice Canadian lumber suitable for deals to that market. From all appearances prices are likely to be well maintained, and may rule even higher for next year's delivery. The export has been slightly under that of last year, the stock wintering rather heavier; including, however, a larger proportion than usual of culls and odd sizes. We learn that the shipments from Montreal have increased considerably this season.

	Supply.	Export.	Stock.
1885	2,666 240	2,376,737	955 648
1884	2,247,240	2,442,946	847,653

SPRUCE.—For some weeks in the early spring a brisk demand existed, attributable, however, more to the fact that the fleet arrived almost simultaneously and that the mills, owing to the lowness of water, were unusually late in getting to work. As the season advanced prices dropped, but towards the close of navigation considerable sales were made at fair figures. We would, however, urge our mill men to curtail the supply, as we are convinced that if the manufacture be excessive the present healthy tone will not be maintained.

	Supply.	Export.	Stock.
1885	2,535 324	2,473,529	822,632
1884	2,222,557	2,636,465	838,817

Freights have ruled low all season. opening at 20s. to 22s. 6d. Timber, 47s. 6d to 50s. Deals to Liverpool, 20s. to 22s. 6d. Timber, 50s. to 52s. 6d. Deals to London, 17s 6d. to 19s. Timber, 45s. to 47s. 6d. Deals to Greenock closing at 18s. Timber, 45s. Deals to Liverpool, 20s. Timber, 45s. to 47s 6d. Deals to London, 16s. 6d. to 17s. timber, and 45s. deals to Clyde.

THE BAND MILL.

The interest in band saws does not abate. Owners of good timber see the necessity of making the most of it. Good pine is too valuable to throw away in sawdust. The time was when the thickest circulars were thought to be the best saws. They were durable, easily run, and the wide kerf was no objection. Gangs were not introduced as timber savers particularly; the saving they made was a consideration with some, but the fact of superior manufacture was the prime object.

The oldest operators in the field are the ones who are now giving the most thought to band saws. Years of experience have taught them that by the older methods of manufacture what would otherwise bring to them many dollars goes into the refuse heaps. They plainly, and forcibly see that this is poor policy. They are also aware that their pine possessions are growing smaller year by year. They want to make the most of the last of it. It is often said—and we all know it by experience—that a person never fully appreciate a friend until that friend is gone. So it is with pine. When it was plentiful, and could be had at $1.25 an acre of government for asking, it was not appreciated. Its value was underrated. In a strictly commercial sense it was worth only what it would bring, but its prospective value was much greater. The latter value was what was considered by the cautious and far sighted, as is proved by the fortunes at which several holders have recently disposed of their timber.

That band saws, almost without number, will be put in as soon as possible, admits of no question. It can be said that there is a craze for them, but it is backed by common sense, and strictly business principles. The machine that will pay for itself in a few months is considered a good investment, and we believe a good band saw will do that. The man who can change his methods of business and make $1.25 when before he made but $1, will naturally, as soon as possible, place himself in a position to secure the extra 25 per cent. If he can do this by using a band saw, instead of a circular, he is certainly excusable for being an enthusiast.

The men who do not wish to adopt band saws are those who cut coarse stock mainly, and who are obliged to turn out large quantities of it, in order that their business may be profitable. A small output of lumber of low grades rarely pays. There is but small profit on a thousand

feet, consequently the more that is manufactured and sold the better. But this objection is entirely done away with as soon as good lumber is considered. A gain of from 20 to 35 per cent. in the amount of lumber turned out, in favor of the band saws, is a prime object, when such logs produce good lumber. What, for instance, would have been the result, if up to date, the Wolf river stock had been manufactured by band saws? Much of the timber cut on that river was exceptionally fine, as high as $20 a thousand having been paid for logs, yet these logs have been cut with circulars. The waste of timber has been so great that had that waste been sold as lumber, as a large portion of it would have been had thin blades been used, fortunes would have come from it. Old operators have in mind just such cases, and while they cannot undo the past they are determined to do better n the future.

There has been a doubt in the minds of many manufacturers as to the feasibility of using band saw mills. This not to be wondered at. The outcome of any prominent innovation is always doubted by many. The old, if not so good as the new, is, as a general thing, clung to by the majority. We believe there is no manufacturer of band saws who will say that his machine is perfect; still there are band mills doing excellent work, day after day, as figures, published from time to time in these columns, prove. And after all it may turn out that there are better mills on the market than many give them credit for being. Along in the fifties, somewhere, the first circular that was put in a Manistee mill was discarded because it was thought to be worthless. Practically it was worthless, but it was so because it was a new thing. The mill men were not used to it, and did not know how to run it. Yet the circular which was thrown out had the same intrinsic merit that have the scores of rotaries that sang in Manistee during the last sawing season. Without a doubt, there are many sawyers in that city,—and probably there is one in every mill in the Northwest,—who, had they a chance, to-day, would take their supposed worthless old circular, and make it do a hero's work. Every machine has its peculiarities,—some say its despondent and elated moods,—and no man can understand it who is not familiar with it.

There is another forcible argument we see in the use of the band saw. The white pine lumber manufacturers know, or ought to know, by this time, that the capacity of their mills has injured their business. For years the manufacture of lumber has been carried on with a mighty rush. Timber and prices have been slaughtered. Certain mill owners say that the capacity of the band mill is not large enough. If such mills are to come into general use, let the lumbermen of the Northwest hold up their hands and in unison thank heaven that their capacity is no larger. With the invasion of yellow pine from the South, and of California, Oregon and Washington territory lumber from the West, if every other circular and gang in the 2,700 mills of the Northwest were replaced by band mills there would then in coming years be all the white pine lumber manufactured that could be disposed of profitably.—*Northwestern Lumberman.*

THE DAMAGING GUM SPOT.

A widespread difference of opinion exists in the various markets in regard to the inspection of cherry. In New York there are certain dealers who consider a car load of cherry first class if it will run fifty per cent firsts on their yard inspection, while in Boston the standard is 75 per cent. firsts. In another market there is also a marked difference in the manner of grading, and the proportionate amount of firsts which must exist in order to constitute a choice or standard grade lot of cherry. This variety of opinion undoubtedly arises from one source, the prevalence of gum spots in the lumber. There are inspection rules in force which require a first in cherry to be eight inches or over in width and absolutely perfect, and it is an easy task under such a rule, of course, to pick out the firsts

It requires care and judgment in inspecting cherry to intelligently and fairly classify boards that are entirely free from knots and sap and still have more or less gum spots on their surface. As a matter of fact very few cherry boards or plank are absolutely free from gum spots; it is a natural characteristic of the timber, and while many places might have but one or two minute blemishes of this description, it naturally follows that a strict adherence to the letter of grading which consigned such pieces to a second grade, would in case the lumber had been sold in sorts, prove unjustly severe upon the manufacturer. It is true that buyers of cherry in the large markets place great stress upon the appearance of gum spots in the lumber, but observation proves that in the finest goods manufactured from this wood, the process of staining and polishing has failed to entirely obliterate the gum defects, which goes to show that while it may be desirable to secure cherry absolutely free from nature's blotches it is far from possible to do so, and consequently the feature is used more as a means of securing what amounts to a discount on the lumber when bought, than from a desire to really secure an impossibility.

Cherry growing in various sections of the country differ materially in regard to the presence of gum; a distinct choice exists between mountain growth and valley growth timber more or less cut from second growth trees i mixed in with that cut from trees of an older growth to "sweeten" the average. Still, in the face of all these facts, there should exist some common understanding regarding the classification of gum specked cherry, so that its real value may be obtained.— *Northwestern Lumberman.*

JAPANNING.

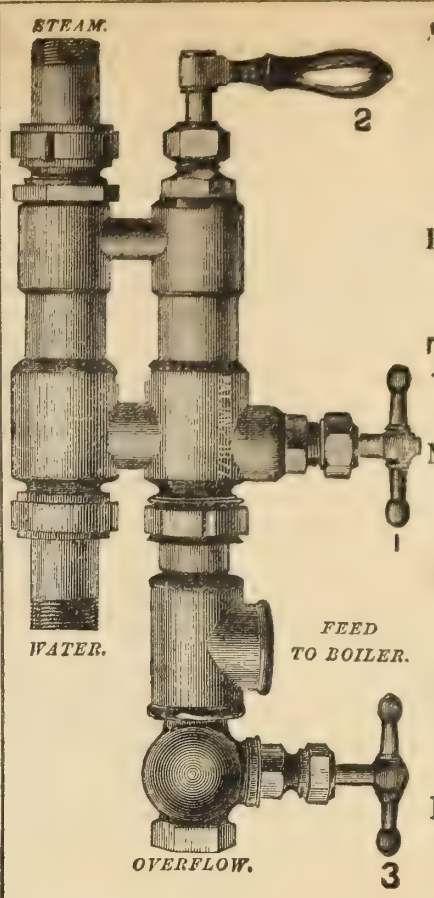
In an article on japanning, the *Scientific American* says the work to be japanned is cleansed, dried and warmed. If of wood or other porous material it is given while warm several coats of wood-filler, or whiting mixed up with a rather thin glue size, and is, when this is hardened, rubbed down smooth with pumice stone. It is then ready for the japan grounds. Wood and similar substances require a much lower degree of heat and usually a longer exposure in the oven than metals, and a higher temperature may be employed where the japan is dark than when light. The japanner's oven is usually a room or large box of sheet metal, heated by stove drums and flues, so that the temperature indicated by a thermometer or pyrometer can be readily regulated by dampers. The ovens are also provided with a chimney, a small door, and wire shelves and hooks. The ovens must be kept perfectly free from dust, smoke and moisture. A good, cheap priming varnish for work to be japanned consists of pale shellac 2 oz., pale resin 2 oz., rectified spirit 1 pint. Two or three coats of this is put on the work in a warm, dry room.

Catarrh—A New Treatment.

Perhaps the most extraordinary that success has been achieved in modern science has been attained by the Dixon treatment for Catarrh Out of 2,000 patients treated during the past six months, fully ninety per cent. have been cured of this stubborn malady. This is none the less startling when it is remembered that not five per cent. of the patients presenting themselves to the regular practitioner are benefitted, while the patent medicines and other advertised cures never record a cure at all. Starting with the claim now generally believed by the most scientific men that the disease is due to the presence of living parasites in the tissues, Mr. Dixon at once adapted his cure to their extermination; this accomplished the Catarrh is practically cured, and the permanency is unquestioned, as cures effected by him four years ago are cures still. No one else has ever attempted to cure Catarrh in this manner, and no other treatment has ever cured Catarrh. The application of the remedy is simple and can be done at home, and the present season of the year is the most favorable for a speedy and permanent cure, the majority of cases being cured at one treatment. Sufferers should correspond with Messrs. A. H. DIXON & SON, 305 King street west, Toronto, Canada, and enclose a stamp for their treatise on Catarrh.—*Montreal Star.* 1y122.

Advice to Mothers.

Are you disturbed at night and broken of your rest by a sick child suffering and crying with pain and cutting teeth? If so, send at once and get a bottle of Mrs. Winslow's Soothing Syrup for children teething. Its value is incalculable It will relieve the poor little sufferer immediately. Depend upon it, mothers, there is no mistake about it. It cures dysentery and diarrhoea, regulates the stomach and bowels, cures wind, colic, softens the gums, reduces inflammation, and gives tone and energy to the whole system Mrs. Winslow's Soothing Syrup for children teething is pleasant to the taste, and is the perscription of one of the oldest and best female nurses and physicians in the United States, and is for sale by all druggists throughout the world Price 25 cents a bottle.



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Market Reports.

TORONTO.

From Our Own Correspondent.

JAN. 9.—Considerable trade has been done up to within the past five days, but as might be expected the present severe weather put a stop to all outside work, and the yards are all quiet waiting for more favorable chances. In the meantime those who are wise will stock up their yards while the present favorable prices stand, for most assuredly figures will advance ere long, and may be said to be now moving up. Stocks at the mills are run low, and the season for getting in logs must of necessity now be a short one, and with a fair prospect of the duties being taken of lumber going to the American side, all tend to make manufacturers hopeful of what the future has in store for them. On the other hand should the balance of the season prove favorable for stocking a good spurt will be put on by the mill men and a fair stock be got in, and prices may not advance to the extent hoped for. Yard men can hardly hope, however, to stock up their yards again to sell out out at the prices now being obtained. In fact they cannot now purchase to sell again at their present quotations. There is no bill stuff worth mentioning piled off on track side here. The only article that is plentiful is the lower grades of one inch boards, and as the season advances the stock in hand here will be materially lessened, and a considerable portion of that now at the mills will find its way west, so that there is but little fear of any glut during the present winter and spring. Mill men must not suppose, however, that dealers will snap up green lumber to ship out during the present winter (unless where cut to fill orders.) The question of freight on green lumber is a serious one, and dealers cannot afford to overlook that item. Railroad companies generally take care to remind them that they have such articles as weigh scales, and if manufacturers want their stocks removed before it becomes reasonably dry they will have to submit to taking low prices.

Basswood is plentiful on our market and only a limited demand for it; the same may be said of maple. Birch and cherry will find a ready market. Sawn lath are in fair demand, and shingles quiet. Should the present cold snap continue long there will not be much demand for anything below dressing and better lumber until milder weather comes in.

Mill cull boards and scantling	$10 00
Shipping cull boards, promiscuous widths	12 00
" stocks	13 00
Scantling and joist, up to 16 ft	13 00
" " " 18 ft	14 00
" " " 20 ft	15 00
" " " 22 ft	16 00
" " " 24 ft	17 00
" " " 26 ft	18 00
" " " 28 ft	19 00
" " " 30 ft	20 00
" " " 32 ft	21 00
" " " 34 ft	22 50@22 50
" " " 36 ft	24 00
" " " 38 ft	27 00
" " " 40 to 44 ft	30 00
Cutting up planks to dry	20 00@25 00
" boards "	20 00
Sound dressing stocks	16 00@18 00
Picks Am. inspection	30 00
Three uppers, Am. inspection	35 00@40 00
B. M.	
1¼-inch flooring, dressed	25 00@30 00
1¼ " " rough	14 00@15 00
1¼ " " dressed	23 00@25 00
1¼ " " undressed	14 00
1 " " dressed	16 00@20 00
1 " " undressed	12 00@14 00
¾ Beaded Sheeting, dressed	18 00@20 00
Clapboarding, dressed	12 50
XXX sawn shingles, ₱ M	2 75@ 2 90
Sawn Lath	2 25
Red oak	20 00@25 00
White "	25 00@30 00
Basswood, No. 1 & 2	18 00@20 00
Cherry, No. 1 & 2	50 00@60 00
White ash 1 & 2	25 00@30 00
Black ash 1 & 2	20 00@25 00

OTTAWA.

From Our Own Correspondent.

JAN. 9.—Not a little uneasiness exists amongst lumbermen in this vicinity over the project now said to have taken shape among Michigan mill owners of taking over logs and other lumber in crude form from the Georgian Bay and Lake Superior section for manufacture in United States territory. These Michigan men have already secured a foothold by buying timber limits in the Georgian Bay and Lake Superior section, and propose towing the logs over to their Michigan mills. While no one disputes the right of the Michigan men utilizing our forests, still it is contended that this will act detrimental to the lumber industry of this section of the Dominion, and they think that an export duty should be placed on all logs thus taken out of Canadian territory. Canadian lumbermen have to pay duty when shipping lumber to the United States, and they think it only just in the interests of the Canadian trade, that American shippers of crude lumber should come under taxation to the revenue of Canada. True it is that the United States tariff on coarse lumber has lately been reduced, still there remains the present very heavy duty on first quality. By towing logs across in booms from the Canadian side to the Michigan mills the American escape both imposts. This complaint of Canadian lumber merchants is certainly not without reason, and it is presumed that the Government will take some steps to equalize things a little in a matter of such serious importance. Another aspect of the case is the fact that the territory over which the American lumbermen will operate is that they will have easier facilities for getting their logs to the saw than the average Canadian millowner. They propose to operate in the Georgian Bay country and utilize the rivers of that territory, which will make the transport not only short but rapid. The longest distance which these logs will have to be driven before being placed in the boom, ready to be towed to the mills, will not at the outside exceed over 50 miles; whereas the Chaudiere mill owners have to drive their logs hundreds of miles before they reach the mills, and are thus heavily handicapped in the race of competition. The Georgian Bay and Lake Superior section is a heavily timbered country, and owing to the ease from which it can be reached and utilized by the American lumbermen, it offers a very inviting field for their enterprise and energy, now that their own forests are beginning to show such visible signs of depletion. Bordering on the Georgian Bay are a number of fine rivers running into the bay, which are naturally well adapted for the rapid transport of logs; whereas the Ottawa and its tributaries are not only a lengthy means of reaching the markets, but have often very hazardous channels and subject to many drawbacks owing to low water in some seasons. The question of putting all who are engaged in the lumber industry on a footing of equality is one well worthy of grave consideration, and the Government by attending to the matter at once will simply be doing a duty which is incumbent on it.

CHICAGO.

AT THE YARDS.

The *Northwestern Lumberman* of Jan. 9th says:—In the absence of anything but a dribbling winter trade, the wholesale dealers are having plenty of time to reflect on the past year, and speculate on the future. They have taken a firm grip on values for the time being, which they are able to hold, somewhat as a driver can hold a team that is standing stock still, with no disposition to go. The lumber business is taking a rest, when compared with the rush of the busy season, so that there is no trouble in holding the team of values. A little later, when the dogs of competion get a-barking, and rumors of cut prices begin to explode with much noise, the team will commence to dance and cavort, and then it will be business to hold the horses.

The books for the year have been balanced, an account of stock has been taken, the dealers know how much they have paid out, and how much they have left. It is seen that the aggregate of business done shows a decrease as compared to results in 1884. There are a few exceptions in which houses have made a comparative increase of their business during the past year. But the great majority have had an opposite experience. Dealers are now asking Why is it that receipts and distribution in and from this city fell off during the past year as compared to the year previous? Some are bold enough to assert that the Chicago lumber trade has passed the summit, and never again will be so large as it was in 1882. Other dealers take a different view, and say that another period of good times will place the white pine trade back where it was before the late depression in the matter of volume. But all regret the departure of fair profits, and the majority are fearful that they have gone to stay. As a basis for this view, it is pointed out that stumpage and manufacturing has got into strong hands, and that the cargo market fails to yield to the demands of the yard men, as it once did. It is claimed that two much has been paid per thousand for lumber now in stock. The stumpage owners and manufacturers are able to hold their values steady, while the wholesale trade is cut up and constantly menaced by competition from various quarters. Now the yellow pine of the South, and the redwood of California threatens to eat into the western trade. It is argued that under the weight of all these adverse circumstances the wholesale trade of this city must necessarily be restricted, and gradually dwindle The claim is not made, of course, that there is to be a rapid decline and near-by extinction of the wholesale trade, but it will fall off, a few millions a year, until where 1,500,000,000 was once handled by the jobbing trade, there will increase with the growth of the city and suburbs, while the near-by country demand will constantly call for supplies.

The *Lumberman*, while admitting that there is argument in the foregoing view of the prospect, must contend that the subject is not thus wholly covered. The manner of doingbusiness will change, and greater attention will be paid to local trade and special lines. There will be less dependence on rushing great quantities of lumber out West, and more of fine, economical handling introduced into the business. Still the situation of this city at the focus of lake and rail transportation, with a vast and growing local and contiguous, as well as widespread, demand to supply, must insure the continuance of a heavy distribution from this point.

But immediate prospects are really most interesting lumber dealers now. It can be plainly seen that they are anxious about the coming spring demand. Being dissatisfied with the business of the past year, they naturally want to secure a trade for the coming months that will compensate them for lost time. They look eagerly for encouragement from some quarter. The late warm weather gave them hope that the log crop would be meager. But since the later snows and freeze they have cast the short log crop reliance aside as worthless They now conclude that there will be logs and lumber enough for any demand. Now they look to a local requirement through the winter to break up assortments of dry stock as a help to prices. This is something substantial, for there will be a fair local consumption all winter, if the weather hereafter is not cooler than it has been. Moderate weather will also tend to the maintenance of a steady country trade—a condition precisely opposite to that which prevailed last winter. But the more favorable conditions on which to base a good prospect are the short stocks in country yards, and the increased demand on account of railroad building These are really the pronounced features of the situation that render the outlook now better than it was last year at a corresponding time We cannot look to a lack of supplies, beyond the fact that dry stocks will be in demand for the early trade, if it come with a rush We have no reason to think that there will be an extraordinary farmers' demand while prices for grain and meat are so low as now. But we have reason to expect that the call for dimension and strips, on railroad construction and car equipment account, will be extraordinarily large for the coming year. The call from the car factories has already begun in considerable volume. Yet the railroad demand will not be felt so forcibly early in the year as later. when construction gets under full headway, and there has been some completion.

The low state of stocks in the country yards will necessitate large buying in the spring, but it will not be so heavy in volume as would be the case if there were speculation in buying. So long as the hand to mouth method is pursued the wholesale trade will continue to complain that the country trade is slow, and profits meager. Yet, if toward spring general business and railroad construction should begin to certainly exhibit a tendency to boom, a great change would be manifest in regard to buying. Country dealers would begin to realize that dry stocks were being picked up, and that in order to transfer the profits of a sharp advance from the pockets of the wholesalers to their own, they would have to put in stock. This is what may happen, and it is well for all interested to bear it in mind.

The feeling in regard to prices at present is undoubtedly firm. Estimates on bills, wherever seen, show that list prices, or very near them, are asked for dimension. There is not trade enough, however, to be a serious test of values. Holders of lumber better than common are making inquiry about the feeling in respect to this class of stock. The strong faith in good lumber that during the past year prevailed, induced some dealers to quietly lay in ample supplies. Now these holders are naturally anxious about the future of prices. It is impossible to see why the better grades of lumber should not hold their value with the lower grades. Better times will increase the call for manufacturing, and for all purposes requiring the use of good stock.

LIVERPOOL.

The *Timber Trades Journal* of Jan. 2nd says:—The deliveries during the past week have been, as one would naturally suppose at this time of year, meager in the extreme, and the business done has had neither interest nor importance. A straggling cargo or two keep dropping into port, but nothing of importance, if we except the various lots of sundry kinds of timber arriving in the Atlantic steamers from the United States, such as oak waggon scantling, whitewood, maple and staves.

We notice in the large ship Emily Flinn, well known in the timber trade, with a cargo of spruce deals from St. John, N. B., bound to Fleetwood, has gone ashore at Sherbourne, Nova Scotia, and will probably become a total wreck. Happily, the crew has been saved, and a portion arrived here this week in the Dominion steamer Sarnia.

It is said that some shipbuilding work for the Government has been placed with Messrs. Laird Brothers of Birkenhead, and it is to be hoped the orders will be extensive, for a great amount of misery and hardship has been felt in that borough for some time past, owing to the intense and long-continued depression in the various shipbuilding and engineering concerns.

The completion of the tunnel between Birkenhead and Liverpool, which is now accomplished, will in all likelihood give a considerable increase to the building trade of the former town during the coming season, as many good building estates in Cheshire will be brought into quick and easy reach of Liverpool, and as West Cheshire is a favorite residential district with business men in this city. many of the villages will, we hope, show signs of building activity in spring and summer.

The experimental trains, under the supervision of the Government Inspector, were run through the tunnel this week from Birkenhead to James Street station, Liverpool, and the usual certificate may be expected within the next few days, preparatory to the formal opening of the line by His Royal Highness the Prince of Wales on the 19th of this month.

LONDON.

The *Timber Trades Journal* of Jan. 2nd says:—There is but little fresh to chronicle as to the course of business for this season's shipment, but we expect that before the end of this month some considerable contracts will be closed on this side. With regard to France, many good judges are of opinion that the importers there will not hold aloof from the market during the early part of the year, as they did last season, but will, at any rate, provide for part of their requirements before the shippers' specifications are too much picked over. Altogether, the situation seems a more hopeful one, and, as sellers seem inclined to be reasonable, and buyers not unwilling to operate if fairly met, we shall be surprised if we are not shortly in a position to inform our readers that some extensive operations have taken place. We expect, however, that the coast buyers will lead the way, and we do not anticipate that the London importers will purchase much on

f.o.b. terms, until they are in a position to judge as to the course the market is taking. We expect, of course, a few special makes, which always command a ready sale.

The dock deliveries, we are glad to be able to say, have shown some slight improvement on last year's report to date. The increase over the corresponding week twelve months since, amounts to 463 stds. deals, battens, etc., and 112 standards of flooring, but the item of floated timber is some 400 loads short. We have become so accustomed to be always bewailing the diminished consumption, that it comes as quite a relief to be able to change our tone, and we hope the altered state of things will continue. Next week we shall be comparing 1886 and 1885, but we must not forget to have an occasional look back at our old friend 1884. It is a good augury beginning the new year with fresh activity in the dock deliveries, and for Christmas week, too, the improvement reported is of additional importance, for that is generally credited with being the dullest week in the whole of the year in the wood trade.

One effect of the continued pressing of goods on the market has been to give to the timber trade a more retail character than it formerly had, and the small dock orders which are exchanged now would have had a startling effect on the merchants of thirty years ago. Exceptional cases will occur when it is difficult to help giving an order on the docks to deliver to somebody or another half a dozen deals or as many boards, or even a few bundles of laths; but a decade since such instances were very rare. At the present time, however, they have almost ceased to create surprise, though by no means welcome to the officials who have to execute them. What will be the outcome of all this retail business time alone can tell. Perhaps when prices take a turn for the better the desire to hold bigger stocks will work its own cure, and sellers will feel less anxiety to press goods in such little parcels.

We are glad to note the improvement in the dock deliveries the past week, Christmas week too, when things might be supposed to be at their worst; the record shows something like five hundred standards of deals over and above last year's consumption during the same period.

The satisfactory settling on the Stock Exchange and the absence of failures in the outside market are favorable features of the new year. Altogether the outlook is quite up to earlier anticipations. The activity in the dock deliveries is also significant of trade improvement. Things could not go on being dull for ever, and we hope the turning point is now reached.

TYNE.

The *Timber Trades Journal* of Jan. 2nd says:—The Christmas holidays have effectually stood in the way of any business having been done during the last seven days, and in this district the New Year's Day being even a more popular holiday than Christmas, they extend from 24th of December to January 4th, most works being entirely closed during the whole of that period, and in consequence business is at an entire standstill. At present there is not a great deal of business to be done, and to owners of saw mills, or any mills where much machinery is employed, the relief is satisfactory when a slackness of orders is felt.

The importations are, as may be expected, on a very small scale. They cover, however, two complete steamer cargoes of wood goods, one from Namsos of battens, and one from Drontheim of staves, one late ship from Stockholm with deals and battens, and several items of lesser importance.

So far no business is reported over this district for next year, and in the face of large stocks and a small demand it is scarcely likely to be attempted for some time to come.

TONAWANDA.

CARGO LOTS—MICHIGAN INSPECTION.

Three uppers	$42 00@44 00
Common	18 00@24 00
Culls	10 00@18 00

ENOS MICHAEL, operator of a mill at Kinderhook, Mich., has failed.

ALBANY.

Quotations at the yards are as follows:—

Pine, clear, ₱ M	$53 00@55 00
Pine, fourths	48 00@50 00
Pine, selects	45 00@47 00
Pine, good box	22 00@53 00
Pine, common box	11 00@13 00
Pine, 10-in. plank, each	00 42@00 45
Pine, 10-in. plank, culls, each	00 23@00 28
Pine boards, 10-in	00 28@00 32
Pine, 10-in. boards, culls	00 16@00 20
Pine, 10-in. boards, 16 ft., ₱ M	28 00@32 00
Pine, 12-in. boards, 16 ft	28 00@32 00
Pine, 12-in. boards, 13 ft	28 00@00 00
Pine, 1½ in. siding, select	40 00@43 00
Pine, 1½-in. siding, common	15 00@18 00
Pine, 1-in. siding, select	40 00@42 00
Pine, inch siding, common	13 00@15 00
Spruce, boards, each	00 00@00 16
Spruce, plank, 1½-in., each	00 00@00 20
Spruce, plank, 2-in., each	00 00@00 30
Spruce, wall strips, each	00 12@00 12
Hemlock, boards, each	00 00@00 14
Hemlock, joist, 4x6, each	00 00@00 32
Hemlock, joist, 2½x4, each	00 00@00 14
Hemlock, wall strips, 2x4, each	00 00@00 11
Black walnut, gook, ₱ M	100 @120 00
Black waluut, ⅞ inch	80 00@90 00
Black walnut, ¾ inch	00 00@85 00
Scaymore, 1-inch	28 00@30 00
Scaymore, ⅞-inch	21 00@23 00
White wood, 1-inch and thicker	38 00@40 00
White wood, ⅞-inch	28 00@30 00
Ash, good, ₱ M	40 00@43 00
Ash, second quality, ₱ M	25 00@30 00
Cherry, good, ₱ M	60 00@85 00
Cherry, common, ₱ M	25 00@30 00
Oak, good, ₱ M	40 00@43 00
Oak, second quality, ₱ M	20 00@25 00
Basswood, ₱ M	25 00@30 00
Hickory, ₱ M	40 00@40 00
Maple, Canada, ₱ M	28 00@30 00
Maple, American, per M	26 00@28 00
Chestnut, ₱ M	38 00@40 00
Shingles, shaved, pine, ₱ M	0 00@ 6 50
" 2nd quality	0 00@ 5 00
" extra, sawed, pine	4 30@ 4 50
" clear, "	0 00@ 3 00
" cedar, mixed	0 00@ 3 30
" cedar, XXX	0 00@ 0 00
" hemlock	2 25@ 2 37
Lath, hemlock, ₱ M	0 00@ 2 25
Lath, spruce, "	0 00@ 2 13

OSWEGO, N.Y.

From Our Own Correspondent

Three uppers	$42 00@46 00
Picking	32 00@35 00
Cutting up	24 00@26 00
Fine Common	22 00@25 00
Common	14 00@18 00
Culls	11 00@14 00
Mill run lots	16 00@22 00
Sidings, selected, 1 in	30 00@35 00
" 1½ in	32 00@36 00
Mill run, 1x10, 13 to 16 ft	16 00@21 00
Selected	21 00@24 00
Shippers	14 00@16 00
Mill run, 1½x10	17 00@20 00
Selected	21 00@30 00
Shippers	14 00@16 00
Mill run, 1 & 1½ in. strips	15 00@18 00
Selected	22 00@30 00
Culls	11 00@13 00
1x7 selected for clapboards	25 00@35 00
Shingles, XXX, 18 in. pine	3 10@ 3 50
XXX Cedar	2 20@ 2 35
Lath 1½, No 1	1 80@ 1 90
No 2	1 00@ 1 25

BUFFALO.

We quote cargo lots:—

Uppers	$45 00@46 00
Common	17 00@18 50
Culls	12 50@13 00

Queer Books in a German Library.

One of the most curiously original collections of books in any library is said to be a bontanical collection at Warsenstein, in Germany. At first sight the volumes appear like rough blocks of wood; but on closer examination it is found that each is a complete history of the particular tree which it represents. At the back of the tree the bark has been removed from a space large enough to admit the scientific and the common name of the tree as a title. One side is formed from the split wood of the tree, showing its grain and natural fracture; the other shows the wood when worked smooth and varnished. One end shows the grain as left by the saw, and the other the finely polished wood. On opening the book one finds the fruits, seeds, leaves, and other products of the tree, the moss which usually grows upon its trunk, and the insects which feed upon the various parts of the tree. To all this is added a well printed description of the habits, usual location and manner of growth of the tree.—*London Daily News.*

The Season for Complaints.

This is the season for complaints, to witness the number of questions that are coming forward, and we never recollect a year in which claims have been so rife as in the one now drawing to a close. It would be interesting to have a formal report of all the arbitration cases of which the trade as a body know nothing that have been settled this year. The surveyors, who now form an important branch of the wood trade, have we expect, had rather a busy time of it.—*Timber Trades Journal.*

SPRUCE.

An exchange says:—The supply of spruce is very limited as compared with that of pine. Outside of New England, Province of Quebec and the Adirondack region there is little or no spruce of Commercial value. Spruce lumber, taking into consideration its strength, lightness and desirability for framing purposes, is selling comparatively lower than any other valuable wood on this continent. Simply because spruce has always been in overstock in New England the price has been unreasonably depressed. The necessities of small millowners has ever created a supply slightly in excess of the demand and a consequent weakness in prices. If a single reason of short supply should occur, so that that the buyers were forced to seek supplies of the manufacturer, prices would be considerably and permanently advanced. It is a sin to slaughter our magnificent spruce forests with so little remuneration to either operators, manufacturers or dealers. We predict within ten years good sized spruce lumber will sell at double the price of sapling pine. Spruce lumber will meet with proper appreciation when an approaching scarcity, at least in large sizes, forces builders to hunt for desirable substitutes, so light, so strong, and so easily worked. Already the lumbermen report the berths of virgin spruce as growing scarcer and farther removed from drivable streams and transportation by rail.

DROWNED IN LAKE NIPISSING.

OTTAWA, Jan. 13.—Mr. Charles Sereny left this city last Wednesday to visit his lumber works on Lake Nipissing. Some time after reaching the shanty, near Nipissing Village, he complained of feeling unwell, and a letter was sent to Southeast Bay, summoning Dr. Walton to attend him. On reaching the shanty, in which Mr. Sereney was confined, the doctor found the man suffering from insomonia or sleeplessness, and injected morphine into his feet to induce sleep. On Saturday night the foreman of the shanty, Mr. McDonald, heard a noise but paid no further attention to the matter. On rising in the morning McDonald discovered that Mr. Sereny was not there and went to look after him, but no traces could be found for some time. Finally traces of footsteps were found near the shanty in the vicinity of Nipissing village. The tracks were compared with feetware belonging to Mr. Sereny and it was found that the feetware and tracks fitted. The tracks led to a portion of the lake where the water is open, but no returning tracks were found. At the point where the track stops the water is very deep No trace of the body has yet been found, but no one has any doubt but that Mr. Sereny wandered to this spot in his delirium and was drowned. The body has not yet been recovered.

Bark Up and Bark Down.

When it is desired that the bark shall come off of wood easily, it should be piled bark down. A correspodent writes giving his experience as follows:—"I have sold wood for over forty years, and I find that when wood is corded bark up, the bark remains on until I sell and measure up the wood, and all that is bark down, the bark falls off, and measures nothing. Besides, there is more heat in the sap of the log. The most and best ashes are also in the bark. I have on my place now some wood that was chopped nine years ago, and corded bark up, and the bark would hold on if I would draw the wood eighteen miles and cord up and measure; besides, where the bark is piled down, the water runs in around the wood and makes it dozy, wet and heavy."—*Ex,*

Advice to Mothers.

Are you disturbed at night and broken of your rest by a sick child suffering and crying with pain and cutting teeth? If so, send at once and get a bottle of Mrs. Winslow's Soothing Syrup for children teething. Its value is incalculable. It will relieve the poor little sufferer immediately. Depend upon it, mothers, there is no mistake about it. It cures dysentery and diarrhoea regulates the stomach and bowels, cures wind, colic, softens the gums, reduces inflammation and gives tone and energy to the whole system. Mrs. Winslow's Soothing Syrup for children teething is pleasant to the taste, and is the prescription of one of the oldest and best female nurses and physicians in the United States, and is for sale by all druggists throughout the world. Price 25 cents a bottle.

BEAR SLAIN WITH DYNAMITE.

I remember once when I was mining near Breckenridge that I met a grizzly bear, one that would tip the beam at 1,000 easily. You see, I was going up to the mine, and nothing could be further from my mind than expecting to meet one of those fellows at such a time and place. But it's like them, they always turn up when they are least expected, and when you are most ill prepared for them. I had no gun with me, or even knife. What was worse, or would be to a man who lacked presence of mind, I had with me a box containing dynamite cartridges, which were to be used in the mine. This would of itself have prevented me from retreating with credit or despatch, if such a thing were possible; but it so happened that when I sighted the bear I had wandered from the regular trail, having taken a narrow ledge in the hope of finding a short cut to the mine. There was a sheer fall from this of at least five hundred feet. The bear had already passed on to this when I first saw him, and as I never before traversed the ledge, I had no idea as to how far it might be passable.

When I saw the bear it was evident that he had not yet discovered my presence. He was snuffling along at an easy gait, apparently quite familiar with the path. I did not dare to run on the narrow ledge, but I got in the best licks at walking that I knew how, and had soon gained a fair lead on the grizzly. I began to hope that I would come safely out of the difficulty, and was further encouraged by the fact that the ledge appeared to be slightly wider as I advanced. In rounding a sharp curve, however, you may imagine my consternation when I saw the ledge suddenly terminate not twenty feet in front of me in a cavern, unquestionably the habitation of the bear. Above the wall rose straight hundreds of feet, and below there was empty space. The bear had made a nice selection of a home, I saw at a glance, and he would find here, right at his very door, a meal in me, provided I could do nothing to avert the catastrophe.

My mind became strangely active. The events of my past life did not pass in review before me. It might have been on account of lack of space, but it is much more likely that it was due to the greater interest attaching to the incident in which I was soon to take a prominent part.

I tried hard to think of some way out of the dilemma, and came so near finding nothing to base any hope on that I almost lost my presence of mind. I did not, however. I thought of everything I had about me, with a view of using it for my defence. I had eight pounds of candles, a jack-knife, and a lead pencil. It occurred to me that if I had sufficient candles I might feed the bear for a while until I could induce him to feel that he was in a condition for hybernating, but I would not be more than able to whet his appetite with what I had. The jack-knife and the lead pencil were dismissed without a moment's thought. The dynamite suggested possibilities. I hit upon a plan. Taking a dozen sticks of dynamite, I thrust them in among the candles, and hastily retracing my steps around the corner I placed the charge of candles and dynamite in the path of the approaching bear The latter was but a few rods away, but appeared to be wrapped in such a brown study that he did not notice my action. Then I again retreated around the curve, and withdrew myself into the bear's cavern to await developments. I did not have long to wait. In less than five seconds after I entered the cave the mountain shook as though in an earthquake, and I knew that I had succeeded. The bear had evidently tried to eat the candles and found them too much for him I rushed out to see the result of my strategy. There was little to be seen, however. A tuft of hair here, and a splash of bear's grease there, a splinter of bone or two, and the end of the bear could only be guessed.—*Denver News.*

Heavy Losses to Cattle Men.

DODGE CITY, Kas., Jan. 12.—The heavy snow and the bitter north winds of the past two days have caused the most serious apprehensions among cattle men as to their probable losses. Within a few miles of here 500 head have drifted to the river, where they perished in attempting to cross, or drifted up to the fences, where they remained frozen to death. A man from a ranche south reports seeing cattle on his way up frozen that were standing on their feet. The water holes are frozen over. The grass is snowed under, and the weather is cold, with every prospect of more snow. The loss of live stock will be very heavy on the Arkansas River.

During last year 3,364,205 dozen of eggs were imported into the United States from Canada through the Suspension bridge customs office alone. The trade is assuming immense proportions

The Ontario Canoe Co, Limited.

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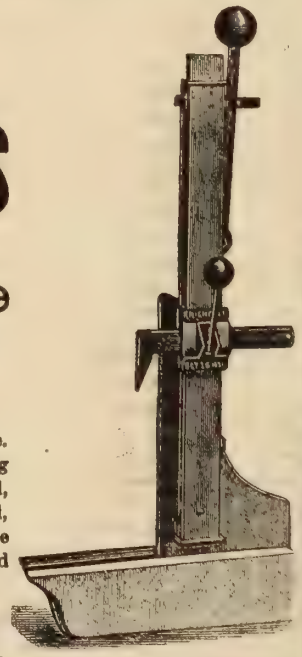
For Holding Logs upon a Saw Mill Carriage while being Sawn into Lumber.

These Milldogs I guarantee to give satisfaction in every case. They will hold a frozen log as well as a soft one, for cutting Scantling, Square Timber, &c. These Dogs cannot be excelled, I sell them all on their own merits, give ten or fifteen days trial, and then, if not satisfactory, return them to my order, as I have no agents on the road this year, I will sell them at a reduced price. Send for Circular and price list.



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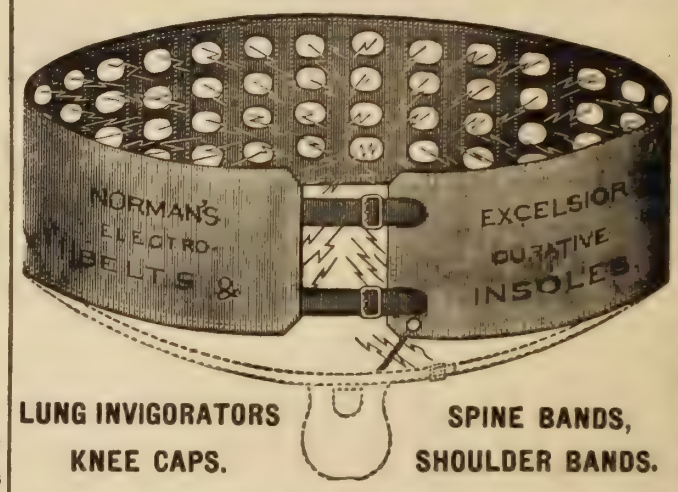

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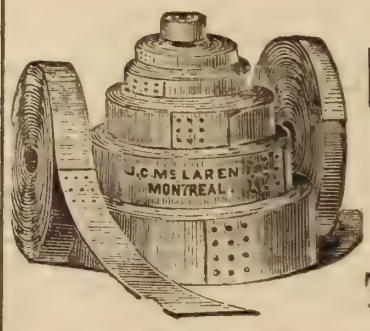

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3. It furnishes complete and reliable quotations of prices of lumber in all the leading markets.
4. Its columns are filled with interesting reading matter, valuable alike to the land owner, manufacturer or dealer.
5. It costs only $2.00 per year to have it sent, post-paid, to any address in Canada, and no land owner, lumber dealer, manufacturer or individual in any way connected with timber industries, can afford to do without it.

☞TO ADVERTISERS.

It has a circulation among saw mill owners, manufacturers, lumber and timber dealers and all classes connected with the timber business.

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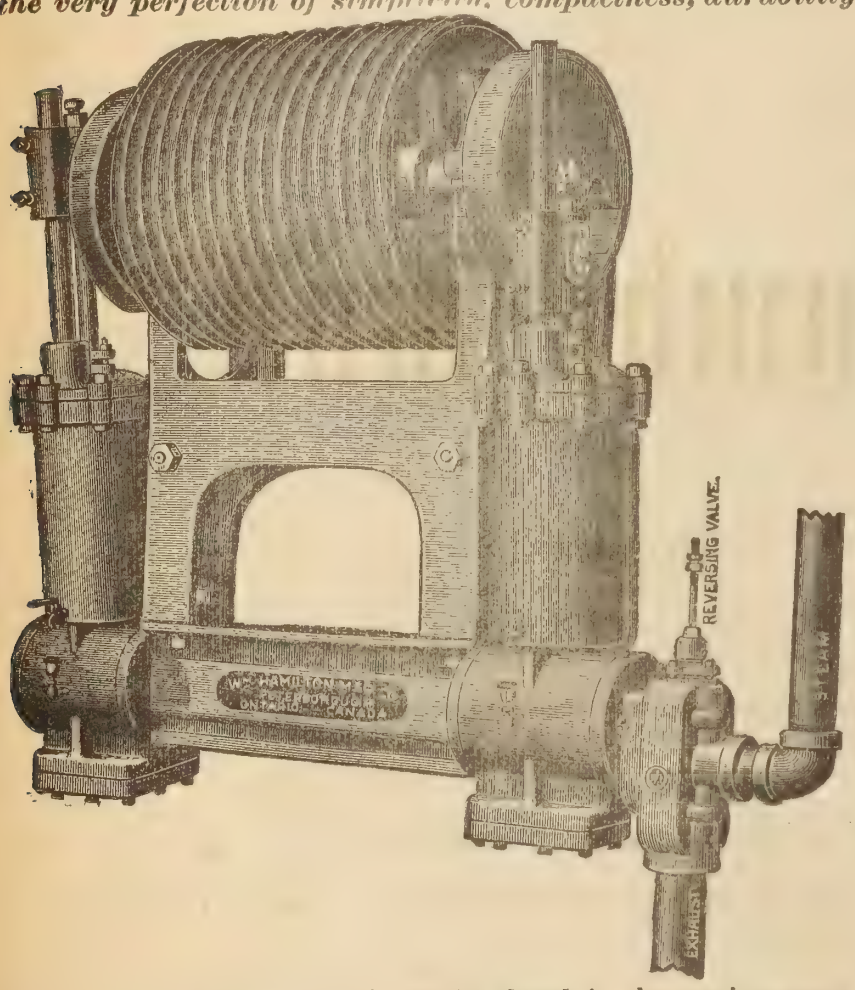
———CHEAPEST, BEST, MOST RELIABLE and ONLY TRUE MEDIUM———

for placing your goods or wares before the saw-mill men and lumber and timber dealers of the Dominion.

CUNNINGHAM'S
PATENT OSCILLATING TWIN ENGINE
FOR STAM FED IN CIRCULAR MILLS WITH RACK OR ROPE.

This Engine has practically but two moving parts, aside from cranks and shafts. The whole array of eccentrics, valves, valve rods, connecting rods, cross heads, slides, levers, rock shafts, bell cranks, etc., is done away with, and the very perfection of simplicity, compactness, durability and cheapness attained.



The above engraving illustrates the Twin Engine, 10x16, for Rope Feed, for Saw Mill Carriages. The spool is 27 in. diameter, 30 in. face, is grooved 2 in. pitch for 1½ in. rope. The shaft is steel, 4½ in. diameter, with disk cranks. No connecting rods, eccentrics or valve rods to get loose and out of order. The ports are in the trunions, and worked by an oscilliation of the cylinders, and are held in their place in the downward motion by a steam cushion below. The sawyer's valve is a perfect balance, and by moving this valve the engine can be reversed, stopped or started almost instantaneously if necessary, as the sawyer has perfect control of it by his lever either to go fast or slow. Should the sawyer let go of his lever either by mistake or any other cause, it is balanced so that the valve will come to the centre and cut the steam off both cylinders and stop the feed. When standing, the lever is locked or fastended, so that is is impossible for it to start off itself. The engine stands upright below the carriage, and bolted to two upright beams, placed on the mill for the purpose. When a rack is preferred in place of the rope, we put on a steel wheel 30 in. in diameter, and the engine placed high enough to work into the rack on carriage bar, or if the beams come in the way, an idler wheel can be used between engine and rack segs; or, the engine can be placed at a distance and have a shaft from it to the carriage; or it can be placed in the engine room, where it is under the control of the engineer for oiling, thence by shaft and pinion to carriage rack bars. These engines are well adapted for cutting long logs, or where the logs are mixed, the advantage of this feed will be apparent to mill men. When the carriages are used in two or more sections, the coupling and uncoup ling of each section is quick and simple.

There were two of these feeds working this summer and giving the best of satisfaction, one with rope feed at James Playfair & Co's Mill, Sturgeon Bay, near Waubaushene, and one at the new mill furnished by us to Francis Carswell & Co., at Calabogie Lake, on the Kingston and Pembroke R. R. This mill is working with the Rack and Pinion feed, and drops from fifteen to seventeen stock boards per minute. We have also sent one to the Rathbun Company, Deseronto, to put in to feed their heavy Circular Mills. They will also commend themselves for various other cases, especially for running Elevators, hoisting Engines, and wherever a simple and easily reversible motion is required.

We would also call attention to our Improved Hand Saw-Mill for cutting logs

☞ ***We guarantee this to be the best Mill of its kind got up, and would ask any one wanting a good Band Saw-Mill to communicate with us. We would also call the attention of Mill Men to our new IRON GANGS, CIRCULAR MILLS and MILL MACHINERY. For further information, prices, &c., address the Manufacturers,***

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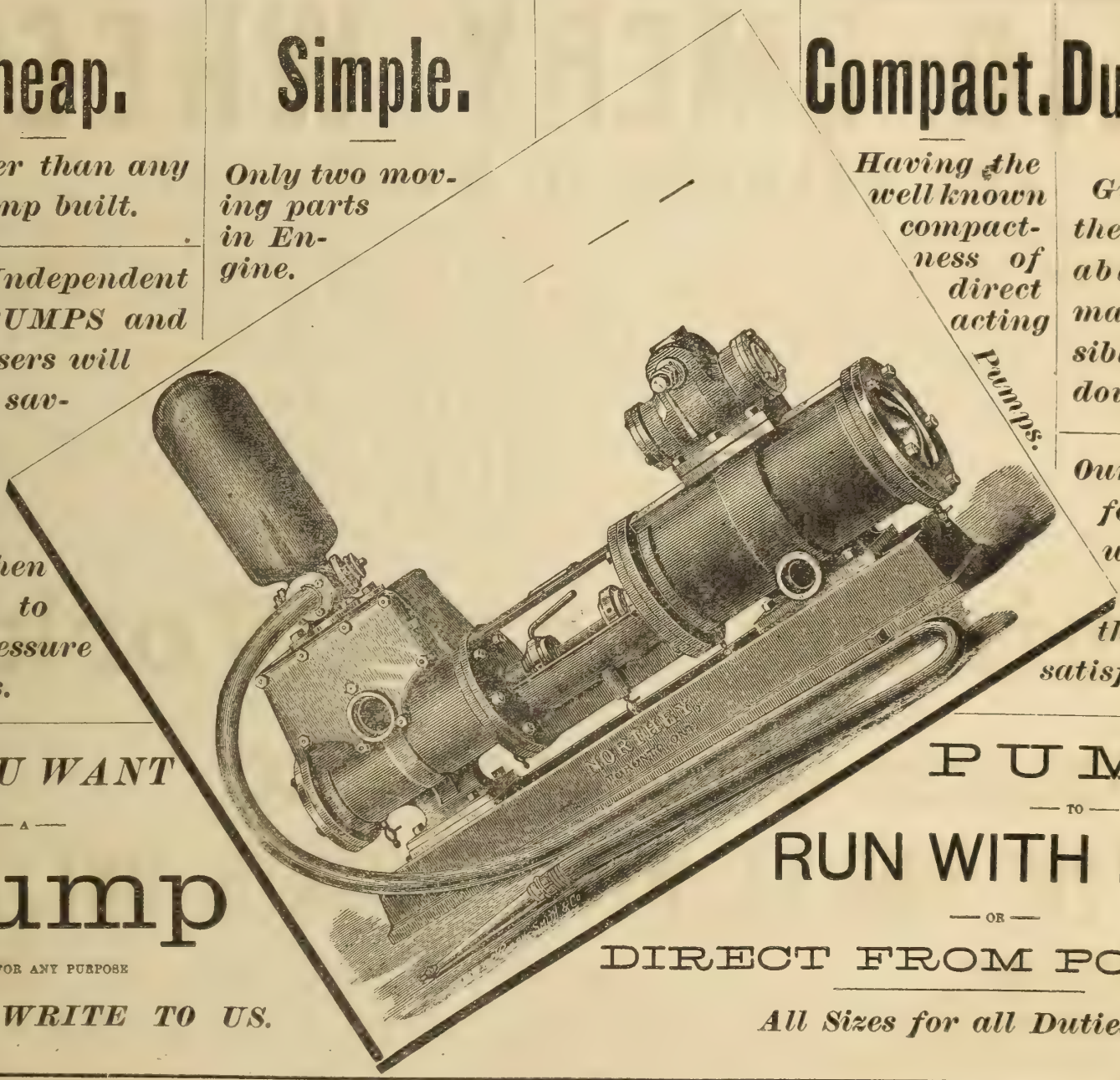

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Our PUMPS for general water supply give the greatest satisfaction.

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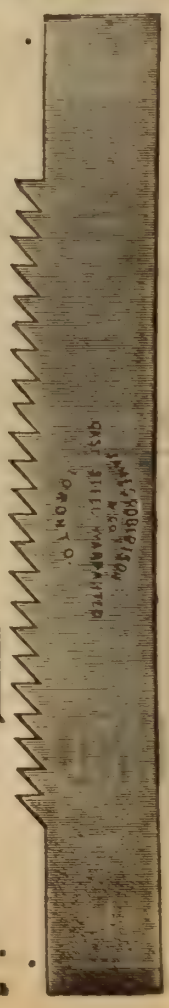

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THE CANADA LUMBERMAN

AND MILLERS' MANUFACTURERS AND MINERS GAZETTE.

PUBLISHED SEMI-MONTHLY.

The only Newspaper devoted to the Lumber and Timber Industries published in Canada

SUBSCRIPTION $2.00 PER ANNUM

VOL. 6. PETERBOROUGH, ONT., FEBRUARY 1, 1886. NO. 3.

NEW YORK CITY.

The *Record and Guide* in its annual review of the lumber trade for the year 1885 says:—

The general lumber trade of this city has been conducted in a quiet, undemonstrative manner during the past year, and at no time did business develop into quick, snappish form. To a portion of the operators this absence of flurry and excitement has been a source of annoyance and complaint, as their ideas of trading are confined in the main to large sweeping sales and constant fluctuations on value as influenced by a speculative sentiment rather than by natural factors. Happily, however, with no chance to work the market, that class of trader has gradually disappeared, and the reports from the more conservative portion and majority of those engaged in handling the various kinds of lumber are by no means as uncheerful as might have been expected. Rates have certainly been low and margins narrow throughout, and that very feature was unquestionably a strong attraction and material aid in drawing out and preserving a good consumptive demand. So that by careful nursing all good intentions of buyers in listening to and accepting fair bids, and refusing to take advantage of evident and only momentary necessities of customers, dealers have made a great many sales of all sized invoices that will probably fully equal in the aggregate that of 1884, and it is a question if there is not really an excess. The only comparative record that can be reached, is that of the export trade; and here we find an increase over the preceding year, notwithstanding constant and positive assertions during the season that the foreign trade was running behind. These claims, however, were due in a measure to the "cutting up" of the export business among a larger number of dealers, and the additional opportunities offorded shippers by offerings direct from interior points; and those who were most hurt by the change seemed to think that business was losing ground. A change in method should also be allowed for in calculating upon the volume of local consumption, as a great many small dealers as well as manufacturers and contractors have been added to those who purchase direct from the producers or pretty closely thereto; and this supply is rarely taken into consideration when the exhaustive capacity of our market is in question. No means are available permitting even a fair guess as to the proportions of leading grades of lumber used in comparison with former years; but as a simple matter of surmise, hardwoods have probably made a gain. Values have touched no lower points than in the preceding year, except in two or three instances; but were also without recovery on losses of 1884, and this has made a modification in the average of cost on first hand parcels of which consumers have reaped a fair share. For yard rates, however, it has been a difficult matter to give other than a nominal line of quotations, and make the range pretty wide at that; as the "go as you please" manner in which dealers conduct the business gives nearly every concern, great or small, some different notion of valuation, based on inspection, delivery, quantity, terms of credit and other minor influences on which there is an entire absence of uniform action. Failures have come to disturb a portion of the trade, but disasters have not been heavy or widespread, and the collections and settlements naturally due at about this period are progressing very well. The amount of stock on hand at the turn of the year is doubtful, owing to the uneven character of the accumulation. Some of the principal and generally far-sighted dealers seem to have simply taken about all the stock they could by any possible means find room for, partly on account of its comparative cheapness and partly in expectation of a coming good demand; while others fully with as much ability to purchase, and standing high in the matter of clear judgment, are carrying a smaller supply than usual—not because they consider the cost, but rather that they are uncertain and far from sanguine regarding the future. Taking fine and coarse together, however, we think there is a little more stuff in yard than a year ago, but less to fall back upon at near primary poins, such as Albany, etc.; and since the winter tariffs went into effect few, if any, rail offerings except at advanced figures. Without the development of any unexpected disturbing element the chances for spring trade are good in this city, and excellent in Brooklyn, and upon its own natural merits the market, as a whole, is no doubt in better form than one year ago.

WHITE PINES FOR LUMBER.

We have frequently referred to the desirability of appropriating many of the waste spots in the farming districts of New England and New York to the growth of white pine for lumber. No better disposition could be made of such spots. A correspondent of the Woonsocket *Patroit*, taking a similar view of this subject, supposes in a practical way that we take a good standard growth of pines, say 150 trees to an acre, averaging at the end of forty years 250 feet each, board measure, making in round numbers about 40,000 feet, thus averageing 1,000 feet of lumber for each acre each year and on the poorest land of the farm. The poorest land, he says, can be bought for $6 an acre, which is, perhaps, a high price in some sections, but taken as a basis the interest and taxes of each acre would be about 32 cents per year; cost of ploughing, harrowing and sowing the seed about $5 per acre; cost of three quarts of pine seed about; interest on this investment 28 cents per year for each acre, making 60 cents per year above first cost for each acre, with the exception of the rise of the taxes as the value of the land increased, and if this be sent at an average of 15 cents more for each acre, we shall then have the extra cost for each year of each acre at 75 cents. So the thousand feet of lumber cost 75 cents on the stump, or, putting in the risk of fire at 10 cents and all other losses and liabilities at 15 cents, the total cost will then be $1 per acre of 1,000 feet of pine lumber on the stump. But such price lumber in this section is worth $4.50 per 1,000 feet on the stump, so that the grower may estimate a profit of $3.50 for each acre each year above the income of four per cent on his investment. The acre on this basis gives an income each year of 29 per cent on the first investment. Even if the croaker is allowed to call this a trick of figures, it certainly contains sufficient suggestion to stimulate much thought upon the subject of growing pines on waste lands.

Ordinary human nature does not like to look ahead forty years, but in the nature of things those kinds of business which are new and peculiar, and in which the few venture, are generally apt to yield larger income.

About the seed. The cones of pine are not produced every year, and the grower must watch his chance and may have to climb the trees after the cones, for they must be gathered just before they open. Then spread them on a tight floor or old sail cloth until fairly dry, when they will open and a sharp rap will jar out the seed. If the trees come up too thick it would be well to thin them out, and, perhaps, to transplant a few on the vacant places or even on a new piece of land, though transplanting is a delicate piece of business. In eastern Massachusetts and Rhode Island most of the pine lumber is used for boxes and is usually sawed thin, from five-eights of an inch to seven-eights of an inch thick, rough-edged, and is bringing now at the box mill from $9 to $11 per 1,000 feet, costing from $2 to $2.50 per 1,000 feet for the saw bill. Many are the acres of wretched bush pasture and stretches of sand flats, and even scrub oak lands, where a growth of pine might be started up, using a little labor and common sense.—*Manufacturer's Gazette.*

AVERAGE ADJUSTMENT ON RAFTED TIMBER.

The subjoined letter recently appeared in *Lloyd's Shipping Gazette*:—

"SIR,—We beg to call the attention of your readers to the following facts. While a vessel was loading a cargo of pitch pine timber from rafts in a port of the Southern States of America, bad weather came on, and a quantity of the timber, which had been secured along side, broke adrift. Part of this was subsequently recoved by the captain; at a cost to him of about £40, and the remainder was lost. More timber was sent alongside the vessel, and she was filled up and came on to her destination with a full cargo. It is the universal custom at all North American timber ports, when vessels lose timber from alongside while loading, and it cannot be recovered, to supply them with more timber to fill up with, so that whether the timber lost from alongside be recovered or not the vessel has always a sufficient supply of cargo to complete loading, and thus a full freight is earned. The shipowner, as far as his freight is concerned, has, therefore, no interest whatever in recovering the lost timber, and under these circumstances the timber is recovered for, and only for, the benefit of owners of cargo or underwriters thereon. Hitherto both merchants and underwriters on cargo have accepted this mode of adjustment, but we have now before us the following opinion of a leading firm of London average adjusters: 'We are of opinion that the freight on the cargo so salved, after having broken adrift from the ship, should contribute to the said expenses of salvage.' We cannot but think that the view taken by these gentlemen is wrong, and wish to point out that the effect of that opinion, if brought into practice, would be to make owners of ships, or underwriters on freight, liable for a proportion of expenses incurred solely for the benefit of the cargo, and it would, on becoming better known, further have the effect of discouraging the recovery of timber lost from alongside; for, as we have clearly shown, though timber is lost, the vessel still gets a full cargo, and, consequently, loses no freight; but if the captain incurs expense in recovering timber, then according to the average adjuster's opinion just quoted, he or his owners must claim on the underwriters on freight for a portion of same; or, if the freight be not insured, then bear the loss themselves. The captain will not, under these circumstances, take any further trouble with timber that has gone adrift. In that case the underwriters on cargo would become the ufferers.

Yours, &c.,

ALFRED DOBELL & Co.

Whitewood.

So far as Great Britain is concerned the demand for whitewood is principally, if not entirely, from Scotland, as buyers at the north-east ports profess themselves unable to pay the figures which can be obtained without difficulty from Scotch importers. The English firms, however, are quite willing to contract at a moderate advance on last year's rates, and they will doubtless augment their offers still further as soon as they become convinced that the reports received from the Scotch and German markets are reliable. We have already prepared our readers for an improvement in the prices of whitewood battens, and, so far, our prognostications have been realized, as an advance of fully 5s. per standard has been established without difficulty. We expect to find whitewood retain its firm tone throughout the season. —*Timber Trades Journal.*

MONTREAL LUMBER TRADE.

MESSRS. Henderson, McKenzie & Co., shid brokers, of Montreal, have favored the CANADA LUMBERMAN with an interesting statement showing the shipments of lumber made from Montreal during the past season. The details are minute, but the statement is so interesting to the trade that we give it in full.

TO THE UNITED KINGDOM.

The following is a statement of the deal and lumber shipments from the port of Montreal during the season of 1885:

Date.	*Vessel.*	*Que. Stds.*
May 14 SS	Sarmatian	5,171.48
18	Polynesian	15,953.13
21	Carthaginian	3,040.40
"	Sarnia	32,236. 2
"	Lake Winnipeg	4,153.51
"	Titania	8,806.35
22	Carmona	30,034.43
23	Coreau	1,274.00
"	Bristol	11.520.00
25	Lake Huron	6,842.48
"	Ocean King	1,867.50
"	Siberian	11,273.23
26	Parisian	23,417.15
27	Polina	6,265.00
28	Norwegian	10,412.00
"	Oxenholme	27,514.38
"	Lake Superior	4,970.39
"	Scotland	17,213.41
29	Toronto	24,901.22
"	Cynthia	12,715.00
30	Avlona	18,622.00
"	Escalona	6,768.00
June 2	Somerset	5,760.00
4	Hanoverian	9,405.00
"	Suffolk	43,700.22
"	Lauderdale	47,587.38
"	Montreal	14,373.51
"	Lake Champlain	1,967.11
6	Glenmorven	93,230.00
"	Erl King	3,456.00
"	Canadian	3,491.00
8	Dracona	5,906.39
10	Lake Manitoba	4,078. 4
"	Milanese	24,207.14
11	Grecian	22,515.00
"	Mississippi	15,856. 3
12	Barden Tower	9,572.00
13	Jeranos	31,965.00
"	Scandinavian	3,962.21
16	Dominion	9,909.08
19 BK	Occident	7,240.11
" SS	Devon	13,025.00
22	Brooklyn	12,341.40
24	Finebury	37,562.00
25	Carthaginian	5,566.00
"	Polynesian	230.00
"	Quebec	22,116.12
"	Lake Nepigon	3,744.24
26	Parisian	10,703.00
27	Siberian	108.00
29	Lake Huron	6,386. 2
30	Lake Winnipeg	6,388.41
" BK	Echo	15,115.19
July 2 SS	Polynesian	3.864.00
"	Sarnia	24,686.19
3	Ontario	14,703 51
"	Titania	7,300.18
6	Amethyst	33,122.48
"	Circassian	4,706.00
7	Cynthia	6,372.00
9	Toronto	5,751.43
"	Elginshire	55,850.22
10	Sardinian	4,883.00
"	Ocean King	10,183.11
"	Bristol	5,124.00
11	Lake Champlain	6,087.29
13	Montreal	15,287.10
15	Buenos Ayres	8,789.00
"	Texas	3,876.42
"	Lake Superior	12,804.27
16 BK	Hafraford	16,269.00
17 SS	Oxenholme	19,155.29
18	Carmona	28,728.00
20	Scotland	18,918.45
21	Escalona	17,999.00
22	Somerset	4,715.00
"	Garth	34,757.11
23	Parisian	9,038.00
24 BK	Merritt	18,643.00
" SS	Lake Nepigon	4,967.49
"	Barden Tower	7,197.30
"	Mississippi	8,730.00
25	Storm Queen	50,020.43
"	Ashbrooke	35,780.00
27	Scandinavian	3,100.00
"	Grecian	5,882.00
28 BK	Ali	9.700.00
" SS	Mayo	32,604.00
29 BK	Johanne	14,076.27
30 SS	Dominion	1,749.21
"	Peruvian	2,136.00
"	opklyn	24,656.39
31 BK		10,724.00
Aug. 1 SS	Avlona	8,325.16
2 BK	Scotia	23,182. 8
" SS	Lake Huron	16,284. 1
"	Carthaginian	2,991.00
5	Erl King	6,786.22
"	Quebec	23,677.15
"	Dominion	1,451 24
6	Coronilla	35,435.00
"	Carthaginian	1,643.00
"	Circassian	11,294.00
"	Titania	19,461.38
7	Oregon	16,986.40
" BK	Achilla F	18,074. 6
" SS	Lake Winnipeg	9,449.25
8	Regius	91,561. 9
10	Romeo	56,913.00
11	Cynthia	12,468.44
" BK	Adeona	20,883.60
12 SS	Siberian	14,053.00
13	Sardinian	8,156.00
14	Ontario	7,148. 6
"	Sarnia	21,673.17
15 BK	Malvina (for Australia)	14,065.00
17 SS	Lake Champlain	6,508.17
19 BK	Rota	15,048.45
20 SS	Norwegian	7,095.00
21	Sarmatian	4,860.00
22	Ocean King	5,904.00
"	Lake Superior	15,287 21
"	Capulet	59,040.00
"	Montreal	15,881. 7
27	Buenos Ayreau	10,445.00
"	Parisian	8,934.00
"	Fernholme	68,474.00
"	Carmona	38,323.12
"	Barcelona	10,744.54
"	Texas	1,991.52
28	Toronto	15,278.26
"	Lake Nepigon	5,980.44
31	Escolona	20,532.21
Sept. 2	Oxenholme	21,264.00
4	Scotland	27,875.00
"	Canadian	3,779.00
5	Juliet	4,248.00
"	Titania	12,594.52
"	Lake Huron	21,422.25
"	Brooklyn	15,979. 5
8	Nova Scotian	9,713.00
11	Concordia	9,940.10
"	Oregon	11,980.54
15	Carthaginian	12,052.00
16	Lucerne	8,856.00
18	Benhope	26,141.00
"	Mayo	32 255,38
"	Sarnia	22,885.25
"	Lake Winnipeg	5,938.45
19	Cynthia	3,744.00
20	Dominion	9,023 48
22	Siberian	17,209.00
23	Benona	16,698.00
"	Ontario	7,290.53
24	Caspian	2,176 00
"	Colina	14,361.44
"	Murciano	41,276.46
"	Batavia	8,016.40
25	Montreal	7,322.36
28	Lake Champlain	8,338.22
29	Norwegian	552.00
Oct. 1 BK	Nore	12,809.34
" SS	Lake Superior	19,226.09
2	Parisian	8,075,00
3	Celtic Monarch	20,376.00
"	Dracona	1,963 35
4	Bammwall	27,068.52
5	Toronto	12,463.45
7	Buenos Ayreau	2,088.00
"	Titania	17,971.17
9	Enrique	47,870. 1
10	Texas	8,058.50
"	Coreau	7,451.0
"	Ocean King	24,243,00
12	Brooklyn	10,204 17
"	Lake Nepigon	9,167.54
14	Grecian	8,618.00
16	Oregon	13,019.37
"	Lake Huron	14,035.05
19	Concordia	16,118.24
"	Glenrath	37,867.00
"	Oxenholme	19,455.00
21	Dominion	1,104.25
"	Carthaginian	252 00
23	Cynthia	18,165.24
"	Barcelona	10,217.32
"	Sarnia	9,431.47
24	Lake Winnipeg	12,895.40
27	Sardinian	4,607.00
29	Scotland	13,995.00
30	Colina	5,763.45
31	Pensher	31,104.00
	Lake Champlain	12,251. 3
Nov. 1	Montreal	8,572,45
2	Wandrahm	3,000.00
"	Newcastle City	18,285.00
"	Norwegian	2,880.00
"	Minerva	26,156.00
	Escalona	2,241. 5
	Saltburn	24,768.00
6	Ontario	4,907.43
7	Lake Superior	18,107.40
9	Ashdene	25,181.00
10	Toronto	7,574.25
11	Camden	28,982.39
12	Erl King	8 143 34
"	Buenos Ayreau	8,000.00
"	Parisian	9 086.00
13	Grassbrooke	22,050.00
14	Avlona	12,772.00
16	West Cumberland	31,824.00
"	Texas	2,400.24
18	Lake Huron	11,838.29
19	Polynesian	4,552.00
20	Coreau	8,387.00
Quebec Standards		3,260,633,15

The monthly shipments were as follows:—

May	284,981.13
June	489,469 30
July	602,941. 9
August	756,776.23
September	383,935 48
October	457,938.48
November	284,590. 9

A total of 3,260,633 15 Quebec standards, or 89,667,407 feet. The total forwarded by steam was 3,064,809.27 stds. and by sail 195,823.43 stds.

The deal shipments to the United Kingdom were made by the following firms:—

	Quebec Stds.
R. R. Dobell & Co	1,402,959.00
John Burstall & Co	715.321.00
Bryant, Powis & Bryant	596,226. 1
Robt. Cox & Co	417,134.25
Other small shipments	158,526.40
Total	3,404,453. 6

The following is a statement of the shipments from Montreal to the United Kingdom during the years mentioned:—

1880	19,784;885 ft.
1881	15 539,287 "
1882	50,514,378 "
1883	50 514,378 "
1884	52,587,205 "
1885	89,667,407 "

FROM PIERREVILLE.

The following were the shipments during the season from Pierreville:—

Date.	*Vessel.*	*Standards*
July 11 SS	Benbrack	20,745 36
31	Lauderdale	48,135.12
Sept. 5	Juliet	45,312 20
Oct. 24	Maharajah	29,628.43

A total of 143,820,155 standards, or 3,955,050 feet board measure.

The following were the shipments from Pierreville to the United Kingdom for the years mentioned:—

	Quebec Stds.	*Feet.*
1882	79 775.46	= 2,193,835
1883	92,655.17	= 2,548 020
1884	142,989.00	= 3,932,202
1885	143,820. 1	= 3 955,050

FROM THE ST. LAWRENCE TO THE PLATTE.

The following is a statement of the lumber shipments from Montreal to the River Platte during the season of 1885:—

Date.	*Vessel.*	*Feet.*
June 11	Eulie	231,580
22	Gloaming	1,186 211
"	Sokoto	754,088
23	Jane Law	1,106,853
24	Kate Harding	505,667
30	Peacemaker	586,376
July 3	Hamingia	416,665
7	Osterra	430,597
"	Royal Arch	284,186
8	Rondo	655,927
11	Vibilia	419,444
13	Maggie Dart	385,417
16	G. W. Halls	363,097
18	Galena	392,387
"	Hastings	293,812
24	Grant	338,000
25	Gettysburg	819,564
"	Brothers & Sisters	545,316
Aug. 4	Leine	725,731
6	Trust	405,367
10	Thomas Fletcher	485,762
11	Henry A. Setchfield	502.701
17	Rose of Sharon	275,031
20	Ralph B. Peake	589,039
"	Cupid	543,208
28	Hecla	709,138
"	Bachelors	554,015
Sept. 4	Piskataqua	520,755
10	Cathella	311,299
11	Etta Stewart	615,844
17	Scotia	545,893
18	Milo	600,376
19	Minnie Carmichael	808,372
25	Mary I. Baker	647,806
28	Wm. Owen	509,516
30	G. M. Stanwood	392,752
Oct. 5	Belguim	581,619
8	Venice	539,321
10	Republic	662,273
12	Dora	745,155
14	Jas. Kitchin	416,224
"	Anna	551,11
"	Icavus	384,108
"	Peticodiac	582,901
26	Patagonia	1,023,092
31	Polynesian	1,045,011
Nov. 3	New Brunswick	480,812
Total		26,465,543

Equal to 962,383.21-55 Quebec standards.

From the lower St. Lawrence ports to the River Platte:—

Date.	*Vessel.*	*Feet.*
June 17	Annie C. Maguire	776,000
29	Ankel Christian	260,000
July 3	Augusta	200,000
9	Ironsides	368 000
10	Hollingsides	505,000
Aug. 14	M. K. Campbell	347,000
"	Iona	268,000
Sept. 5	Our Annie	304,000
15	Amicus	350,000
"	Atlanta	385,000
"	Arvak	662,000
Oct. 28	Alice Roy	520,000
Total		4,946,000

Equal to 179,854.30-55 Quebec standards.

The quantity of pine shipped was 26,519,543 feet; spruce, 4,825,000 feet; total, 31,344.543. Spars, 688, small towage, 526,828 pieces.

A shipment of 402,599 feet was made on the Aspotogan for the west coast of South America.

The following is a recapitulation:—

	Feet.
From Montreal	26 868,142
" Lower St. Lawrence	4,879,000
Total	31,747.142

For the years mentioned the shipments were:—

	Feet.
1880	10,420,080
1881	16,147.941
1882	24,419,827
1883	18.768,652
1884	37.355,553
1885	31,747,142

RECAPITULATION.

The total shipments from Montreal Harbor and Pierreville to the United Kingdom, and from Montreal and lower St Lawrence ports to the River Platte, west coast and Australia were:—

	Quebec Stds.
By steam to United Kingdom	3 208 629 28
Sail do. do.	181 770.43
" River Platte	1 139 801.31
" West Coast S. A	14,639 53
" Australia	14 053 00
Total	4,558,894.45

or 125,269,613 feet board measure.

PHOSPHATES.

The total shipments of phosphates from Montreal have been as follows:—

	Tons.
1880	7,500
1881	10 307
1882	15 556
1883	17 160
1884	20 461
1885	24,876

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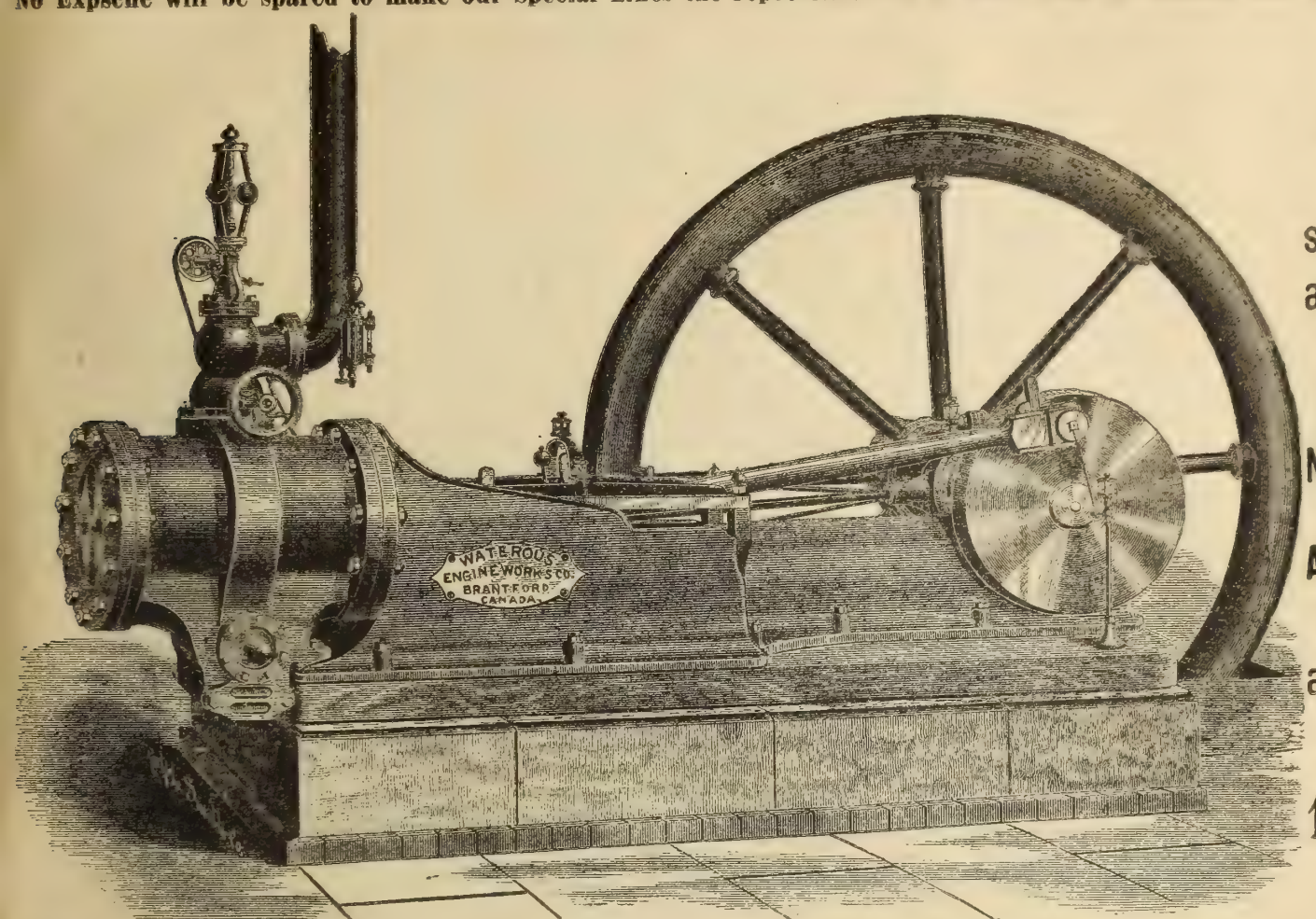

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AT THE REVIEW BOOK BINDERY.

LIVERPOOL STOCKS.

We take from the *Timber Trades Journal* the following Comparative Table showing Stock of Timber and Deals in Liverpool on Dec. 31st 1884 and 1885, and also the Consumption for the month of Dec. 1884 and 1885 :—

	Stock, Dec. 31st. 1884.	*Stock, Dec. 31st. 1885.*	*Consumption for the month of Dec. 1884.*	*Consumption for the month of Dec. 1885.*
Quebec Square Pine	296,000 ft.	226,000 ft.	66,000 ft.	76,000 ft.
" Waney Board	378,000 "	389,000 "		
St. John Pine	21,000 "	20,000 "	4,000 "	8,660 "
Other Ports Pine	66,000 "	62,000 "	10,000 "	22,000 "
Red Pine	54,000 "	26,000 "	3,000 "	10,000 "
Pitch Pine, hewn	521,000 "	280,000 "	41,000 "	39,000 "
" Sawn	297,000 "	606,000 "	94,000 "	84,000 "
Planks	44,000 "	78,000 "	15,000 "	23,000 "
Dantzic, &c., Fir	51,000 "	68,000 "	8,000 "	21,000 "
Sweden and Norway Fir	60,000 "	55,000 "	3,000 "	10,000 "
Oak, Canadian and American	239,000 "	288,000 "	38,000 "	45,000 "
" Planks	179,000 "	160,000 "	35,000 "	75,000 "
" Baltic	9,000 "	5,000 "	0,000 "	0,000 "
Elm	5,000 "	35,000 "	7,000 "	10,000 "
Ash	40,000 "	22,000 "	1,000 "	4,000 "
Birch	70,000 "	144,000 "	38,000 "	29,000 "
East India Teak	13,000 "	171,000 "	22,000 "	1,000 "
Greenheart	50,000 "	126,000 "	11,000 "	6,660 "
N. B. & N. S. Spruce Deals	25,307 stds	20,590 stds.	0,000 stds.	0,000 stds.
" Pine	1,083 "	741 "	4,130 "	3,150 "
Quebec Pine Deals & boards	5,284 "	6,638 "	1,930 "	1,679 "
Do. Spruce	536 "			
Baltic Red Deals, &c.	3,560 "	4,105 "	401 "	448 "
Baltic Boards	31 "	250 "	00 "	75 "
" prepared Flooring	2,997 "	1,339 "	682 "	485 "

AUGERS.

"Like many of our most useful inventions," said a prominent auger maker recently, "the principle of the auger now in use all over the world was discovered by accident. In 1680 Benjamin Paugh, an Englishman, while watching some school boys endeavoring to bore a hole in the ground with a piece of iron barrel hoop, noticed that after the hole had been sunken some distance into the earth and the flexible metal of their improvised boring tool had become heated, it twisted and carried the dirt up to the sureace nicely, and he could not see why the same principle should not apply to wood. The invention of the auger was the result. The screw auger," he continued, "is an American invention, and was invented about 100 years ago by Thomas Garret, who lived in the vicinity of Oxford, in Chester County, this State, where most of the black augers are still made.

"Most of the bright tools are made down east, but one of the principal manufactories is in this city. The old-fashioned pod auger is still used in Germany and England.

"The single screw auger is also an American invention, and was first discovered by accident by a Philadelphian. It is the only auger that can be used to any satisfaction in very hard woods, where the double-screw augers become clogged."

Although every one is perfectly familiar with this common-place tool, but comparatively few know the process of its manufacture. In making augers the iron which form the main or spiral part is welded into the steel of which the tip is made before forging. The bar is then put under hammers and forged into shape. It is then put into what is called a wringing machine and twisted up in a rough state into the spiral form, after which it is passed through crimpers, giving a uniformity of twist. The augers are next put through straightners and revolved, making them perfectly straight, when they are ready for putting on the head, which is the most delicate operation in their manufacture and requires the work of a skilled artizan. They are then subjected to a grinding out process, which consists of putting them through two rubber wheels to rough polish the twist.

The fitter-up then takes hold of them and lightens or fits the head; then the filers file down and sharpen the heads, after which they pass through the hands of the polishers, where they are polished and hardened ready for market.—*Ex.*

THE NEW YEAR AND THE OLD.

From a business standpoint the year which has just ended was notable principally as a period of recovery. Since January, 1885, values have been slowly rising. In many instances the progress made appears but slight, and still nearly everywhere along the line the advance is sufficiently marked to be obvious to the most superficial observer, and in some industries the improvement is very noticeable. At the present moment it is safe to say that the outlook is decidedly encouraging. All the conditions essential for a prosperous year are now at hand. It is true that the silver coinage question is still unsettled, but with this single exception the commercial and financial conditions now ruling are thoroughly satisfactory.

The improvement in the iron trade, regarded in business circles as an especially encouraging sign, has been followed by equally favorable changes in most of the other leading industries. The stock market is particularly active, and as regards the lumber trade the reports from every important centre of this industry are very satisfactory. In Maine the season closes with stocks well sold out at the mills, and every indication of a greatly increased demand with the opening of spring. In the Middle States the situation is on the whole quite as encouraging. In the South we find the mill-men, as a rule, fairly satisfied with the business of 1885, and confident of still better fortune in the present year. To those who are acquainted with the resources of the Southern States this confidence seems perfectly justifiable. From the great lumber regions of the Northwest, where the trade has been most depressed, the advices are all highly encouraging. A year ago the manufacturers were complaining that the increased production had not been followed by a demand to correspond, and that stocks of lumber were accumulating to an alarming extent. But during 1885 the production of lumber was greatly curtailed, while the demand through the year was much larger than was anticipated. The result has been a large reduction in the stock now at hand as compared with that available a year ago. This combined with the certainty of a heavy demand in the spring and the favorable business conditions generally prevailing, has infused a hopeful feeling through all branches of the lumber industry of the Northwest.

There is in these circumstances nothing to warrant any extravagant anticipations as regards the business of 1886, but judging from present appearances, noting the abundance of money, the firmness in the stock market, the rising tendency in the prices of raw materials and manufactured goods and the increasing demand for labor, it seems certain that 1886 will be, as regards the volume of business transacted and prices obtained, a great improvement on the year which has just expired.—*Saw Mill Gazette.*

FORCE, POWER, AND WORK.

There exists in the minds of very many engineers with whom we come in contact but a very vague conception of the meaning attached to these three little words. Not so much does the difficulty appear to be in getting at a general sense of meaning for the words, as to separate the general idea conveyed into its factors, and to discern clearly just what portion of this whole is meant by force, by power, and by work. Let us therefore consider each in their order, and study their composition and relation.

We all have a pretty good idea of what force is, but the difficulty appears to be to disconnect the idea of force with that of motion. We can easily appreciate the force of gravity when we see a weight falling to the earth, but it is more difficult to comprehend the force as still existing, after the body has reached the ground, tending ever to draw it nearer the earth's centre whenever its support shall be taken from under it. Force is exerted by the magnet as much in holding a nail against its pole as in moving it up there. When the nail was in motion, or the body was falling to the earth, there was power developed. Power is the product of force and space. If a magnet could lift a weight of one pound against the force of gravity through one foot, it would develop one foot pound of power. If the force of a cylinder full of steam can push a piston against 110 pounds through three feet, it will develop 330 foot pounds of power.

Now what is the difference between power and work. Work takes account of the time in which power is exerted. If the engine mentioned was 48 inches in stroke it would have to make one revolution to move the load through three feet as above. Now suppose the engine to run 100 revolutions per minute we should have 110 pounds move through 300 feet in a minute, which would equal one horse power of work. If the engine runs at 50 revolutions per minute we should have only 150 feet per minute =16,500 foot pounds per minute=one-half a horse power, and if it runs 200 revolutions per minute it would develop 66,000 foot pounds per minute=two horse power of work. Work is the consumption of power and the horse power, the measure of work is the measure of the rate of its consumption of power. It is evident, therefore, that a machine, the resistance which it requires a certain force to overcome, its resistance twice the number of times in a given time, and that it is not the pounds of force which a machine is capable of exerting which qualify its consumption of power unless we take into account the distance through which this force is exerted. For instance, a test of the power required by a certain shop was unsatisfactory to the man who owned the engine. He maintained that certain embossing presses consumed almost as much power in themselves as our instruments showed for the whole shop, and called our attention to the irresistible force with which the dies were pressed into their work. The press was a heavy one with a large fly wheel and a toggle joint with an enormous leverage. It was run at a moderate rate of speed and a man with a crank upon the fly wheel could easily have run the press at its usual rate and have exerted that enormous pressure upon the dies as many times a minute as when it was run by power. The force exerted was truly great, and would have measured a good many pounds, but the distance through which it was exerted, the depth of the impressions was a very small fraction of an inch smaller still of a foot, and when reduced to foot pounds of power amounted to but little, and this number of foot pounds was not repeated a sufficient number of times per minute to amount to much when reduced to horse power of work. It is surprising to see how much power is required by a small engine running at a high rate of speed. We have seen an emery wheel without work being ground upon it absorb a full one-third of the power required by a good-sized machine shop, while the variation in the load afforded by stopping and starting a large planer was comparatively slight.—*Boston Journal of Commerce.*

RAISING OAK TREES.

During the last few years large quantities of acorns have been taken from this country for the purpose of planting. White oak acorns are preferred, and they have been chiefly obtained in the State of Missouri. They are generally planted on sandy or broken land that is intended for pasturing sheep. In Great Britain sheep are accustomed to eat acorns, and it is considered profitable to raise them for sheep food. No variety of oak has received much attention at the hands of the planters of fruit trees. They state that that the trees make a very slow growth and for this reason they prefer to plant trees that grow rapidly and furnish fuel and timber in a shorter time. A foreign writer suggests that oak may be raied to excellent advantage in connection with other varieties of trees that grow rapidly. He admits that oaks grow slowly while they are young, but states that they increase in size rapidly when they are fifteen or twenty years old. If care is exercised they may be cut down so as not to injure the young oaks. These trees being removed the young oaks will grow rapidly and completely occupy the ground. Oaks are easy to propagate, as the acorns can be obtained at small cost and are almost certain to germinate. Acorns are much easier to manage than large nuts like those produced on the hickory or pecan tree. They can be planted where it is desired to have them grow, or in nursery rows, from which the small trees may be taken up when they are at a suitable size to be transplanted. The wood is excellent for fuel, timber and post. —*New Orleans Times.*

ROOFS OE PAPER

A roof pronounced superior to that of slate, because of its lightness and other advantages, is now made of any fibrous pulp. From this material tiles of any shape desired are formed by pressure under machinery, or any other method which may suggest itself. Pressed into the designs wished for the pulp tiles are partially dried previous to being subjected to a water-proof solution. Thoroughly impregnated with the preparation to resist moisture they are baked to harden in them the water-proof mixture. After the baking the tiles are treated to a mixture imparting an enameled surface; to this is added a coating of sand, whereby the pulp is rendered proof against the action of heat or flame. By the use of different colored sands a variety of tints may be imparted to the tiles, which, after the application of the enameling mixture and sands are baked a second time, after which they are ready for use. Besides the inherent lightness of pulp ties, which obviate the necessity of a heavy frame to support a weighty roof, the pulp tile, being tough and not brittle like slate, is far less liable to be broken from blows, stones thrown upon them or human footsteps. Again, slate tiles cannot be laid compactly together on a roof, on account of their brittleness, which prevents their being drawn tightly together by nails. Through the fibrous pulp nails may be driven as close home as in shingles, thereby bending them closely to the bed and together without any possibility of lateral movement, or being blown away in a high wind, as slates loosely fastened on roofs so frequently are. Nails penetrate the pulp tiles more easily than shingles, and lie closer together, being more elastic than wood.—*Boston Journal of Commerce.*

TEETH AND SPEED.

The kind of teeth and the speed of the saw should be determined by the hardness and grain of the wood, its greater or lesser freedom from moisture, from gummy or resinous matter, whether frozen or not, also its size. The harder and the smaller the more upright should be the teeth, and the less their velocity and rate of sawing. Pine, willow, and alder require large, acute and well-pitched teeth; oak, mahogany, and rosewood, need perpendicular teeth, close together; yellow and pitch pine and larch being gummy and resinous, require grease to clear the blade; California redwood cuts like eastern pine. It is generally concluded that for pine, spruce, and hemlock the teeth should be cut tangent to a circle half the saw's diameter. Cedar cuts best with a peg tooth of fine gauge, pitch and space. Mahogany, ash and English elm are best cut with the gullet or mill tooth, of small space and nearly upright pitch. For maple, oak, and all timber known as hardwood, swaged teeth answer. For hardwood in warm weather, Norway pine, and chestnut, teeth partly bent and partly swaged are often used. For water-soaked spruce and pine spring-set teeth are generally used.— *Timber Trades Journal.*

A SUMMARY of last year's lumber business in Minneapolis, as given by the *Pioneer-Press*, shows a decrease in the mill cut over the previous year of about 130,000,000 feet, a decrease in the boom scale of about 14,000,000 feet, a decrease in receipts of about 13,000,000 feet, and a decrease in shipments of about 8,000,000 feet. The figures for ten years past, however, show a large increase in business, and the reduction of last year was only an incident of the general depression prevailing everywhere.

Chips.

VASSAR, Mich., has a new company engaged in the manufacture of wood paving blocks.

THERE is a mill being built at Tower, Minn., which is surrounded by pine enough to last forty years if cut at the rate of 100,000 feet a day.

NEW YORK City imports of lumber from the British Provinces in 1885 amounted to 58,305,420 feet. Of shingles 1,050,000 were imported.

THE exports of lumber, exclusive of hardwoods, from the port of New York during 1885, amounted to 76,079,000 feet. The total value of the exports of wood and its product was $7,001,343.

NEW HAMPSHIRE ships millions of fish barrel staves, made of sapling pine, to Michigan and other States bordering on the lakes. The resinous character of the wood commends it to the packers of fish for holding brine.

THE strength of the chestnutwood is to oak as 54 to 100. Cohesive force, according to Tredgold, is from 9,570 to 12,000; its specific gravity is ·535 according to Tredgold, and ·657 according to Rondelet; weight per cubic foot about 30·6 pounds.

The amount of lumber inspected in Boston during 1885 was 98,498,000 feet compared with 98,741,000 in 1884, and 119,000,000 in 1882. Western and Canada pine are not inspected, and a large amount of yellow pine and spruce goes directly to the yards at the mill inspection.

ABOUT 6 o'clock on the morning of the 13th inst, the saw mill belonging to Mr. Geo. McGregor, lot 31, con. 10, township of Hamilton, Ont, was discovered to be on fire. The mil with all the machinery and a large quantity of lumber were totally destroyed. No insurance. The fire was without doubt the work of an incendiary.

MR. A. HOPPINS, of the Rathbun Company, has purchased the entire cut of the Hinchinbrooke saw mill. It will measure 130,000 feet, and consists of pine, hemlock, basswood, oak, and ash. Mr. Hoppins will also purchase all the ties and fence posts between Kingston and Renfrew.

THE Lethbridge, N. W. T., *News* says:—A party of men came down from the N. W. C. & N. Co's. log camp in the mountains on Tuesday evening. They report that the largest drive ever made in this country will take place in the spring, and that the south fork of the Old Man's river will be full of logs for 15 miles. The logs are said to be best ever got out.

MESSRS. J. A. J. Craig & Co., of Montreal, Quebec, have just fitted out one of the most extensive furniture factories in Canada. Mr. Craig has been for years in this business, and is one of the few men who have grown rich in manufacturing furniture. About a year ago he was burned out, but has concluded to try it again,

THE amount of lumber cut by the saw mills on the line of the Grand Rapids & Indiana railroad in Michigan in 1885 is reported as 240,404,203 feet, of which there was 152,275,478 feet on hand. The amount of shingles manufactured was 244,248,000, of which 38,250,000 were reported on hand at the close of the season.

A COMMON method of grafting is to make a transverse section in the stock and a vertical slit above it, and the bud is pushed upwards into its position; this method, we believe, if carefully done, rarely fails. As the sap descends by the bark the bud thus placed above the transverse section receives abundance. There are numerous other methods.

A LEGAL case which came up at Toronto on Jan. 18th is thus reported:—*Re* Rainy Lake Lumber Co.—J. D. Edgar for the Toronto General Trust Company moved on petition under 45 Vic., cap 23, sec. 43, for possession of properties embraced in mortgages to the applicants. J. R. Roaf for the company. W. A. Foster, Q. C, for shareholders and contributories. Motion suspended for one month, the company to pay debenture holders within one month, if payment not made, order for possession to go. Costs out of estate.

MOUNTAIN MAHOGANY.

In Nevada there is a peculiar wood known as mountain mahogany. The tree does not grow large. A tree with a trunk a foot in diameter is much above the average. When dry the wood is about as hard as boxwood, and being of a very fine grain might no doubt be used for the same purpose. It is of a rich, red color, and very heavy. When well seasoned it would be a fine material for the wood-carver. In the early days it was used in making boxes for for shafting, and in a few instances for shoes and dies in quartz battery. Used a fuel it creates intense heat. It burns with a blaze as long as ordinary wood would last, and then is found (almost unchanged in form) convert to a charcoal that lasts about twice as long as ordinary wood. For fuel it stands much higher than any other kind of wood; indeed, a cord of it always brings the same price as a ton of coal. The only objection to it as a fuel is that it creates such an intense heat as to burn out stoves more rapidly than coal, however bad.—*Exchange.*

Ancient Saw Mills.

More than 300 years ago an English historian gave the following description of a saw mill: "The saw mill is driven with an upright wheel, and the water that maketh it go is gathered whole into a narrow trough, which deliverth the same water to the wheels. This wheel has a piece of timber put to the axle tree end, like the handle of a broch, and fastened to the end of a saw, which, being turned by the force of the water, hoisteth up and down the saw, that it continually eateth in, and the handle of the saw is kept in a rigall of wood from swerving. Also the timber lieth, as it were, upon a ladder, which is brought by little to the saw with another vice."

Catarrh—A New Treatment.

Perhaps the most extraordinary that success has been achieved in modern science has been attained by the Dixon treatment for Catarrh Out of 2,000 patients treated during the past six months, fully ninety per cent. have been cured of this stubborn malady. This is none the less startling when it is remembered that not five per cent. of the patients presenting themselves to the regular practitioner are benefitted, while the patent medicines and other advertised cures never record a cure at all. Starting with the claim now generally believed by the most scientific men that the disease is due to the presence of living parasites in the tissues, Mr. Dixon at once adapted his cure to their extermination; this accomplished the Catarrh is practically cured, and the permanency is unquestioned, as cures effected by him four years ago are cures still, No one else has ever attempted to cure Catarrh in this manner, and no other treatment has ever cured Catarrh. The application of the remedy is simple and can be done at home, and the present season of the year is the most favorable for a speedy and permanent cure, the majority of cases being cured at one treatment. Sufferers should correspond with Messrs. A. H. DIXON & SON, 305 King street west, Toronto, Canada, and enclose a stamp for their treatise on Catarrh.—*Montreal Star.* 1y122.

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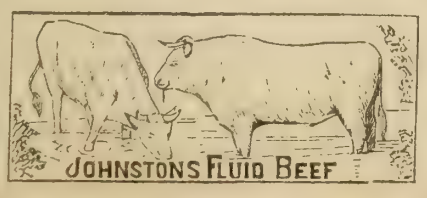

The nourishing, palatable and warmth giving qualities of Johnston's Fluid Beef has caused this invaluable preparation to before a favorite and fashionable beverage for the winter season. It is now obtainable on draught at the leading hotels and restaurants throughout the Dominion 18t7

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The Best Article Ever Offered to the Trade.

I have much pleasure in drawing attention to my **WROUGHT IRON COOKING STOVE, for Shanty, Hotel and Boarding House use.** These stoves are made of **Heavy Sheet Iron,** the top and lining of the fire-box being of **Heavy Cast Metal** and all the connecting parts of substantial **Wrought Iron Work.** The dimensions of these Stoves are as follows:

SINGLE OVEN STOVE

Top surface contains six 10-inch holes, with ample room between, and one oven 28 x 24 x 19. Fire box takes 28-inch wood.

DOUBLE OVEN STOVE

The Double Oven has a top surface containing twelve 10-inch pot holes, with two ovens, each 28 x 24 x 19. One fire-box of suitable size for area to be heated. Below will be found Testimonials from some of the leading Lumbermen, who have used my **Wrought Iron Cook Stoves** since I commenced manufacturing them. They are the names of gentlemen who are well known and reliable, and will carry more weight than any recommendation of my own could do.

The Best Stove I have ever Used.

PETERBOROUGH, May 31, 1880.

ADAM HALL, Esq., Peterborough. Dear Sir,—I have used your Wrought Iron Cooking Stove in our lumbering operations since its introduction here, and have no hesitation in saying that I prefer it to any other. For durability, economy and efficiency, where a large number of men are employed, it is the best stove I have ever used. You can, with confidence, offer it to hotels, boarding houses and lumbermen.

Yours truly, THOS. GEO. HAZLITT.

The Stove for Lumbermen.

PETERBOROUGH, June 1st 1880.

ADAM HALL, Esq., Peterborough. My Dear Sir,—We have used your Wrought Iron Cooking Stove and find it is very satisfactory for lumber operations, especially so on drives. We can recommend it highly.

Yours truly, J. M. IRWIN.

In addition to the above I can refer you to the following lumber firms who use my Wrought Iron Range exclusively in their camps:—

THE GEORGIAN BAY LUMBER CO.....Waubaushene
THE LONGFORD LUMBER CO.....Longford Mills
MESSRS. GILMOUR & CO.....Trenton and Ottawa
MESSRS. RATHBUN & CO.....Deseronto
THE MUSKOKA LUMBER CO.....Gravenhurst

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All the necessary TINWARE and CUTLERY for Shanties Supplied at the Lowest Prices.

ADAM HALL, Peterborough.

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THE CANADA

LUMBERMAN

DEVOTED TO THE LUMBER AND TIMBER INTERESTS OF THE DOMINION.

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The CANADA LUMBERMAN is filed at the Offices of MESSRS SAMUEL DEACON & Co., 154 Leadenhall Street, London, England, who also receive advertisements and subscriptions for this paper.

PETERBOROUGH, Ont, FEB. 1, 1886.

MICHIGAN parties have recently bought a single birth on the Spanish River for a consideration of $120,000.

NEW buildings to the cost of $2,300,000 were erected in Montreal, Ont, during the past year.

THE Kingston & Pembroke Railway Company has purchased the car works at Kingston, Ont., for $20,000.

MOSES BALLAH, while chopping near Essex Centre, Ont., was instantly killed by a falling limb.

IN some parts of northern Michigan cedar ties have advanced from 16 to 18 cents each, and posts from 5 to 6 cents.

A RELIABLE authority makes the statement that there will be six hundred miles of new railway completed in Missouri the present year.

EZRA RUST, of Saginaw, Mich., sold this week 30,000,000 feet of pine on Tobacco river to A. A. Brockway, of the same place for $200,000.

THE brig Adria, from St. John, N. B., for New York, with lumber, put into Vineyard Haven, January 13th, having lost part of her deck load in a heavy gale.

GOW & MAJO shipped 1,100 tons of sawdust from Muskegon to South Chicago last year for terra cotta manufacture. Next year they propose to ship 100 tons a week.

THE boom in Muskegon river, above Newago, broke loose lately and 500,000 feet of logs went down the river. The logs belonged to the Newaygo Manufacturing Company, and will have to be sawed at Muskegon.

A BIG tree was recently cut at Moore & Tanner's camp on the Au Sable riverr It was cut into a stick 108 feet long, which measured 27 inches at the top and contained 10,300 feet.

A YOUNG man named Addison, of Minden, had his thigh bone broken recently in one of the Parry Sound Lumbering Co.'s camps by a log rolling down from a skidway, over a sleigh, and striking him.

THE Emery Lumber Company of Bay City have about 15,000,000 feet of logs skidded on one of the branches of French River. The timber is said to be of superior quality and will be taken to Tawas for manufacture.

MESSRS. Folsom & Arnold, of Bay City and Albany, are owners of very valuable timber on the Spanish river and have a saw mill at its mouth—the first mill there. Their cut the past season was about 12.000,000 feet, averaging about ten per cent. to uppers.

AMERICAN pitch pine appears to be as much a pet of the German revenue system as American hog products. Besides a duty of 30 per cent levied upon the importation of American pitch pine, the railroads of Germany, which are under governmental control, make an almost prohibitory discrimination against it. If any part of a car load is pitch pine the whole load is classed as such.

As much as it has been predicted that walnut would be hustled aside by other woods, says the *Northwestern Lumberman*, it is still in the ring as vigorous as ever. Good walnut lumber finds ready sale in any of the leading markets, and buyers from both home and foreign markets are busy looking it up. Any other wood that grows will have more than it bargained for if it at tempts to satisfactorily take its place."

SINCE the recent sale of newly offered berths by the Crown Land Department, says a Toronto report, there has been greater activity in Algoma timber sales than for years and the value of stumpage has considerably appreciated Transactions in limits appear to be on the basis of from $1 to $2 per thousand feet for white pine. In some cases the Algoma birch is a very valuable item, but account is rarely taken of the Norway or spruce in fixing values.

MIRAMICHI.

J. B. SNOWBALL'S wood trade circular for the year 1885 has been received. It states that the depression which existed during 1884, and which was supposed to have reached bottom, has continued through the year 1885, now closed. The advisability of the Provincial Government continuing its present policy in regard to the tax on the timber supply is questioned. It is pointed out that while in 1884 the tax represented only about 20 cents per thousand superficial feet, it is now increased until the direct tax and land tax (the tax is levied in two forms) amount to $1.40 per thousand superficial feet. The shipments from that port for the year show a falling off of 20 per cent from last year, and last year's was 27 per cent. less than the year 1883. The total shipments from the Province show a shortage of 12 per cent. There would have been a much greater reduction, says the circular, were it not for the excessive quantity of Nova Scotia goods shipped from St. John this season, which passed as St. John production. Nova Scotia shipments, however, show an increase of 5,277 St. Petersburg standards, the figures being 40,221 stds. in 1885 against 34,944 standards in 1884. The only ports in New Brunswick that show any increase are Sackville, Shediac and Cocagne, all ports bordering on Nova Scotia.

The stock being wintered is estimated at 17,000,000 superficial feet, against 26,000,000 last year and 40,000,000 in 1883. The amount of work being done in the forests is small, much less than for many years past, and this, with the very small stock being held over, will make next season's shipments show a still further reduction, which must continue as long as the present unremunerative prices prevail. The stock being wintered at St. John, and also the new supply, are on a restricted scale, and consequently all are being held for improved prices.

The shipments for the past ten years from Miramichi, given in superficial feet, were as follows: –

	Sup. Ft.
1876	116 000,000
1877	150,000,000
1878	106,000,000
1879	114,000,000
1880	155,000,000
1881	128,000,000
1882	117,000,000
1883	149,000,000
1884	108,000,000
1885	87,000,000

The distribution of the shipments in 1885 was as follows:—To Great Britain, 47,239,692 sup. feet; Ireland, 24,984,538; France. 10,223,213; Australia, 1,534,672; Africa, 2,262,198; Italy, 1,005,715; total, 87,250,028.

The shipments from St. John to trans-Atlantic ports for the past 8 years were as follows:

	Sup. ft. Deals.	*Birch.*	*Pine.*
1878	188,163,610	7,989	2,493
1879	153,279,357	11,548	3,237
1880	215.485,000	16,035	2,441
1881	210,281 730	5,134	1,734
1882	201,413,717	7 576	3,332
1883	181,517,932	11,778	3,883
1884	164,829,825	14 006	3,836
1885	152,543 026	13,769	3,686

Dalhousie and Campbellton, in 1885, shipped 13 796,950 super. feet deals, scantling and ends and 5,267 tons timber; Richibucto and Buctouche, 11,909 050 super. feet; Bathurst, 10,-160,242 feet, 29 tons birch and 588,140 pieces palings; Shediac, 5,797,035 super feet; Caraquet, 2,231,787 super. feet, 56 tons timber and 111,000 pieces palings; Sackville, 7,117,000 super. feet.

The total lumber shipment of New Brunswick in 1885, compared with 1884, was as follows:

	1884.	1885.
No. of vessels	595	519
Tons	390,185	343.988
Sup. ft. deals, etc	.333 191,893	291 747,383
Tons timber	26,939	27.738

The shipments from Nova Scotia in 1885 were as follows:—No. of vessels, 172; tonnage, 92,-087; sup. feet deals, etc., 79,647,765; birch timber, 8,389; palings, 13,346. The shipments of deals from Nova Scotia to trans-Atlantic ports in the years mentioned were:—

1882	85,752,000
1883	77.918 000
1884	69,159,000
1885	79,647,765

The shipments of deals, etc, given in superficial feet, from the Nova Scotia ports mentioned, were as follows:—Guysborough, 2,061,642; Shelbourne, 704,880; Pictou, 300,795; Yarmouth, 2,516,250; Parsboro, 31 383,000; Port Medway, 525,000; Margaret's Bay, 2 000 000; Amherst, 16,124,947; Halifax, 12,155,251; Ship Harbour, 1.500,000; Sheet Harbour, 6,000,000; Liscomb, 752,000; Bridgewater, 3,624,000.

THE PINE TREE OF KARASATE.

A few miles from Otsu, Japan, is Karasate, a little point of land running into the lake, where a Shinto temple has stood for centuries. The shrine is covered by the arms of a pine tree, whose trunk is more than four feet in circumference, and the branches, trained out on supports, cover over an acre of ground. Of all the wonders of this part of the world, this old pine tree of Karasate deserves a first mention, and one wanders amazed under the great canopy of long drawn out, interlading branches, and studies the intricate way in which the limbs of the sturdy old pine have been twisted, looped, tied and braided, as if they had been so many sticks of candy. The ends of the branches reach out over the water on either side, and a heavy stone wall on the lake front protects the venerable tree from ever being washed away by storms or floods. There is a tiny little box of a shrine up among the branches, and the pilgrims look strangely enough when they clap their hands loudly and stand with clasped palms, turning their faces up to the branches overhead.

All the small children in Karasate followed us about as we wandered under the gnarled branches of the pine tree, half of the small boys and girls carried a smaller brother or sister on their backs. One dear bright-eyed little rascal capered about most bewitchingly, and hardly left my elbow. When I sat down he sat down and kicked his sandalled feet against me. He leaned over and read the same page of the guide book with me; discovered my watch, held it in his hand to hear it ticking, and made himself at home in the most betwiching, half-timid and polite way. The other children, drawn up in a silent array before us, wondered no less at the foreigners themselves than at the favor or audacity of their young companion.

When we finally rose I picked up a few cones and the empty shell of a skin from which some locust had lately flown. A sweet shy little girl saw me doing it, and ran to gather more and present them with many bows, the head of her baby brother on her back bobbing and rolling around alarmingly as she did it. The present of a big copper cent made her bow more than ever, and in a second the whole troop of youngsters were off over the sand and up the tree hunting for cones and locust shell.—*St. Louis Globe-Demacrat.*

LONDON TRADE OF 1885.

The annual circular of Simson & Mason, of London, says: Since the year 1881 the wood trade of the port of London has been most unsatisfactory, alike to shippers and importers. 1885 has closed, and resembles for the most part the previous years. All branches of industry throughout the country have continued depressed, and the wood trade has been in sympathy. Until there is a better tone in the general trade of this country it would appear that the wood trade is not likely to show much improvement. The recent fall-off in consumption is, in a large measure, due to the suspension of building operations in the metropolis and its suburbs; from this large and active source of consumption the demand has been for some months past gradually falling away. London has been overbuilt and requires some period of rest Although there are no immediate signs of a better state of things, yet there is concurrent opinion that prices have seen their lowest and any change must be for the better. Money was made and lost during the spring of the year through a "war scare" which soon subsided, and this has been the only exception to the monotony of dullness which has characterized the past year. Freights have ruled exceedingly low from all ports, and some wood charters have been closed, perhaps, at a cheaper rate than ever previously known.

The total import amount to 806,000 tons, being a reduction of 40 000 tons on 1884, and 30,000 below the average of the last five years. The total consumption, as indicated by the deliveries from the Surrey Commercial and Millwall Docks in sawn and planed wood, has been 205,050 Petersburg standards, against 232,000 Petersburg standards in 1884 being a fall-off of 12 per cent. Compared with 1883, the fall-off is 13 per cent., with 1882 15 per cent., and with 1881 18 per cent. The fall-off as against last year equals about 500 Petersburg standards per week. Of hewn wood, excluding sleeps, the consumption, as indicated by the Surrey Commercial Dock deliveries, has been a fair average one, amounting to 69,000 loads against 68,000 in 1884.

WHY WILL YOU cough when Shiloch's Cure will give give immediate relief Price 10 cts 50 cts, and $1. For sale by Ormond & Walsh druggists, Peterborough.

DR. CARSON'S STOMACH BITTERS will cure the worst forms of Dyspepsia, Indigestion, and all bilious complaints. Large bottle, 50 cents. Go to your druggist and get a bottle.

Advice to Mothers.

Are you disturbed at night and broken of your rest by a sick child suffering and crying with pain and cutting teeth? If so, send at once and get a bottle of Mrs. Winslow's Soothing Syrup for children teething. Its value is incalculable It will relieve the poor little sufferer immediately. Depend upon it, mothers, there is no mistake about it. It cures dysentery and diarrhœa, regulates the stomach and bowels, cures wind, colic, softens the gums, reduces inflammation, and gives tone and energy to the whole system Mrs. Winslow's Soothing Syrup for children teething is pleasant to the taste, and is the perscription of one of the oldest and best female nurses and physicians in the United States, and is for sale by all druggists throughout the world Price 25 cents a bottle.

HARRIS, HEENAN & Co.

124 AND 126 QUEEN STREET, - - MONTREAL.

Patent Stitched–Steam Power Pressure Stretched–Oak Tanned

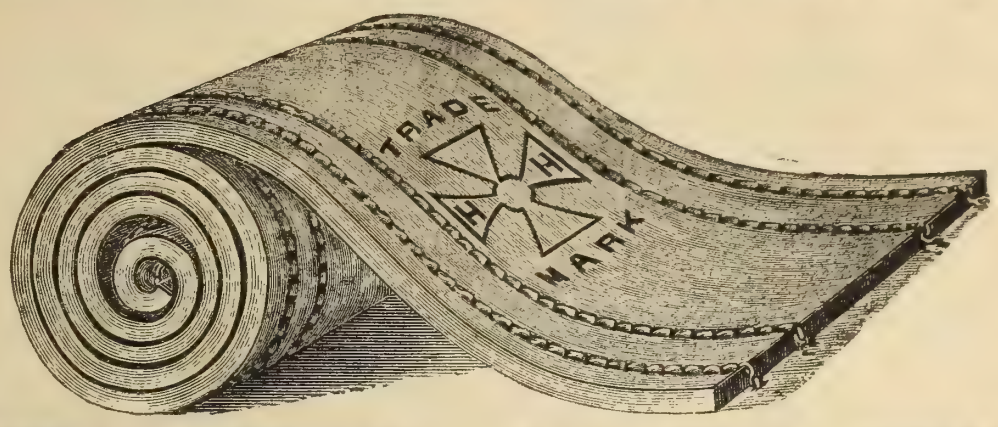
TESTIMONIAL

IRA GOULD & SONS, CITY MILLS, Nov. 13th, 1884.

Harris, Heenan & Co.

DEAR SIRS.—Your Patent Sewed Belt has been in use in our "City Mills" for some time. We are thoroughly convinced of its superiority over any belt, American or Canadian, we have used in an experience of over 35 years. It stretches so little, and gives so little trouble, that compared with riveted belting, the sewed belt saves double its price in time and laces saved. We heartily recommend it to manufacturers as the cheapest and most satisfactory belt in the market

Yours respectfully,
W. C. MARSHALL,



TESTIMONIAL.

PECK, BENNY & CO., CANAL HORSE SHOE AND NAIL WORKS, MONTREAL, 15th Nov. 1884.

Messrs. Harris, Heenan & Co., Montreal.

I have pleasure in recommending the belting manufactured by Messrs. Harris, Heenan & Co., of this city. After thoroughly testing it, I find it greatly superior to any belting that has come under my notice and fully equal to all they claim for it, and certainly without an equal for strength or double belting.

CHAS. R. ELLACOTT,
Supt. H. S. & H. N. Dept.

LEATHER BELTING!

The Best, therefore the Cheapest, Belt in the market.
Replaces, when used, all others.
More Pliable and Durable, especially at the splices.
Stretches but little, always retains it original wid h.
Superior for Cross or Double Belts.
Runs sraight and true, does not start at the laps.
Single equals medium double.

25 per cent Stronger, 33₁ More Lasting, and 12⅓ Heavier, than any other Leather Belt

BOARD OF TRADE RETURNS.

The following are the returns issued by the Board of Trade, for the month of Dec. 1885, and also for the 12 months ending Dec., 1885:

MONTH ENDED 31ST DEC., 1885.

Timber (Hewn).	*Quantity. Loads.*	*Value. £.*
Russia	6,346	12,857
Sweden and Norway	24,683	84,286
Germany	9,997	29,270
United States	6,111	22,986
British India	5,196	71,351
British North America	10,995	45,696
Other Countries	33,705	36,727
Total	97,033	253,173
Timber (Sawn or Split, Planed or Dressed).		
Russia	32,060	57,408
Sweden and Norway	44,948	101,549
British North America	66,540	151,547
Other Countries	17,171	58,799
Total	160,719	369,303
Staves, (all sizes)	3,642	58,632
Mahogany (tons)	2,283	19,020
Total of Hewn and Sawn	257,752	622,476

TWELVE MONTHS ENDED DEC. 31ST, 1885.

Timber (Hewn).		
Russia	258,857	465,805
Sweden and Norway	540,217	758,826
Germany	289,555	693,247
United States	138,593	470,984
British India	42,588	576,724
British North America	255,264	1,108,829
Other Countries	409,587	557,760
Total	1,934,661	4,632,175
Timber (Sawn or Split, Planed or Dressed).		
Russia	1,188,380	2,551,123
Sweden and Norway	1,716,456	3,602,247
British North America	995,374	2,437,629
Other Countries	330,108	996,602
Total	4,230,318	9,587,601
Staves (all sizes)	124,374	588,971
Mahogany (tons)	55,889	486,193
Total of Hewn and Sawn	6,164,979	14,219,776

SHILOH'S VITALIZER is what you need for Constipation, Loss of Appetite, Dizziness and all symptoms of Dyspepsia. Price 10 and 75 cents per bottle. For sale by Ormond & Walsh druggists, Peterborough.

THE LUMBER TRADE.

QUEBEC, Jan. 27.—Information from the woods is to the effect that unusual activity prevails this winter in the pine lumbering districts of the province. The decline in the square timber trade is likely to become permanent from present indications, and the export trade in deals and dimension timber will probably increase in direct ratio to the decrease of the other. It is reported that the immense stock of sawn lumber at the Gatineau Mills' piling ground, Cheslea, has been disposed of for Spring delivery. The firm operating these mills, Messrs. Gilmour & Co." are exceptionally busy on the Gatineau River this winter and will probably drive over 200,000 logs next spring. The firm has lat ly acquired the limit so long held by Mr. Willis Russell of this city, and may berhaps cut some pine there this season. The Kapabourga limit. formerly the property of Messrs. Benson, Cennet & Co, has also been bought by the Messrs. Gilmour. Mr. J. MacLaren is also actively engaged on the Eagle, Ignace and Desert rivers, doing most of his business through jobbers. Messrs. Hamilton Bros. are doing rather more than usual on the Gatineau, and expect to drive from 80,000 to 90,000 logs of the finest quality and the largest size. They are busy as usual on the tributaries of the Grand or Ottawa river. All of this firm's timber will be cut at the Hawkesbury mills sixty miles below Ottawa on the Ontario side of the river. and for the future will be taken to the seaports for exporation by barge, this plan having been found to have many advantages over rafting, which involved several handlings of the lumber, as well as the scouring of each board by machinery. On the Black and Colcunge rivers. Messrs. Gillis and others are doing a large winter's w rk. The sale of the old Bronson business for $600,000 circles, and some doubt is expressed as to whether the immense limits above the Boscatong on the Gatineau which cover 900 square miles of conntry, are included in the purchase. So far little is known of the intentions of the new firm, which includes Mr. Stewart, late of New Brunswick, and now of London, England, Mr. Bronson, and some others not so well known to the trade. The Messrs. Greer Bros., of Montreal, have also purchased limits on the Gatineau, and will probably work them before long.

Horsford's Acid Phosphate

Very Satisfactory in Prostration.

Dr. P. P. Gilmartin, Detroit, Mich., says: "I have found it very satisfactory in its effects, notably in the prostration attendant upon alcoholism."

The discovery of the instantaneous process of taking photographs has been quickly followed in the medical world by a perfect and instantaneous remedy for all acute aches and pains, as Neuralgia, Toothache, Rheumatism, etc. This valuable remedy is called Fluid Lightning, and is sold at 25 cents a bottle by John McKee, druggist.

WELLAND CANAL.

NOTICE TO CONTRACTORS,

SEALED TENDERS, addressed to the under-igned and endorsed "Tender for Lock Gate Timber," will be received at this office until the arrival of the Eastern and Western Mails, on TUESDAY, the 9th day of FEBRUARY next, for the furnishing and delivering, on or before the 22nd day of June next, 1886, of Oak and Pine Timber, sawn to the dimensions required for increasing the height of the Lock Gates on the Welland Canal.

The timber must be of the quality described and of the dimensions stated in a printed bill which will be supplied on application, personally or by letter, at this office, where forms of tender can also be obtained.

No payment will be made on the timber until it has been delivered at the place required on the Canal, nor until it has been examined and approved by an officer detailed to that service.

Contractors are requested to bear in mind that an accepted bank cheque for the sum of $600 must accompany each tender, which shall be forfeited if the party tendering declines to enter into a contract for supplying the timber at the rates and on the terms stated in the offer submitted.

The cheque thus sent in will be returned to the respective parties whose tenders are not accepted.

This Department does not, however, bind itself to accept the lowest or any tender,

By order.

A. P. BRADLEY,
Secretary.

Department of Railways and Canals,
Ottawa, 22nd January, 1886. 4

SNOW DRIFT

BAKING POWDER

The Peoples' Favorite.

w5

Health is Wealth

DR. E. C. WEST'S NERVE AND BRAIN TREATMENT, guaranteed specific for Hysteria, Dizziness, Convulsions, Fits, Nervous Neuralgia, Headache, Nervous Prostration caused by the use of alcohol or tobacco, Wakefulness, Mental Depression, Softening of the Brain resulting in Insanity and leading to misery-decay and death, Premature Old Age. One box will cure recent cases. Each box contains one month's treatment. One dollar a box, or six boxes for five dollars; sent by mail prepaid on receipt of price. We guarantee six boxes to cure any case. With each order received by us for six boxes, accompanied with five dollars, we will send the purchaser our written guarantee to refund the money if the treatment does not effect a cure. Guarantees issued only by J. D. TULLY Druggist, Sole Agent for Peterborough.

A GIFT Send 10 cents postage, and we will mail you *free* a royal, valuable, sample box of goods that will put you in the way of making *more money* at once, than anything else in America. Both sexes of all ages can live at home and work in spare time, or all the time. Capital not required, We will start you. Immense pay for sure for those who start at once. STINSON & Co., Portland, Maine.

CYLINDER LUBRICATION.

In former years it was the universal custom to lubricate the valves and cylinder of a steam engine with tallow by means of the old-fashioned cup with which every one is familiar. While tallow in either the crude or prepared state made a good lubricant for many kinds of work and machinery, it was very bad for steam valves or cylinders, not because it was a poor lubricant, for on the contrary it was as good as could be found in those days for the purpose; but the objection to it was the large percentage of acid it contained. Unless great care and frequent cleaning of parts were observed they were observed they were liable to severe corrosion; the valve seats and cylinder would become so corroded or eaten into by the deposits of acids that they have to be re-bored and re-fitted; piston rods became spoiled and had to be replaced; piston springs deteriorated, and piston bolts would almost break in pieces at the slightest pressure of the wrench. Constant repairs on engines having duty to perform were the order of the day, incurring heavy expense and tedious delays. To overcome these serious objections and substitute a lubricant that would be as good for the intermediate steam chambers of the engine and obviate the objections to tallow was a problem the solving of which engaged the minds and attentions of chemists, oil manufacturers, engineers and mechanics alike.

The results of their efforts brought forth cylinder oils of various brands for the sole purpose of lubricating the internal parts of the engine containing steam. They also incidently brought forth numberless sight feed oil cups of several qualities. These oil cups were a thing of beauty and joy forever. The engineer could take out his Waterbury watch and time the drops of oil to suit the duty of the engine, and the proprietor could figure to a nicety how much oil per day was used, and easily got at the cost per year. He did not have to run to the butcher's every once in a while, only to find that some old lady had bought the last lot of tallow; he found when he first started the sight feed cup that the oil men sent enough sample cans gratis to keep him in oil several months. The valve seats, cylinder springs, etc., would invariably present a smooth, even appearance upon examination and everything was lovely for a time. The problem of lubricating the steam engine was solved and consequently every one was happy. After a short time some observing engineers who utilized all their returns from steam heating coils and other sources, discovered that their boilers were not so clean as they had been previous to the use of oil. Careful investigation proved the fact that the cylinder oil returned through the heater with the water. This was all right if it either made steam or was otherwise harmless, but such was not the case. The deposits of oil gradually increased to an alarming quantity and proved detrimental to the boiler.

It did not seem to form a very hard scale, in fact, it was of a soft, mushy consistency. This it seemdeposed to have a great affinity for the ends of the flues, especially the back end, keeping the heat and water apart and causing the flues to leak and gradually harden. I have just seen a large tubular boiler that was built by a first class concern whose name is a guarantee of its quality, which was placed three years ago in charge of a good, careful engineer. That boiler is now receiving a new set of tubes. The ends next the back head were leaking and were so hard that when struck by a chisel it would fly like glass. I might add that the sediment around the tubes was considerably harder than anywhere else. The reason is obvious. The heater, which was of the plain tank style, was in about the same condition, and is being replaced by a new one of a kind that is guaranteed not only to heat but to deposit the sediment in the bottom and thence carry it out through the overflow. The total expense will not be less than five hundred dollars, a very large item to pay for this kind of experience. In connection with all this, a different brand of cylinder oil will be used, and if beneficial results follow it will be hard to determine whether they are caused by the change in heater or oil. A smilar case occurred not long since at a large factory having one of the leading well known heaters that was intended to purify as well as heat the return, etc. After four years run new flues had to be put in and a large, new heater with all necessary connections was introduced, causing an outlay of at least twelve hundred dollars, all on account of the cylinder oil.

In another factory having a thirty-horse boiler, where at least two-thirds the supply used is rain water, the boiler is washed out very carefully every two weeks, and about two quarts of crude petroleum placed therein, and so far, (one year's service), no trouble has occured, the scale of film found on cleaning the boiler being very thin and light. In another case where a certain brand of oil was used, it was found that the piston moved hard, and the more oil it received the worse it became. Upon taking the cylinder head off, the cylinder was found to be coated with small, greasy, sticky pellets, from the size of a pin head upwards. The steam ports were clogged up with this interesting stuff that resembled greasy clay. After carefully wiping out, a different brand of oil was introduced that very quickly cleaned out the ports and loosened out the piston rings until they rattled about. This certainly showed a considerable difference in the two brands of oil. One would lubricate, and did not form the sticky pellets, and would allow the engine to work under much less pressure, while the other produced the opposite effect. As to the effect of the otherwise good oil on the boiler, I have not yet learned, but I presume it is much better.

These few incidents that have come under my recent observation have demonstrated the fact that either there are very good and very bad oils for cylinder lubrication, or that all of them have some foreign stuff used in their manufacture for clarifying, or that they have some radical defect that leaves us no better off than with the old oil and tallow cups. I am strongly inclined to the first theory, from the fact that I know of factories where a certain brand of oil was used constantly for a number of years, having the same kind of plant throughout, and using the same water from the city service, that upon repeated careful internal examination showed no deleterious effects. In view of all these facts, it is economy to buy any cylinder oil because its first cost is low? On the contrary, it is a strong illustration of the good old adage, "the best is the cheapest." No man running a steam plant can afford to use an inferior grade of cylinder oil, even if he gets it for nothing. He would have to receive a present of a great may barrels of the stuff to compensate for the expense of overhauling the whole plant every three years, to say nothing of the delay, loss of business, etc. Oil manufacturers may not like this kind of talk, but if it hits any of them hard I would suggest that the remedy of the difficulty is in their own hands. There is no doubt that there is a few leading brands that will stand the test and perform good service, but it is equally patent that a large number of brands are worthless for their intended purpose, and positively harmful and dangerous. No one about to purchase any oil for the purpose, having a heater taking the returns to the boiler, should order until satisfactory evidence has been given that it will not deposit scale in the boiler, and perhaps it would not be amiss to demand a clean cylinder and other parts of the engine as a result of usirg said oil. —*M. E. Chanic, in Lumber World.*

WOOD AND METAL RAILWAY SLEEPERS.

Differences of opinion exist among engineers as to the relative value of wood and iron railway sleepers. The common belief seems to be that both possess qualities that deserve consideration, and that while wood may advisedly be used in some localities, iron is better suited to others. It is mainly, however, a question of economy, and the cost of transit has to be taken into account in association with the price on the market and the relative durability of wood and iron. It is beyond doubt true that a partial feeling has recently found expression in favor of iron or steel in England, while in Germany, where timber is scarce, and the duty upon wood imported from abroad has been increased within the last twelve months, there is probably good grounds for believing that metal sleepers, notwithstanding the fact they are said to cause a vibration in the carriages highly annoying to passengers, may come into very general use. On this important point the *Manchester Guardian* recently published some highly interesting particulars gathered from a recent report presented by Herr Bueck, the General Secretary of the German Ironmasters' Association, to the members of that body. This experienced engineer observes that he regrets to find that, according to certain appearances, wooden sleepers appear again to be coming into favor in Germany, because the several governments seem desirous of favoring forestry. Contrary to the recommendations of prominent engineers, beechwood sleepers have been laid down recently. Herr Bueck adversely criticises the disposition on the part of the Government to bestow special encouragement upon forestry in this way. The duties on timber imposed in 1879 have been raised this year, although the native growth is not sufficient to supply the requirements of Germany. According to a petition presented by the timber growers and merchants to the Reichstag on the occasion of the discussion on the timber duties, it appears that 2,000,000 sleepers were laid to the eastern part of the empire last year, and that of this quantity one-third were metal sleepers. The German forests could only supply 15,000 oak sleepers. Of the quantities submitted for tender during 1884-5, in the same part of the empire, German producers were only able to supply one 1,500 of oak, and 5·04 per cent. of pine. Should beechwood sleepers prove satisfactory, a sufficient supply may be obtained in the western part of the empire. But experiments with sleepers of this wood in France have not given satisfactory results. In favoring the employment of wooden sleepers, therefore, with a view to the encouragement of German forestry, the German Government are simply promoting foreign timber-growing industry rather than the native metallurgical industry."

It may be taken for granted that so far as England is concerned selection will be determined upon principles of economy. If it can be shown upon incontrovertible evidence that iron or steel sleepers are cheaper in the long run than wood, they will assuredly come into general use. On the other hand, should the contrary be established, timber will remain in vogue. Competition between the two interests involved will have a tendency to reduce the price of both wood and metal, and, so far, rivalry will be attended with advantage to the community. They must, however, stand on their merits, and any attempt to foster a trade by protective measures will fail. It is proverbial that there is neither favouritism or friendship in business. Now that the relative qualities of wood and metal are in course of being tested we believe that it will be found that the conditions under which timber sleepers can be obtained in England are of a nature to justify the expectation that they will still remain in use.—*Timber.*

OAK STAVES FOR EXPORT.

The manufacture of oak staves for export is quite an important industry, and there is a considerable amount of capital employed in it. Formerly nearly the whole of the staves for exportation to Europe were obtained from Canada and shipped via New York, but within the last ten years, in consequence of the exhaustion of the oak timber in that country, the trade has drifted southward, and it may be said now to exclusively a southern industry, as for several years past three parts of the whole quantity of staves exported have been obtained from the States of Arkansas, Tennessee and Mississippi.

Large quantities of staves were obtained on the Cumberland and Tennessee rivers, but there is now no stave timber on those streams. The larger portion of the staves shipped in the last two or three years has been obtained from Arkansas and Mississippi swamps.

The new railroad running from Memphis through Arkansas to Kansas City, and from Memphis to Vicksburg and New Orleans, opens up a considerable timber country, and within the last two years a large quantity of staves has been shipped to Europe via New Orleans over these roads. New Orleans is the principal market and shipping point for these staves, while Memphis is the centre of the manufacturing interest.

Large lots of staves are shipped as what is called "dunnage" in the steamers and other ships carrying cotton from New Orleans to Europe. By "dunnage" is meant the portion of the cargo which is heavy and will work with a light, such as cotton or, in other words, acts as a ballast.

The staves for export are made of white oak or timber of the white oak family, such as cow, burr, overcup oak, etc. The timber must be exceptionally good and large, at least 30 inches in diameter, long bodied and free from knots, crooks, wind shakes and shivers, and worm holes.

The stave should be riven with the grain of the wood, setting the frow to run from the bark towards the heart, and splitting the stave to as near an equal thickness on both edges as possible. In sapping great care must be taken to strike the axe in at the end of the stave, and never in the middle, which is a very objectionable defect. A merchantable stave should be of nearly uniform thickness.—*Southern Lumberman.*

BOXWOOD.

The boxwood boom seems to have spent it force, and the market has dropped in the year from $40 to $17 a ton, which is just $3 below the low point it started from. This change comes from the loss of interest in skating rinks, and the consequent abandonment of roller-skate manufacture by some of the largest concerns, notably one in Newark, N. J., that made in 1884 100,000, and one in New York that up to last July had a two-year's business of 350,000 skates. The dissolution of the skating rink syndicate, that for three years has built rinks all over the country, started them and then sold them to local enthusiasts has divided $400,000 on its last year's business, and has been the medium for sale of over 3,000,000 roller skates. The decline of this business is suggested by the fact that where Nosfolk County, Mass., had 15 rinks running last winter, it now has but five. New York's number has been reduced from 23 to eight, and Philadelphia from 13 to six, and those remaining are not liberally patronized. The abandonment of skating rinks has had some influence also over lumber, and is possibly to be in a large degree accountable for the apathy in prices, and their decline is nearly 30 per cent. since December 1884, while birch, which came into favor for rink floors in the summer of 1883, and jumped to $55 a thousand for kiln dried choice stock, is back, like boxwood, to a lower point than whence it started. —*Miss. Val. Lumberman.*

CRANKY MACHINES.

There are times when nearly all machines get cranky. The trouble is often a simple one, and is not infrequently owing to the machinist not knowing his business. But that is not always the case. The very best mechanic in the world gets hold of a nut that is difficult to crack. A machine, no matter of what kind, may work perfectly for months, and then one day something goes wrong with it. The machinist looks at it, examines it, and perhaps he even takes it to pieces and puts it up again, but all of no avail; the machine remains like a balky horse, which nothing will make go. At last the machinist gets tired and goes home, sick of pottering with the troublesome thing. He comes to work the next day, perhaps having forgotten the previous trouble, touches a handle here and a wheel there, drops a little oil in a half dozen places, turns on the steam, and off she goes without a murmur as if nothing had ever happened. It cannot be explained by any one. The only conclusion to be drawn is that he omitted, on the occasion of the stoppage, those little necessary touches of handles, turning of wheels and droppings of oil.—*Wood and Iron.*

To Clean Brass and Steel.

For brass: powder rottenstone, put it into a pint of water, add a teaspoonful of sulphuric acid, apply, then rub off and polish with whiting. For steel: emery powder mixed with turpentine.

CARELESSNESS IN THE BOILER-ROOM.

"Familiarity breeds contempt," is an old saying, says the *Locomotive*, and it is unfortunately true that it holds good in the boiler room. In this case it would be wise to add to the old saw, "and contempt breeds trouble," for many accidents may be traced to the carelessness in management of boilers which naturally follows long connection with them. Especially is this apt to be the case when the man has been so fortunate in his management of a boiler plant for a long time as to have had no serious trouble with it

It is customary with some mechanics to test new boilers, or old ones which have undergone repairs, by simply subjecting them to a high steam pressure. Why any intelligent person should do this simply passes our comprehension. If a boiler is known to be strong enough to sustain a certain pressure, there is no earthly reason to subject it to that pressure. If it is not absolutely certain that it will sustain any given pressure, then it is the height of folly, and it incurs a risk that no man can afford to take, to apply that pressure in such a manner that, in the event of the boiler not proving strong enough to sustain it, an explosion will inevitably occur.

During the past year we have a record of at least three explosions, all attended by loss of life and great destruction of property, from this cause. The danger in such cases is usually greatly increased by caulking the seams, rivet-heads, etc., where leaks exist while the boiler is under pressure.

Another dangerous practice is the caulking of joints in steam pipes while pressure is on. If pipes or fittings are corroded, as they very frequently are in such cases, there is danger that the chisel or caulking tool may be driven through the pipe. In such a case the sudden escape of steam is more than liable to seriously scald the workman. Quite recently, in a neighboring city, a workman was so seriously scalded in this manner that he died from his injuries. The practice is a very dangerous one, and should never be allowed. Of a similar nature to the above, and one which should be as strongly discountenanced, is the practice of screwing up man hole, hand-hole, and similar plates while boilers are under steam, to stop leakage. A great many accidents have been caused in this manner. A few years ago a battery of three horizontal tubular boilers were fired up, and on raising steam the joint of one of the man-hole plates was found to leak quite badly. Instead of letting down the steam and repacking the joint, a wrench was applied, and the attempt was made to stop the leak by screwing up on the bolt. This proving insufficient, a long piece of pipe was slipped over the handle of the wrench, and more force applied The immediate result was the fracture of the man-hole frame, the explosion of the boiler, the destruction of about $10,000 worth of property, and the loss of three lives.

Only a few months ago a similar accident occurred in a large city in one of the Middle States, but in this case the boiler was of the sectional type. A cap covering the end of one of the water tubes began to leak, and two men, armed with a 24-inch monkey-wrench, attempted to stop the leak by screwing up the nut on a ⅞-inch bolt, with 100 pounds of steam on the boiler. Result: one man killed, and two others badly scalded.

Several bad accidents have also happened through the carelessness of men who have tried to take off man-hole and similar plates while boilers were under the steam. This may appear incredible, but it is nevertheless true. Only a short time ago one of our inspectors, while making quarterly visits in a neighboring city, entered a boiler-room, and found a man trying to remove a man-hole plate with 20 pounds of steam on the boiler. He had removed the nut from the bolt, and was trying to drop the plate (in this case the boiler was provided with an internal man-hole frame) into the boiler. He had just begun the job, and the plate, owing to the great pressure on it, had fortunately so far resisted his efforts to dislodge it. It may be inferred that he had a pretty loud call to "get down of that boiler," and very fortunate for him it was, too.

A few months ago a very bad accident occurred in a rubber works, where two men attempted to remove the head from a vulcanizer before shutting off steam. These vessels consist of a cylindrical shell, and the goods to be vulcanized are put in at one end, and the opening closed by a circular plate or door, which is belted to a flange on the end of the cylinder. After the men had removed some of the bolts, the steam pressure proved to be too great for the remaining bolts to withstand, and the head was blown out with great force, killing them instantly, and damaging the building and machinery to a considerable extent.

This list of accidents might be continued almost indefinitely, but we think we have said enough to call the attention of those interested to the fact that too much care cannot be exercised in the management of steam apparatus of all kinds. Eternal vigilance is the price of safety, and it is much easier and more practical to avoid accidents by the constant exercise of the greatest care than it is to dodge the fragments when an explosion occurs.

THE LOGGING OUTLOOK.

In last week's issue of the *Gazette* we noted the apprehensions felt by the lumbermen on account of the soft weather regarding the getting in of a stock of logs sufficient for next summer's cutting. A good deal of delay had been caused and estimators were discounting the stock 10 to 25 per cent off what is required, but a change has come over the spirit of their dreams. Freezing weather has been wafted from the boreal regions, and where snow has not fallen the freeze up has rendered the sprinklers available. There is no trouble about slipping in the logs now. Wisconsin is well supplied with snow—too well supplied, in fact, and in some portions of Minnesota and Michigan there is enough to help very materially in the logging operations. Hay will be made while the sun shines (or doesn't shine) and logs will be rushed to the streams until the skidways are bare. By that time another thaw may occur. We are not quite ready yet to decide that this will not be an open winter. But one thing we are convinced of—and that is, the log crop will not be so much as 25 per cent. short of actual requirements. But there is time yet for an enforced curtailment. This polar wave may pass away and mild weather prevail in February. We shall know more about it anon.

Of operations in the Northwest the Lacrosse *Republican* says:—

At a meeting of the Menominee River Boom Company, held at Marinette last week, at which were present Senator Sawyer, Jesse Spaulding, of Chicago, Congressman Stephenson and others, the members of the company did not appear to be at all alarmed as to the outcome. They will have with this year's cut and what was left over from last year, sufficient stock to keep them running all next season. There are this season about 5,000 men at work on the Menominee and its tributaries. This year's cut was estimated at 372,000,000 feet, but it will fall below that amount. At the close of last season there was 70,000,000 feet on hand, which, together with the cut this winter will give about 400,000,000 feet for use next summer. The cut on the Peshtigo will amount to about 80,000,000.

In the Eau Claire region the anxiety of lumbermen was relieved by the heavy fall of snow which was general over the entire Northwest. The weather has proven so disastrous that it was thought several contractors would have to throw up their contracts owing to financial embarassments, but if favorable weather now sets in they will probably come out all right. The cut will be from 20 to 25 per cent. short of the estimate, which in round figures is 135,000,000 in the Chippewa district, making the total cut in that district, under the most favorable circumstances, between 450,000,000 and 500,000,000. There will be at the end of this week, between 3,000 and 3,500 men at work in the woods.

Black River Falls lumbermen predict a short cut in their region, even under the most favorable circumstances, and a consequent rise in prices next spring.—*Lumberman's Gazette.*

LUMBER DRIVERS' CALKS

FOR USE IN STREAM DRIVING.

Made from the Best Refined Tool Steel and Forged. The method used in tempering leaves every one of the same temper, rendering them stronger and more durable than any other Calks made Samples and prices free on application to the undersigned.

THE

Orono Cant Dog

Strongest and Lightest in the market. Made of Best Cast Steel by drop forging process. The Handles are made of best quality straight grained split and turned Rock Maple, 5 to 6 feet in length, bored specially to suit the pick. Prices on application.

MANUFACTURED BY

T. McAVITY & SONS,

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A FULL LINE of all Size Single and Double Belting constantly in stock.

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TORONTO

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GET YOUR STATIONERY SUPPLIES AT

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☞ Noted for BEST QUALITY GOODS at LOW PRICES! ☜

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And every house and office requisite always kept in stock, and sold retail in BOTH SMALL OR LARGE QUANTITIES.

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Market Reports.

TORONTO.

From Our Own Correspondent.

JAN. 25.—Business is now extremely quiet, and will remain so while the present severe weather continues, it will take some days in fact before the railroad companies will be able to do much shunting in the yards owing to the block of snow caused by the last storm. The want will not be severely felt by dealers, as there is but little demand at the yards. The bulk of the lumber now selling is for factory use, 1½ cut up and better being in fair demand and the supply limited. The bulk of that now selling is far from dry, so that the dry houses will be fully occupied until the new cut comes in.

Bill stuff is tending upward. All short stuff will now bring from 50 cents to $1.00 per M more than for the past twelve months. The splenpid sleighing now enjoyed by the mill men will no doubt tend to check any further advance however, as there will be great exertions made to secure a full stock of logs and their efforts bid fair to be crowned with success.

The railroad companies have again started their usual winter campaign of weighing car loads of lumber, and, as it is usual in such cases, the lower priced lumber has to take the brunt. Hemlock seldom escapes the weigh master, and in some cases it becomes a question with the consignor or consignee, as the case may be, as to the advisability of taking delivery from the company, as the amount claimed for freight foots close up to the value of the lumber. Full satisfaction between shippers and the railroad companies will never be arrived at until a lower tariff is made on such heavy and low-priced wood as hemlock. Wood dealers are granted special rates on inferior grades of wood for brick yard purposes, and why not grant the same to dealers in sawed hemlock, large quantities of which await manufacture if it can only be made and shipped at a profit. But at the present time with prices at $2.00 per M below live bill stuff, it cannot be shipped if passed over weigh scales at 9 cents per hundred weight.

There is no change in prices at the yards as yet, although it is quite clear dealers cannot afford to pay present figures and sell as formerly. The consequence is they will not carry more stock than absolutely necessary until it is clear that present prices are to be maintained.

Mill cull boards and scantling	$10 00
Shipping cull boards, promiscuous widths	12 00
" stocks	13 00
Scantling and joist, up to 16 ft	13 0.
" " " 18 ft	14 00
" " " 20 ft	15 00
" " " 22 ft	16 00
" " " 24 ft	17 00
" " " 26 ft	18 00
" " " 28 ft	19 00
" " " 30 ft	20 00
" " " 32 ft	21 00
" " " 34 ft	22 50@22 50
" " " 36 ft	24 00
" " " 38 ft	27 00
" " " 40 to 44 ft	30 00
Cutting up planks to dry	20 00@25 00
" boards "	20 00
ound dressing stocks	16 00@18 00
Picks Am. inspection	30 00
Three uppers, Am. inspection	35 00@40 00

B. M.

1½-inch flooring, dressed	25 00@30 00
1½ " " rough	14 00@15 00
1½ " " dressed	23 00@25 00
1½ " " undressed	14 00
1 " " dressed	16 00@20 00
1 " " undressed	12 00@14 00
⅞ Beaded Sheeting, dressed	18 00@20 00
Clapboarding, dressed	12 50
XXX sawn shingles, ₱ M	2 75@ 2 90
Sawn Lath	2 25
Red oak	20 00@25 00
White "	25 00@30 00
Basswood, No. 1 & 2	18 00@20 00
Cherry, No. 1 & 2	50 00@60 00
White ash 1 & 2	25 00@30 00
Black ash 1 & 2	20 00@25 00

OTTAWA.

From Our Own Correspondent.

JAN. 25.—Reports from different quarters of the upper Ottawa give a most glowing description of the work being done in the woods. The recent thaw which was followed by a sharp frost and a snowfall made roads in the bush just all that the lumbermen could reasonably require, and as a consequence the drawing is well forwarded. The ice on some of the great lakes to the north, however, is said to be anything but good, and the greatest precautions have to be observed by those whose duty it is to forward supplies. Some time ago 15 teams were drowned on Kiffewa Lake while thus engaged. However, it may be said that causalities are very rare, in fact, considering the immense force of men engaged in the lumbering industry, this is a phenomenal year in that respect. Your correspondent had a conversation with one of the largest lumber merchants on the upper Ottawa a few days ago, and his remarks on the prospects of the trade for the coming season all pointed to a prosperous year. This gentleman expects to get to market three rafts of white pine out on Black River alone, and at least one hundred thousand logs. He says that in his long experience he never saw a more favorable year for work in the woods, and from the present depth of snow in the Black river country he anticipates a good flow of water in the spring. In fact the same may be said of all the other steams in this district. The thaw which occured about New Years changed all the snow then on the ground into ice, making it a kind of reserve. The matter of water for getting logs out of the various streams on which they are deposited, is, as everyone acquainted with the business knows, of the first importance, and the cheerful prospects in this respect are most encouraging. Mr. E. B Eddy, one of the lumber kings of the Chaudiere, starts in a few days for an extended trip to Europe, and from thence to South America. It is known that Mr. Eddy undertakes the long journey more for business than pleasure, and hopes to be able to make arrangements whereby he can ship direct to the different markets in Europe and South America without any interference of the middleman. His trip will, it is expected, last over four months. Stocks at the Chaudiere yards may be said to be froze up for the winter, as there is nothing outside the local demands and that itself is but trifling.

CHICAGO.

AT THE YARDS.

The *Northwestern Lumberman* of January 22nd says:—If orders for shipment had been plenty during the past week, but little could have been done on account of the continued stormy weather, with considerable snow Tuesday and Wednesday, making it difficult to load cars. But orders were few, so that the yard men were content to remain in their offices. The monotony of the current time is, however, being somewhat relieved by the inquiry that is awakening. Within the past week the general lumber trade has shown that it still lives and intends to do business for the year to come There are few yards that have not been called upon to make estimates on bills during the past week, and some of them have been heavy. As yet buyers appear to be in no haste about placing their orders, and it is quite likely that the majority of inquiries are merely to feel the market. Yet the season for stocking up in the southern part of the prairie states is near, and, judging from past years, lumber must begin to move in considerable volume during the next two or three weeks. It is generally conceded, likewise, that stocks in retail yards are unusually low, which will necessitate early buying. Under the circumstances, there should be a fair movement of lumber by the middle of February, and undoubtedly there will be unless frequent snowstorms and very cold weather prevent.

When the demand for car strips is taken into consideration, January trade this year will exceed that of last. Buyers are still picking up all the clear white pine short flooring and Norway strips for car siding and decking they can find. In some instances cutting long strips to the required length has been resorted to. There appears to be no limit to this demand, nor will there be until all the available dry stock has been absorbed. Inquiry as to prices paid for such stuff is generally answered by a shrug, or evasive language, though it is insisted that it is bringing higher prices than a short time ago. In fact, there was no market for Norway strips last summer and early fall. Since all the car shops are busy, and some of them refusing orders unless at an advance in values, it can be safely assumed that car stuff will continue to sell and at stiff prices.

The late reduction of five cents a hundred on eastern freight rates has slightly stimulated shipments in that direction. Dealers say that the reduction is too meagre to be of much benefit unless it leads to cuts and soft rates all around. Inquiries from various eastern points are coming in, and there is some shipping of small lots. The desultory trade that sets in to the eastward and southward in the winter time is for specialties, covers a wide range of territory and demand, and amounts to a considerable aggregate. Orders are received from Maine to Florida, and the dealers here seldom fail to respond with what is wanted. The demand in Pennsylvania, the two Virginias and Maryland, can be called heavy at certain seasons of the year, and is underestimated by the majority when considering the Chicago yard trade. One of the Twenty-second street houses lately filled an order for Portland, Me., and one for Cedar Keys, Fla. In the Portland bill was white pine piece stuff and cull fencing; the Florida order called for oak lumber. The reason why there is this widespread call on Chicago stocks is because it is known everywhere that an order sent here will be promptly filled. A man wanting a car load of specials finds it more convenient to order from a point where he knows the order will be attended to at once and filled than to try a near-by place, perhaps, at which he is satisfied that but a part of his bill can be made up, and probably with unsatisfactory lumber at that. While it is conceded by many dealers that the trade of this city may hereafter be reduced in volume by reason of a decline in the white pine supply and the competition of northern districts, it is claimed, and with reason, that this will remain a great market for well assorted and fine lumber as long as the accessible forests yield up their wealth of raw material. The position with reference to lake and rail transportation insures such a continuance.

The talk about prices is still strong. There is no reason why dry piece stuff, fencing, 12-inch boards, and good atrips should sell for anything but firm prices. Values for the next 60 days will be more or less effected by the weather conditions, but dealers should not get "rattled" because of dull trade during the winter. If the winter is unfavorable to shipments, and there is consequent delay about putting in spring stocks, it will only result in a greater rush later on, which would be favorable to stiff prices. Time flies fast, and a little patience, with a firm hold on values, will bring the trade through the winter in fine form But an attempt to force business out of season, and against adverse weather conditions, can only result in a weakening of values.

There is something of a breeze among the sash, door, and blind manufacturers about a shortness in the supply of thick lumber that enters their operations. It is said that the supply at Oskosh is meagre, and that buyers in Wisconsin are active in picking up lots at mill points throughout the state. This feature of demand may have some significance to the holders of thick lumber in the yards of this city.

Receipts of lumber and shingles, for the week ending Jan. 21st as reported from the Lumberman's Exchange:—

RECEIPTS.	*Lumber.*	*Shingles.*
1886	3,062,000	692,000
1885	1,653,000	459,000

FROM JANUARY JAN. 1, TO JAN. 21, INCLUSIVE.

RECEIPTS.	*Lumber.*	*Shingles.*
1886	9,548,000	8,292,000
1885	5,993,000	2,240,000
Increase	3,555,000	1,052,000

STOCK ON HAND JAN. 1.

	1886.	1885.
Lumber & timber	626,692,473	623,910,097
Shingles	418,313,350	332,533,611
Lath	95,653,678	88,160,599
Pickets	4,446,752	2,528 738
Cedar posts	1,962,947	397,825

EASTERN FREIGHT RATES.

FROM CHICAGO AND COMMON POINTS ON CAR LOAD LO OF HARD AND SOFT LUMBER.

IN EFFECT NOV. 1,

To New York	30c.
Boston	35c.
Philadelphia	28c.
Baltimore	28c.
Washington	28c.
Albany	28c.
Troy	28c
Buffalo and Pittsburgh	15c.
Shenectady	28c.
Wheeling	15c.
Suspension Bridge	15c.
Salamanca	15c.
Black Rock	15c.
Dunkirk	15c.
Erie	15c.
Toronto	15c

OSWEGO, N.Y.

From Our Own Correspondent

No change in quotations. The demand has improved some for past weeks; country yards are buying to keep up an assortment. We do not look for a brisk trade during the winter.

Three uppers	$42 00@46 00
Picking	32 00@35 00
Cutting up	24 00@26 00
Fine Common	22 00@25 00
Common	14 00@18 00
Culls	11 00@14 00
Mill run lots	16 00@22 00
Sidings, selected, 1 in	30 00@35 00
" 1¼ in	32 00@36 00
Mill run, 1x10, 13 to 16 ft	16 00@21 00
Selected	21 00@24 00
Shippers	14 00@16 00
Mill run, 1¼x10	17 00@20 00
Selected	21 00@30 00
Shippers	14 00@16 00
Mill run, 1 & 1¼ in, strips	16 00@18 00
Selected	22 00@20 00
Culls	11 00@13 00
1x6 selected for clapboards	25 00@35 00
Shingles, XXX, 18 in. pine	3 10@ 3 50
XXX Cedar	2 75@ 3 00
Lath 1½, No 1	1 80@ 1 90
No 2	1 00@ 1 25

BUFFALO.

We quote cargo lots:—

Uppers	$45 00@48 00
Common	17 00@18 50
Culls	12 50@13 00

TONAWANDA.

CARGO LOTS—MICHIGAN INSPECTION.

Three uppers	$42 00@44 00
Common	18 00@24 00
Culls	10 00@13 00

ALBANY.

Quotations at the yards are as follows:—

Pine, clear, ₱ M	$53 00@55 00
Pine, fourths	48 00@50 00
Pine, selects	45 00@47 00
Pine, good box	22 00@33 00
Pine, common box	11 00@13 00
Pine, 10-in. plank, each	00 42@00 45
Pine, 10-in. plank, culls, each	00 23@00 [illegible]
Pine boards, 10-in	00 28@00 32
Pine, 10-in. boards, culls	00 16@00 20
Pine, 10-in. boards, 16 ft., ₱ M	28 00@32 00
Pine, 12-in. boards, 16 ft	28 00@32 00
Pine, 12-in. boards, 13 ft	28 00@00 00
Pine, 1¼ in. siding, select	40 00@43 00
Pine, 1¼-in. siding, common	15 00@16 00
Pine, 1-in. siding, select	40 00@42 00
Pine, inch siding, common	13 00@15 00
Spruce, boards, each	00 00@00 16
Spruce, plank, 1¼-in., each	00 00@00 20
Spruce, plank, 2-in., each	00 00@00 30
Spruce, wall strips, each	00 12@00 12
Hemlock, boards, each	00 00@00 14
Hemlock, joist, 4x6, each	00 00@00 32
Hemlock, joist, 2½x4, each	00 00@00 14
Hemlock, wall strips, 2x4, each	00 00@00 11
Black walnut, gook, ₱ M	100 @120 00
Black waluut, ¾ inch	80 00@90 00
Black walnut, ¾ inch	00 00@85 00
Scaymore, 1-inch	28 00@30 00
Scaymore, ¾-inch	21 00@23 00
White wood, 1-inch and thicker	38 00@40 00
White wood, ¾-inch	28 00@30 00
Ash, good, ₱ M	40 00@43 00
Ash, second quality, ₱ M	25 00@30 00
Cherry, good, ₱ M	80 00@85 00
Cherry, common, ₱ M	25 00@30 00
Oak, good, ₱ M	40 00@43 00
Oak, second quality, ₱ M	20 00@25 00
Basswood, ₱ M	25 00@30 00
Hickory, ₱ M	40 00@40 00
Maple, Canada, ₱ M	28 00@30 00
Maple, American, per M	26 00@28 00
Chestnut, ₱ M	38 00@40 00
Shingles, shaved, pine, ₱ M	0 00@ 6 00
" 2nd quality	0 00@ 5 00
" extra, sawed, pine	4 30@ 4 00
" clear, "	0 00@ 3 00
" cedar, mixed	0 00@ 3 50
" cedar, XXX	0 00@ 0 00
" hemlock	2 25@ 2 30
Lath, hemlock, ₱ M	0 00@ 2 20
Lath, spruce, "	0 00@ 2 12

LONDON.

The *Timber* of Jan 16th says:—Flooring holds the chief place in the import list for the past week, although the arrivals altogether are within narrow compass and the reverse of important. In the Quebec sheds will be piled the two Fredrikstadt cargoes per Biscaya and Franz, the former of which contains some saleable lines of good quality yellow flooring of Pettersen's shipment. The Millwall docks receive several consignments of yellow and white flooring by the Gothenburg and Christiania liners to the extent of about 50 000 pieces The St. Hilda just discharged in the Russian yard, brings a miscellaneous cargo of Hhlmstadt deals and battens of the HB brand while, to complete the list, a Drontheim cargo (the Victoria) of 260 standards destined for the Centre yard reports for Messrs Bryants' Limited. The importation, although not heavy, is about an average for this period of the year, but we hear that several cargoes of flooring,

from Fredrikstadt and elsewhere, may be shortly expected to supplement our present stock in the quarters where it is weakest.

The almost impassable state of the roads, consequent upon the recent heavy fall of snow and the succeeding frosts, has seriously affected the returns made by the Surrey Commercial Dock Co. of the deliveries for last week, as the following comparative statement clearly shows:

	1886.	1885.	1884.
Deals, etc. (stds).....	1,409	2,549	3,383
Flooring "	246	498	532
Timber (loads).....	605	719	1,500

Messrs. Churchill & Sim's three days' auction has been the event of the week. Each day has gathered a large assemblage of buyers, all of whom were evidently deeply interested in watching the result of this "trial" auction. The room, although seldom crowded, was always full, and seats near the front were not easy to get at any time during the course of the sale. The catalogue itself, comprising several lots of almost every description of deals and flooring, was peculiarly suited to test the range of values likely to hold during the spring, at least, of 1886.

So far as an improvement in prices is concerned, those who hoped for better things, it seems, have had to bear another disappointment. To look at this week's catalogue, and then back to those dealt with at the end of November, enables us to arrive at no other conclusion than that the market has been virtually unaffected by the enforced repose which everyone thought would be of such benefit to it. In the prices now under consideration we discover the least possible variation from the figures current in November; indeed, we may forget the break there has been in the auctions, and continue to trace the tendencies then observable as though we were taking up the thread of the discourse at only a week's, instead of a month's, interval. Battens and common deals are as weak as they ever were, while flooring in third quality shows a tendency to improvement that is not shared by seconds. There is, however, this gratifying feature about the figures made for best quality goods of all sorts, that a fairly good standard was uniformly made, as there were plenty of buyers for all that was offered. Flooring, as a general rule, commanded the best results.

The most important lines in the auction were the various Petersburg stocks, of which the bulk were battens. Archangel found fair favor Next in importance to the Petersburgs, come the shipments from the Finnish ports, which again comprise a long string of batten sizes. These may be dismissed with the remark that 7 in. and 8 in. fluctuated between £6, £6 5s., and £6 10s., with other sizes in proportion.

Variety is essentially the crowning feature of the Swedish stocks, and in the prices realized we have grounds partly for satisfaction and partly for regret, although unfortunately the latter is likely to be the predominating feeling. Fifth deals were apparently in sufficient request to save the price falling below £6 15s., at which a variety of marks found ready buyers. This, in itself, may not be much to say, but it is so far satisfactory in that, as will be remembered, not a few lots of this description were sold as low as £6 5s. in the December autions.

Spruce, pine and red pine were offered in larger quantities than usual, and with satisfactory results. Third Saguenay spruce, 3x9 in. 12 feets, at £6 15s., 11 feets at £6 10s and ends at £6 5s, show a much better result than do most of the Baltic white deals with which, to a great extent, it comes into competition. Third regular pine planks, Saguenay, at £8 15s., reads much like the autumn price; only we should have thought the present partial scarcity would have tempted buyers to pay a little more now that the supplies are closed against them for some time to come. The red pine deals submitted were chiefly in the lower qualities, and for them £6 10s was a fair value. We have seen many better parcels also than the Quebec firsts, of which the plank made £11 15s. The pitch pine deals, ex Telefoi, fetched some wretched prices, although the circumstance that they were a stowage lot and of very undesirable specification is accountable for a good deal.

A good result attended the sale of Oddessa oak boards, and also of the Fredrikstadt slating battens, in both cases a fair advance being established on last prices. Quebec birch, 16 inch to 18 inch, made 67s 6d, which seems to show that notwithstanding the recent heavy import, buyers are not deterred from paying a good price for fair quality wood.

Flooring, as we have remarked, has the reputation of being the best sold. The freshly imported cargo per Pickwick excited a keen competition, which is attributed as well to its fine condition as to the suitability of the dimensions to the requirements of the market at the present time. The few 3rds that were offered realized prices which confirm us in believing that this quality is to enjoy a slight temporary scarcity, accompanied by a good demand. One of the best pieces of the day was that made for the ⅞x7 inch 3rd yellow ex Pickwick, and although 7s for this lot may savor of a lucky chance, it shows at least an anxiety to possess the lot on the part of many buyers present. Third ¾x7 inch yellow matching—that old offender—was stimulated in one instance to an advance of 6d per square, after which ⅝ inch matching was quick to follow suit. Narrow matching, in some cases, improved slightly, but we do not lay much stress on this fact. Inch white went exceedingly well, 1sts making 8s 9d and 2nds 7s 9d, the latter figure being also secured by a lot of DDD. Almost all 1st yellow flooring and matching commanded good figures, and this not only in 7 inch but as well in 6 inch and 5½ inch, which is more unusual. For the 1st ⅞x7 inch and ¾x7 inch, t g.b, ex Pickwick, 8s was made, while the 1¼ inch scored 13s 3d, and the 1 inch 10s 3d. In inch 2nds, although 7 inch and 6½ (of which there were some good lines in the Pickwick) fell flat at 8s and 3d, there is ample cause for satisfaction that 1x6 inch AHA should secure 8s 3d. A precisely similar remark obtains in the case of the ⅞ inch 2nd yellow, 6s 9d for 6 inch and 6s 6d for 5½ inch being much more inspiriting than 7s and 7s 3d for 7 inch. In white ⅞ inch, although there are only a few lots to judge by, prices are also firm when 1st Christiania 6½ inch can make 7s and 2nd 6 inch as much as 6s 3d and 5s 6d. The last named is an excellent price, and falls also the cargo ex Pickwick. From the various odd lots of flooring submitted we select the 1x7 inch EA & Co. 3rd Dram. from 6s 6d as evidence of the improvement in 3rd quality, and the JD & Co ¾x6 inch yellow flooring at 7s, with the ⅝x7 inch white matching at 5s 9d, as instances of really good prices. The Kjorbreek 1¼x6½ inch yellow also shows a considerable advance on the last price made.

WINNIPEG.

The *Commercial* says:—There is no improvement to note in this branch. Trade still hold's in about the same inactive state as during the previous week, and no immediate improvement is considered likely for at least a few weeks to come, or anything like activity until a near approach to the time when building operations can again be resumed.

WOOD-WORKING PATENTS.

The following list of patents relating to the wood-working interests, granted by the United States Patent Office, January 12th, 1886, is specially reported by Franklyn H. Hough, solicitor of American and Foreign patents, 925 F. Street, N. W., Washingston, D. C.

334,330—Log turner—H. T. Basim, Decaturville, Ohio.

334,324—Plane—J. Woods, Columbia, Tenn.

334,175—Saw guide, band—W. Kratzer, Allentown, Pa.

334,285—Saw mill feed mechanism—T. J. Reamy, Nashville, Tenn.

334,284—Saw mill head block—T. J. Reamy, Nashville, Tenn.

334,241—Saw tooth, insertible—A. Krieter, Columbus, Ohio.

334,303—Saw tooth, insertible—J. S. Swank & W. Dages, Big Tres, Cal.

334,297—Sawing machine—D. W. Smith, Long Lake, Mich.

334,141—Sawing machine, circular—J. F. Welsh, Brooklyn, N. Y.

PATENTS ISSUED JAN. 19.

334,538—Lathe—W. J. Muncaster, Cumberland, Maryland.

334,567—Saw—G. N. Clemson, Middletown, N. Y.

334,664—Saw mill feed carriage—G. M. Hinkley, Milwaukee, Wis.

334,730—Saws, machine for jointing and dressing circular—C. Scoch, Truckee, Cal.

334,663—Sawing machine—G. M. Hinkley, Milwaukee, Wis.

334,674—Sawing machine—S. P. Dresser, Pleasant Mount, Mo.

PATENTL ISSUED JAN. 26.

334,893—Chuck, lathe—E. Pement, Esmond, Dakota.

334 997—Edger, gang—S. S. Vall & J. Solliday, St. Louis, Mo.

335,090—Hoop pole sawing machine—E. Powell, Williamsport, Pa.

335 000—Hoop splitting machine—H. Weitzel, Ithaca, Wis.

334 940—Lumber drier—G. H. Derby, Somerville, Mass.

334,943—Plane—A. Doll, Lena, Ill.

334,818—Saw guide, band—S. Stephens & D. B. Handson, Indianapolis, Ind.

334 785—Saw mill, band—E Benjamin, South Evanston, Ill.

334,515—Saw mill dog—J. B. Davis, Munroeville, Ind.

THE Saginaw *Courier* scribe met a prominent lumberman of Ohio in that city last week and asked of the outlook for the lumber business, and was told that a rather better trade than was had last year was expected. The gentleman said in some parts the business had not been very satisfactory, especially in Ohio where the small yards had made but little during the past year. He said they were not stocking up much yet, that in fact the heavy dealers in Cleveland and Toledo were not making an effort to sell as the believed prices must advance.

WANT A LUMBER EXCHANGE.

Agitation for the establishment of a lumber exchange in New York city is going forward. The *Times* notes the movement as follows:—

"One hundred and fifty firms carry on the lumber business in New York, and one of them estimates the amount of capital invested at more than $10,000,000. The persons who compose these firms are in the aggregate worth much more than three times this sum, and if the real lumber market of New York is not so large as Chicago's there is more wealth back of it. For years the New York lumber dealers have tried in vain to establish an exchange. The reason an exchange is desired by them is that by surveying and classifying a system of proper prices may be put upon lumber. Such a system of prices has been adopted in all the principal lumber markets of America except New York, where inspection is not standard, but private, each firm employing its own agent. The lumbermen who want an exchange contend that with its influence for good a set of regulations alike just to the men in the south, west, and northwest as well as to the New York dealer to whom he sells, will be taken up and stood by. They want, as one of them said yesterday, 'regulations which will assure an inspection return properly verified, that it will carry with it evidence of the value of material needed at home and the certificates of both value and integrity that is needed abroad. As it is, however, all lumber depends absolutely on the inspector. If mistakes are made, there are some of the New York dealers who wish for a proper exchange to deal justice all around.'

"The eastern editors of the *Northwestern Lumberman* published at Chicago, say that not a week passes that complaints are not received from shippers of hardwood to the New York market. 'There is no head or tail to the lumber inspection here,' they say, 'and it is this lack of open and authorized inspection that is bringing the New York market into bad repute among mill men all over the country.' The element of the trade which opposes the exchange does so, it is asserted, on the ground that it is not necessary to the needs of the trade, and that, so far as the system of inspection is concerned, the reputation of the firm to which lumber is shipped should be sufficient authority for the honesty of its inspection. The committee which had the matter in charge yesterday adopted a constitution and by-laws. The Legislature will be asked to authorize lawful inspectors."

MANAGEMENT OF BOILER FIRES.

The Hartford Steam Boiler Inspection & Insurance company's bulletin has a timely and instructive artice, which exhibits in a striking manner the serious results which may follow the use of very good feed water when a strong course of practice is followed in the management. The facts are as follows:—

Five new boilers all burned and bagged inside of three weeks after they were first started up. The water used was of very good quality making but little scale or sediment, and the the accidents were due entirely to the manner in which the fires were managed. The burns all occurred within a few inches of the front heads of the boilers, and all occurred at the same hour of the day, although on different days.

It was customary to bank the fires at noon, or rather to fill the furnace full of soft coal, and have the fire door open instead of closing the damper partially, to check the formation of steam. This allowed a current of cold air to enter above the fuel and impinge on the fire sheet. This, of course, would check the circulation, and what little sediment the water held in suspension, and which would circulate with the water as long as steam being rapidly generated, would naturally be deposited on the bottom of the boiler near the front end.

Upon starting the works at one o'clock, it was the practice to run a slice bar through the thick layer of coal put on an hour or so before, and which had in the meantime become thoroughly coked, and break it up thoroughly, then close the fire door. This intense heat thus suddenly applied to the boiler burned the sediment on to the fire sheets before a brisk circulation of the water could be established, which would have gradually picked it up and prevented any damage. But after it was once baked on the shell it could not be removed by the circulating water and the over-heating, bagging, and burning of the iron followed naturally in a short time.

The bag, or pocket, shown in the illustration is about four inches deep, 15 inches broad at the base, and at the lowest point the iron is thoroughly burned out. The thickness of the layer of sediment on the interior is only about 1-16 of an inch. Upon careful examination by the company's inspector, a change in practice was made, and no further trouble has occurred for several years.

Another similar case occurred at about the same time in another locality, where, in a battery of 14 boilers, three of them "came down" at once. This latter case was due to the peculia method of "baking" the fires, and was stopped, as was the first one, by a change in practice.

Too much care can not be exercised in cases similar to the above in the method of firing the boilers. Fires should be started and steam raised gradually, that circulation may be established in a proper manner. This will not only prevent such accidents as have been described, but will also prevent undue strains on different portions of the shells, due to the differences of temperature. Many boilers have undoubtedly been ruined by injudicious firing, and the fault attributed to some defect in the boiler, when in reality none existed.

MOUNTAIN MAHOGANY

In Nevada there is a peculiar wood known as mountain mahogany. The tree does not grow large. A tree with a trunk a foot in diameter is much above the average. When dry the wood is about as hard as boxwood, and being of a very fine grain might no doubt be used for the same purpose. It is of a rich, red color, and very heavy. When well seasoned it would be a fine material for the wood-carver. In the early days it was used in making boxes for for shafting, and in a few instances for shoes and dies in quartz battery. Used a fuel it creates intense heat. It burns with a blaze as long as ordinary wood would last, and then is found (almost unchanged in form) convert to a charcoal that lasts about twice as long as ordinary wood. For fuel it stands much higher than any other kind of wood; indeed, a cord of it always brings the same price as a ton of coal. The only objection to it as a fuel is that it creates such an intense heat as to burn out stoves more rapidly than coal, however bad.

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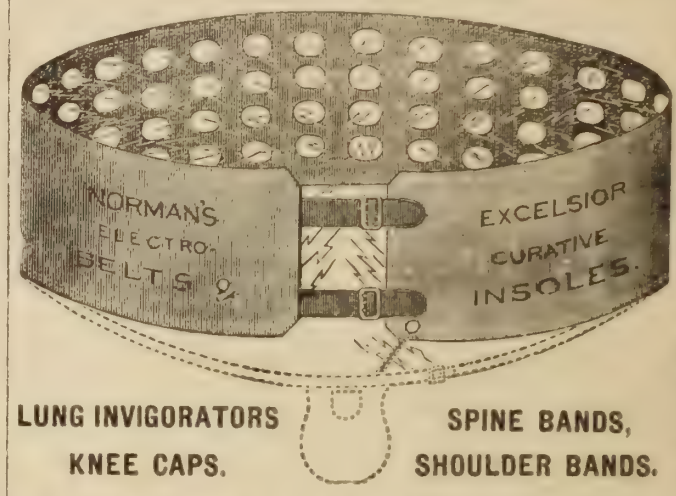

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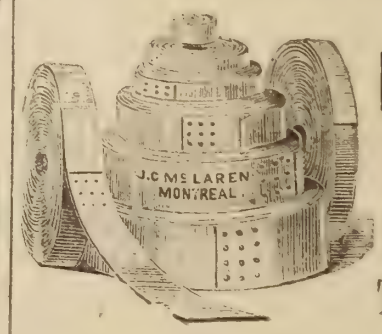

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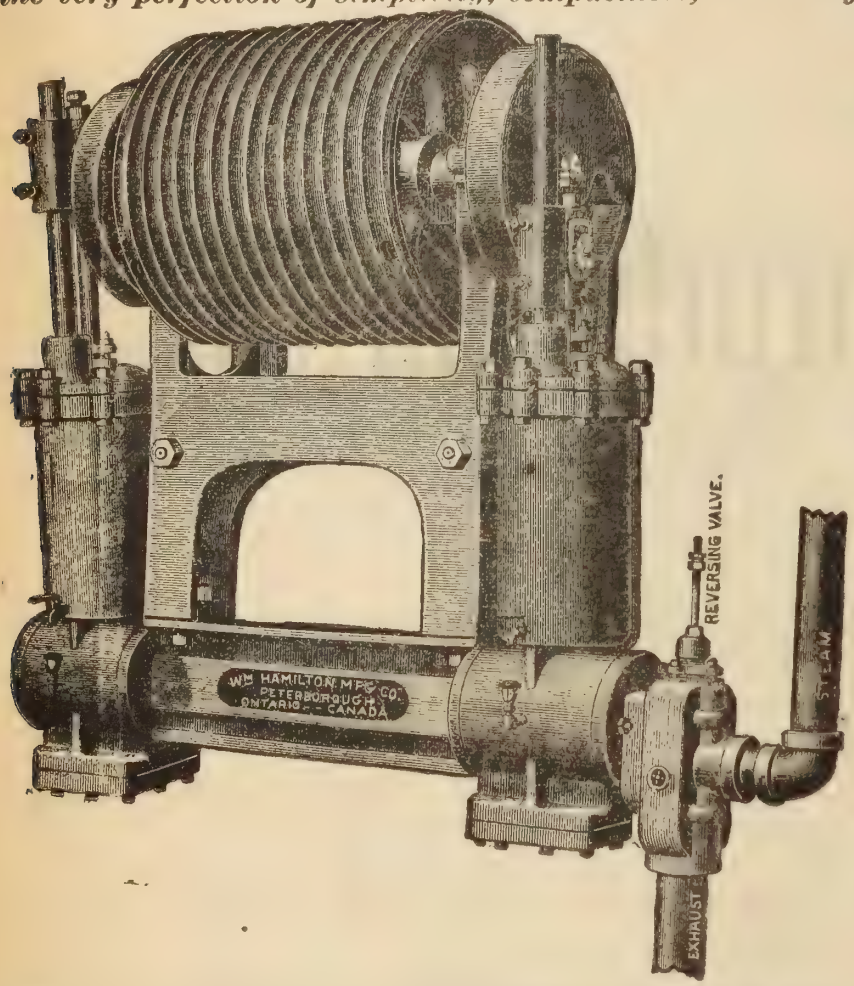

The above engraving illustrates the Twin Engine, 10x16, for Rope Feed, for Saw Mill Carriages. The spool is 27 in. diameter, 30 in. face, is grooved 2 in. pitch for 1½ in. rope. The shaft is steel, 4½ in. diameter, with disk cranks. No connecting rods, eccentrics or valve rods to get loose and out of order. The ports are in the trunions, and worked by an oscilliation of the cylinders, and are held in their place in the downward motion by a steam cushion below. The sawyer's valve is a perfect balance, and by moving this valve the engine can be reversed, stopped or started almost instantaneously if necessary, as the sawyer has perfect control of it by his lever either to go fast or slow. Should the sawyer let go of his lever either by mistake or any other cause, it is balanced so that the valve will come to the centre and cut the steam off both cylinders and stop the feed. When standing, the lever is locked or fastended, so that is is impossible for it to start off itself. The engine stands upright below the carriage, and bolted to two upright beams, placed on the mill for the purpose. When a rack is preferred in place of the rope, we put on a steel wheel 30 in. in diameter, and the engine placed high enough to work into the rack on carriage bar, or if the beams come in the way, an idler wheel can be used between engine and rack segs; or, the engine can be placed at a distance and have a shaft from it to the carriage; or it can be placed in the engine room, where it is under the control of the engineer for oiling, thence by shaft and pinion to carriage rack bars. These engines are well adapted for cutting long logs, or where the logs are mixed, the advantage of this feed will be apparent to mill men. When the carriages are used in two or more sections, the coupling and uncoup ling of each section is quick and simple.

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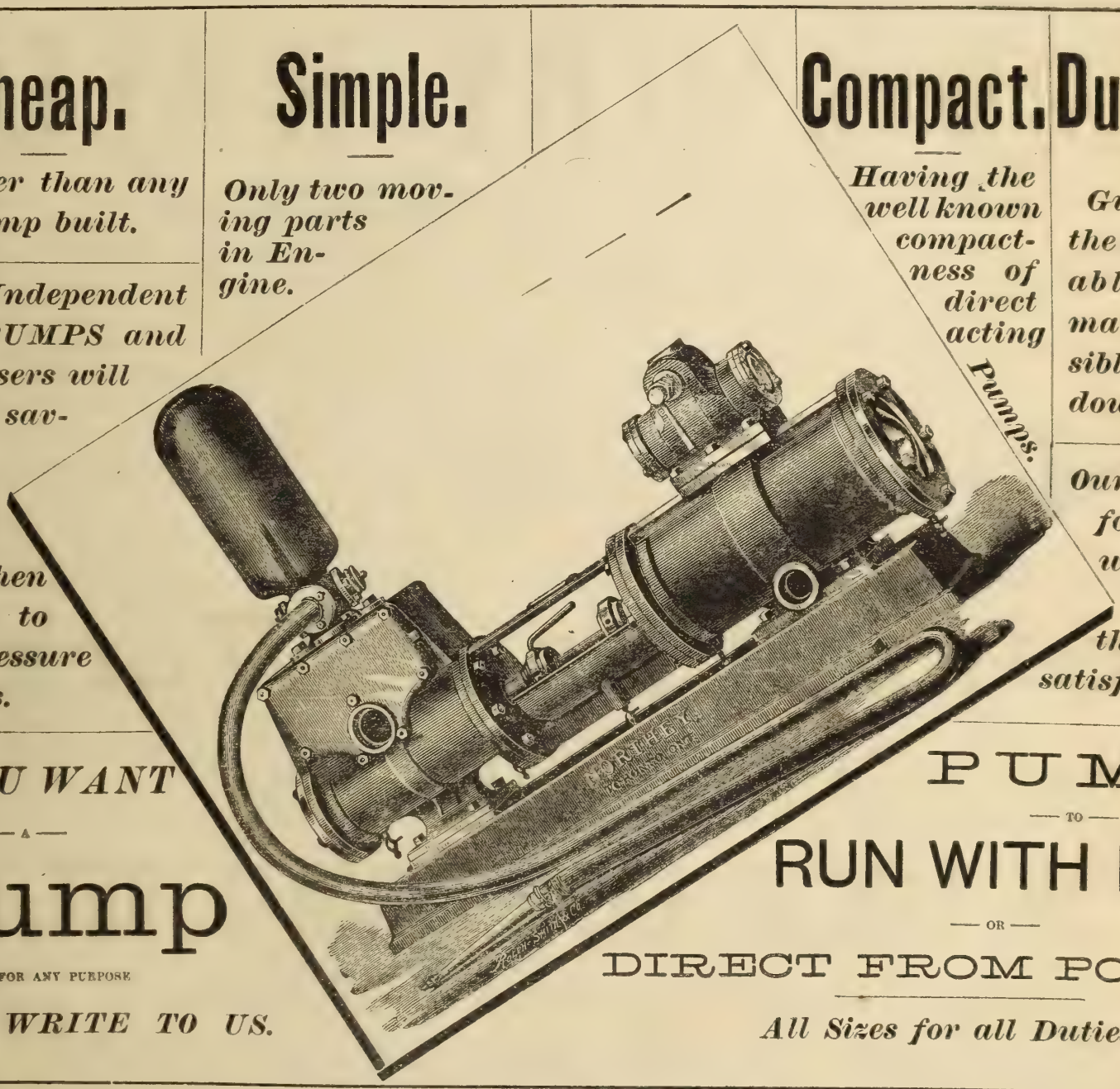

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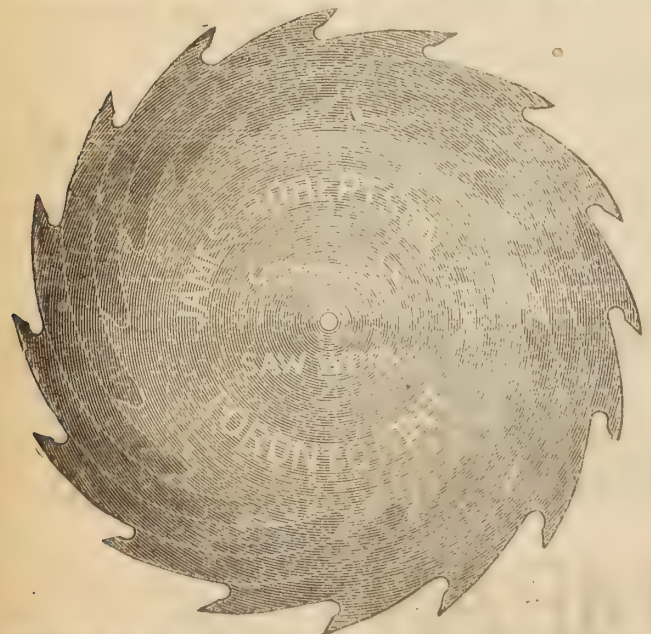

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SUBSCRIPTION $2.00 PER ANNUM;

VOL. 6. PETERBOROUGH, ONT., FEBRUARY 15, 1886. NO. 4.

MR. JOLY ON THE TIMBER TRADE.

SIR,—President Cleveland's recommendation, in his message for the abolition of the import duty on Canadian lumber, appears to meet with a good deal of favor from the Canadian lumbermen. It would benefit them to a certain extent, but not likely to the whole amount of the duty of two dollars per thousand feet. On the other side, if it leads to our allowing the American lumbermen to cut down our forests and manufacture the product thereof in their own country, the result will be fatal to the Canadian lumberman as well as to the country at large.

The Dominion would be much more benefited by the imposition by our own Parliament of a heavy duty on the export of logs to the United States, than by the abolition of the import duty on our sawn lumber into the States.

A heavy export duty on logs would prevent the cutting down of our forests by the American lumbermen, and it would secure work for our people and keep them here. It appears little short of madness, when we have got the raw material here and thousands of willing men to work it, that we should send away to our neighbors both the raw material and the men who can work it here. It is a suicidal policy, and it would be difficult to find a parallel for it in any other country.

The fact is that our timber trade does not rest on a sound basis. If we could arrive at a correct balance of that trade for the last twenty-five years, it would be sad to find out how little we have received for the value of our timber above our expenditure in manufacturing it. In more than one case I fear that we have actually paid the purchasers on the other side to accept our timber from us.

The responsibility of this stateof things must rest, above all, with our Provincial governments. They are the administrators of our timber lands. Instead of treasuring them and opening them only gradually to the lumbermen, as the legitimate requirements of the timber trade demand, they force them, wholesale, on the market and actually compel an extravagant production, which can only have one result: glutting the market and ruining the lumberman.

How many men are they not among us, who understand absolutely nothing of the lumber trade, who had never given even one thought to it, and who, at a moment's notice, have been actually manufactured into lumbermen by the action of Provincial Government?

I stated that our timber trade did not rest on a sound basis; let me quote no less an authority than John Stewart Mill on the subject. In his first volume on the Principles of Political Economy, chap. 15, "of profits," he says:—"The timber trade of Canada is one example of an employment of capital, partaking so much of the nature of a lottery as to make it an accredited opinion that, taking the adventurers in the aggregate, there is more money lost by the trade than gained by it; in other words, that the average rate of profit is less than nothing."

This was written long ago, but it applies now, more than ever, to our timber trade.

It is not often that Governments can interfere, beneficially, with trade; but they can in the present case and it is full time that they should do so.

H. G. JOLY.

Leclerville, P. Q., January, 1886.

LUMBER DUTIES.

THE Port Arthur Board of trade is not satisfied with the present duty on lumber imported from the United States, and wish it re-arranged so that the duty will not be so high per M. on the lower grades. The Board of Trade, at a recent meeting, embodied their views in the following resolution:—

"That whereas it appears that provision is made in paragraph 6 of chap. 15 of 42 Vic. for a reduction of the duty on lumber imported from the United States, in case it should appear to the satisfaction of the Governor-in-Council that lumber may be imported into the United States from Canada at a less rate of duty than that imposed on lumber coming from the States to Canada under the provisions of the act referred to.

"And whereas the United States Government imposes a specific duty of $2.00 per 1,000 feet, board measure, upon pine lumber not planed or finished, without regard to its quality or value, but that lumber imported from the United States to Canada is taxed 20 per cent. upon its value, thus admitting common lumber, which competes with our domestic products, at a low rate, but putting a prohibitory tariff upon the better quality of pine which is not produced here.

"And whereas it appears that most of the imports of lumber into Canada are for consumption in Manitoba and the Northwest, and that is lagely of the expensive qualities required for the manufacture of many staple articles of family and home benefits for which the domestic lumber is not suitable.

"And whereas the effect of an ad valorem duty on lumber is largely to increase the cost of the better goods not produced here, and prohibiting the import of such lumber except in the finished state of sash, doors, etc., so that manufacturers in this part of Canada, who are dependent on such lumber, are unable to prosecute this industry owing to the high cost of the raw material under our tariff, which is in its effect largely in excess of that imposed by the United States on lumber of corresponding value going from Canada.

"It is therefore resolved, that the attention of the Dominion Government be called to the matter, as it seriously affects an important industry, which would, if enabled to obtain its raw material at reasonable cost, prove of great general benefit, and that the equalization of the tariff on lumber would have the effect desired, that it would injure no Canadian industry but would cause a considerable reduction in the cost to the consumer of staple articles required in the Northwest, which are now largely imported from the United States, and that the reduction of revenue to the Government would be slight in comparison with the general advantage to the country."

CHICAGO LUMBER MOVEMENT.

Glancing over the last monthly statistical sheet, issued by the Chicago Lumberman's Exchange, several prominent facts are presented. One is that there was, on January 1st, but 2,782,376 feet of lumber in the yards more than there was at a corresponding date last year, but there is shown an increase of 95,000,000 shingles.

It is interesting to note the course of trade throughout the year, as indicated by the stocks on hand at the beginning of each month. It is peculiarly interesting to the *Lumberman's* market reviewer, and should be to close readers of the paper, on account of the remarkable coincidence between the exchange figures and the movement of lumber as set forth in our reports from week to week. The monthly reports of stock on hand, as returned by the dealers to the secretary of the exchange, are probably the most relieble figures concerning lumber published in the Northwest.

It has been repeatedly asserted that the trade of this city lost a good start in the year's business of 1885 by the excessively cold weather and heavy snow storms of January and February. The figures corroborate this assertion. In January, 1884, 67,007,509 feet of lumber was sold out of the yards, and 125,772,587 feet in February, about 193,000,000 in both months. In January last year the sales and shipments in both months amounted to but little over 96,000,000, less than one-half of that during the corresponding months in 1885. So it will be seen, that as compared to the year previous, the trade on March the first, 1885, was fully 100,000,000 feet of lumber behind. But in March last year there was a heavy outward movement, amounting to 142,394,333 feet, as compared to 127,922,991 in March, 1884. In April of last year trade fell back as compared to April of 1884, the difference being represented by 136,126,975 feet in 1885 to 166,329,243 in 1884.

So it will be seen that last year, up to May 1, there had been three poor months for trade, and one good one—March. On May 1st the yards contained nearly 50,000,000 feet more lumber than they did at a corresponding date in 1884.

There was another start made in May, sales and shipments during that month amounting to 179,173,517 feet as compared to 178,170,870 in May, 1884. Hence it will be seen that the statement then made that trade was in excess of that of the corresponding time the year before was correct. The trade of June was also a little in excess of a like month a year before, as it likewise was in July. But in August distribution fell behind that of the corresponding month of 1884. In September trade forged ahead again, and beat the previous year's record by nearly 90,000,000 feet. Trade in October of last year was also a little in excess of that of the previous year. But in November there was a serious drop-off, there having been sold and shipped in November, 1884, 208,700,000 feet, while last year there was but 170,102,695 disposed of. This difference in favor of 1884 was wholly owing to the fact that there was a southwestern freight rate of only five cents a hundred, while in November, 1885, there was none. Yet there was twice as much lumber sold in December of last year as there was in a corresponding month of 1884.

It is well to observe how the totals for the two years look when sized up together. In 1884, sales and shipments amounted to 1,789,031,939 feet, and in 1885, 1,711,443,112—only about 77,500,000 less in 1885 than in 1884. This falling off last year was more than accounted for by the loss of trade on account of the extraordinary cold weather in January and February of last year.

We have thus thrashed over the old straw, as it were, to show how accurately the *Lumberman* as it went along, has indicated the state of trade, and how utterly without reason is the complaint that the distribution of the past year was greatly less than it was in 1884. As a matter of fact distribution in March, May, June, July, September and October and December was heavier than in the corresponding months of 1884, though in January, February, April, August and November it was lighter. The difference in the volume of trade as compared with the corresponding months of the two years was more owing to weather and freight rate causes than anything else, conditions hat might be reversed in other years. There s nothing in the exhibit of the year's business that certainly points to a decay of the Chicago lumber trade. Prosperous times, or favorable circumstances affecting freight rates and competition may swell the white pine business of this city in some year to come beyond what has as yet been witnessed.—*Northwestern Lumberman.*

ICICLES are such a scarcity at Beaumont, Texas, that during the last cold snap a large one, that hung on the Texas Tram & Lumber Company's water tank, was so admired that the company thought of having it photographed.

THE TRADE.

The lumber trade in Ontario is rather quieter at present, and the prices steadier than was predicted by dealers who profess to forsee an excited rush for lumber and a general advance in prices early this year. True, there has been a decided demand for good dry pine, and that demand continues, with the supply of it almost everywhere short. But what else can be expected when everyone runs after first-class seasoned pine, and the supply cannot be maintained? It is vain to offer to our builders spruce for flooring, hemlock and tamarac for bill stuff. Our extravagant contractors, five times out of six, will have nothing but pine, and until they plant more forests, or bring nearer those already existing, they will probably continue to find dry pine scarce and high.

There is no advance in price of lower grade pine, and though the tendency is upward there is no quotable change in figures for clear and pickings from those we last gave. But joists, scantling, sidings, &c., are held higher in this market. Certain lines, even in the new cut, are pretty sure to maintain their prices. In Albany, good pine is by no means plentiful; recent purchases have been made at Collins' Inlet, Georgian Bay, we understand, by parties from that city, and negotiations are in progress for other large transactions on the bay. The prospect of free admission of Canadian lumber to the United States market appears no brighter than before, but for all that the American demand for our choice pine is quite likely to be maintained.

As to other varieties than pine, we find that hemlock is coming into use here and there in Ontario, where builders perceive that we cannot use pine forever. Tamarac is occasionally used for sills and joisting. It is about equal in price to spruce, which, though not yet used in this district, except for flooring, is largely exported from the lower St. Lawrence to the Eastern States as well as across the ocean. We, in Canada, as well as our American neighbors, have yet to learn the meaning of economy in the use of timber and lumber, as well as in other important respects.—*Monetary Times.*

NEW BRUNSWICK STUMPAGE.

WHILE some Provincial Governments are being charged with wastefulness in disposing of the timber of the country, the Government of New Brunswick is coming in for severe criticism of an opposite character. If the idea of that administration is to preserve its timber until after its sister Provinces are depleted of theirs, the retention of the stumpage charge of $1.25 per M feet would appear to be a pretty effectual way of doing so; but if the high charge is retained only for revenue purposes it looks very much like a suicidal policy.

The lumbermen of New Brunswick cannot be expected to compete with the men in the same business in Nova Scotia and Quebec, when in New Brunswick the stumpage is $1.25, against only 60 and 40 cents in the other Provinces. An excessive charge in a time of depression in business, and the placing of its lumbermen at a disadvantage as compared with the lumbermen in other Provinces, is a sure way to discourage trade and to decrease the revenue, if it does conserve the forests. In fact, the maintaining of such a charge for stumpage can scarcely fail to result in driving the lumbering business out of the Province.

The conservation of the forests is worthy of the Governments in Canada, but it can be attained by other means than the complete stifling of the lumbering business. This question evidently needs the careful consideration of the New Brunswick authorities.

LANCE wood, says an exchange, gets a lift from the toboggan sports. The best comes from Cuba in 14-foot spars from four to eighteen inches thick, and used to be worth $1 to $3 a spar, but now, within a month, $2 to $5 is paid, and not so good a selection on hand as is desirable This wood has been confined for service to dog-cart shafts and fishing rods. It must be freshly imported as needed, else by storage it "dots" or becomes blue. It had favor in the archery days of 1881, but no such advance in prices as toboggan secured.

AN INGENIOUS PAVING BLOCK.

A. T. Elford, of San Francisco, Cal., is the patentee of an improved paving block, which is designed to insure a permanent pavement, adapted to all kinds of weather, and to furnish superior advantages for laying telegraph wires or cables. The following directions give a general idea of the process of paving.

The blocks are cut about four inches thick, eight inches wide, and ten inches long, of any suitable timber of wood. The holes are made from two to two and one-half inches in diameter, according to the nature of the timber employed. The blocks are laid closely together and when wet, on sand or any suitable bedding, such as is employed for other pavements. The top is then coated with asphaltum and sand, or other suitable material, such as is already in use for coating wood to render it more durable and capable of resisting the action of the weather.

When laid, it will be seen that the perforations are in a direct line and form a continuous passage. These passages form an excellent receptacle for telegraph wires or cables, allowing them to be laid along or across the street at any part, thus entirely avoiding the necessity of erecting telegraph poles, which are very objectionable in the principal streets of cities. The common paving block retains the moisture in the whole block, and, when shrinking and swelling, is often thrown up and out of place as the weather alternates from wet to dry.

For the purpose of laying telegraph wires where the street is not so paved, the sidewalk can be paved with the same kind of blocks and the wires run along through the same.

WOODS FOR EXHIBITION.

A Quebec despatch says:—Messrs. R. R. Dobell and Co., and John Burstall and Co., have presented the Dominion Government with some very fine specimens of wood goods, selected from their respective stocks, for the Colonial Exhibition, London, consisting of sixteen pieces of timber of the following varities: Black walnut, chesnut, maple, oak, black ash, rock elm, white pine, red pine, shell bark hickory, white wood, bass wood and white oak; also deals, staves, etc. Some of the white pine deals by Burstall and Co. are of extraordinary size. The above specimens are valued at some hundreds of dollars, and will, no doubt, attract considerable notice when placed on exhibition.

BOBCAYGEON.

TIMBER.—The production of logs this year will be larger than last year. Mr. Boyd's limits along the Monk Road will be very productive, and yield a large drive of logs for Little Bob mill, whilst Mr. Petrie, for his mill, has bought more logs than he ever before had on hand, and not quite as many as he can cut in the season. There is but small demand for hard wood, bass wood is in fair request, and elm for furniture is increasing in demand. The prospects altogether are better now than they have been for years.—*Independent.*

AN Ottawa despatch says:—The lumber trade for 1886 is opening under most auspicious circumstances, in fact the outlook has not been so good for years as it is at present. There are more sales now made and at better prices than have been obtained in the previous history of the lumber industry. A happy feature, and one which shows the healthy condition of trade, is that these sales are not confined to any particular grade of lumber. The sales this years are for the whole cut of the log, that is shipping culls and better. One American firm alone have purchased one hundred million feet at a cost of about $1,600,000, and there are other sales now made which will unquestionably bring the amount of lumber of next season's cut now sold to over $4 500,000. The cut for 1886 will be unusually large. and the output, taking from Arnprior to Hawkesbury, will be about 600,000,000 feet, the value of which amounts to a little over $8,000,000.

SHILOH'S VITALIZER is what you need or Constipation, Loss of Appetite, Dizziness and all symptoms of Dyspepsia. Price 10 and 75 cents per bottle. For sale by Ormond & Walsh druggists, Peterborough.

BOILER TREATMENT.

To the Editor of the Canada Lumberman.

DEAR SIR,—As my attention has been called at different times, by my employers and others, to articles on lubricants for steam cylinders and compounds for the removal of scales in steam boilers, etc. Upon the latter subject I will give the ingredients of a compound that I am using, and have used for some time. And as I have used a goodly number of boiler compounds, among others Lords, which has such a great reputation, and I have never found anything to equal the one I shall give, which is the cheapest, and I believe the best, boiler compound in the market. The ingredients are as follows: 1st, never blow off your boiler under pressure; 2nd, let the water remain in the boiler just as long as time will permit before cleaning; 3rd, enter your boiler at each cleaning, carefully examining every part, and remain inside while washing out to see that every particle of mud has been warhed out, as there will be nothing but mud if the boilers are left to cool down before letting out the water. I have in my possession some of the largest scales I ever saw come out of a boiler, and this simple compound is just what removed them. Of course, some will say, "Oh well, there is lots of difference in the water," and just so, there is, but I am running three large tubular boilers, taking water from the Nation river, of which the bed is solid limestone, and the heater I am using is of the surface type, so that everything that is in the water passes direct into the boilers, and these boilers are the ones I took the large scales from both from the shell and tubes, which collected in six months time, and no other compound was used but the simple one mentioned. Two years ago I took charge of a battery of five large boilers, and found them badly scaled, I applied the same compound with the best results, as I have many other boilers, and always use it to prevent scales from collecting. Now this collecting of scales in steam boilers is but one of the many destructive and most dangerous results of blowing out under heavy steam pressure. But this all I will write on this subject this time, but if permitted to express my opinion through the columns of the LUMBERMAN I shall give more of my experience on this impostant subject.

E. D. TOWSLEY.

Casselman, Ont. Feb. 11th, 1886.

TAXATION ON FLOATING LOGS

An interesting supreme court decision has just been given concerning the taxation of logs in the town of Errol, N. H. The case is somewhat as follows:—Parties cutting logs in sections of New Hampshire, intended for market and manufacture in Maine, had landed the same on the banks of the Androscoggin river in Errol. The selectman appraises them for taxation and assessed thereon state, county, town, and school taxes. Another lot of logs, belonging to the same party, which has been cut in the state of Maine, and were on their way to Lewiston for manufacture, were also detained in the town of Errol on account of low water. These were also assessed for taxes by the selectman. The supreme court now affirms the decision of New Hampshire courts that logs cut in New Hampshire and lying upon the banks, and which had not started on their way or been committed to the common carrier, were liable to taxation in the town of Errol. On the other hand, the court affirms that logs cut in Maine, floating down the river to their destination in Maine, hung up by low water in New Hampshire, were not subject to taxation by the selectman of Errol.

Following is a comparative statement of the lath manufactured by the Saginaw river mills since 1876:

	Pieces.
1876	72,703,660
1877	72,514,990
1878	53,236,075
1879	65,969,000
1880	65,063,883
1881	65,983,750
1882	92 703,800
1883	106,132,703
1884	157,345,000
1885	80,931,400

JOSIAH BEOAS was struck on the thigh by an axe used by J. Smith, near Wellington, Ont., the axe having glanced off a tree. An artery was severed and he bled to death.

THE Australian Colonies, New Zealand, and Fiji Islands, will send specimens of all kinds of native timber to the forthcoming exhibition at South Kensington.

HENRY THIELAU, a farmer, sat down on the box enclosing a buzz-saw, in a planing mill in East St. Louis, on Feb. 10th. The saw suddenly started and Thielau was instantly cut in two.

That troublesome cough should be at once cured, as, if not, it is liable to terminate in consumption. Thousands die annually that might have been saved if West's Cough Syrup had been taken in time. It will positively cure the worst cases of throat and lung diseases, colds, coughs, hoarseness, bronchitis, whooping cough. Price 25 cents, 50 cents and $1 per bottle. Sold by J. D. Tully, druggist.

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We want Live, Energetic Agents in every county in the United States and Canada, to sell a patent article of good merit, on its merits. An article having a large sale, paying over 100 per cent profit, having no competition, and on which the agent is protected in the exclusive sale by a deed given for each and every county he may secure from us. With all these advantages to our agents and the fact that it is an article that can be sold to every householder it might not be necessary to make an "extraordinary offer" to secure good agents at once, but we have concluded to make it to show, not only our confidence in the merits of our invention, but in its saleability by any agent that will handle it with energy. Our agents now at work are making from $150 to $600 a month clear and this fact makes it safe for us to make our offer to all who are out of employment. Any agent that will give our business a thirty days' trial and fail to clear at least $100 in this time, above all expenses, can return all goods unsold to us and we will refund the money paid for them. Any agent or general agent who would like ten or more counties and work them through sub-agents for ninety days and fail to clear at least $750 above all expenses, can return goods unsold and get their money back. No other employer of agents ever dared to make such offers, nor would we if we did not know that we have agents now making more than double the amount we guaranteed, and but two sales a day would give a profit of over $.25 a month, and that one of our agents took eighteen orders in one day. Our large descriptive circulars explain our offer more fully, and these we wish to send to every one out of employment who will send us three one cent stamps for postage. Send at once and secure the agency in time for the boom, and go to work on the terms named in our extraordinary offer. We would like to have the address of all the agents, sewing machine solicitors and carpenters in the country, and ask any reader of this paper who reads this offer, to send us at once the name and address of all such they know. Address at once or you will lose the best chance ever offered to those out of employment to make money.

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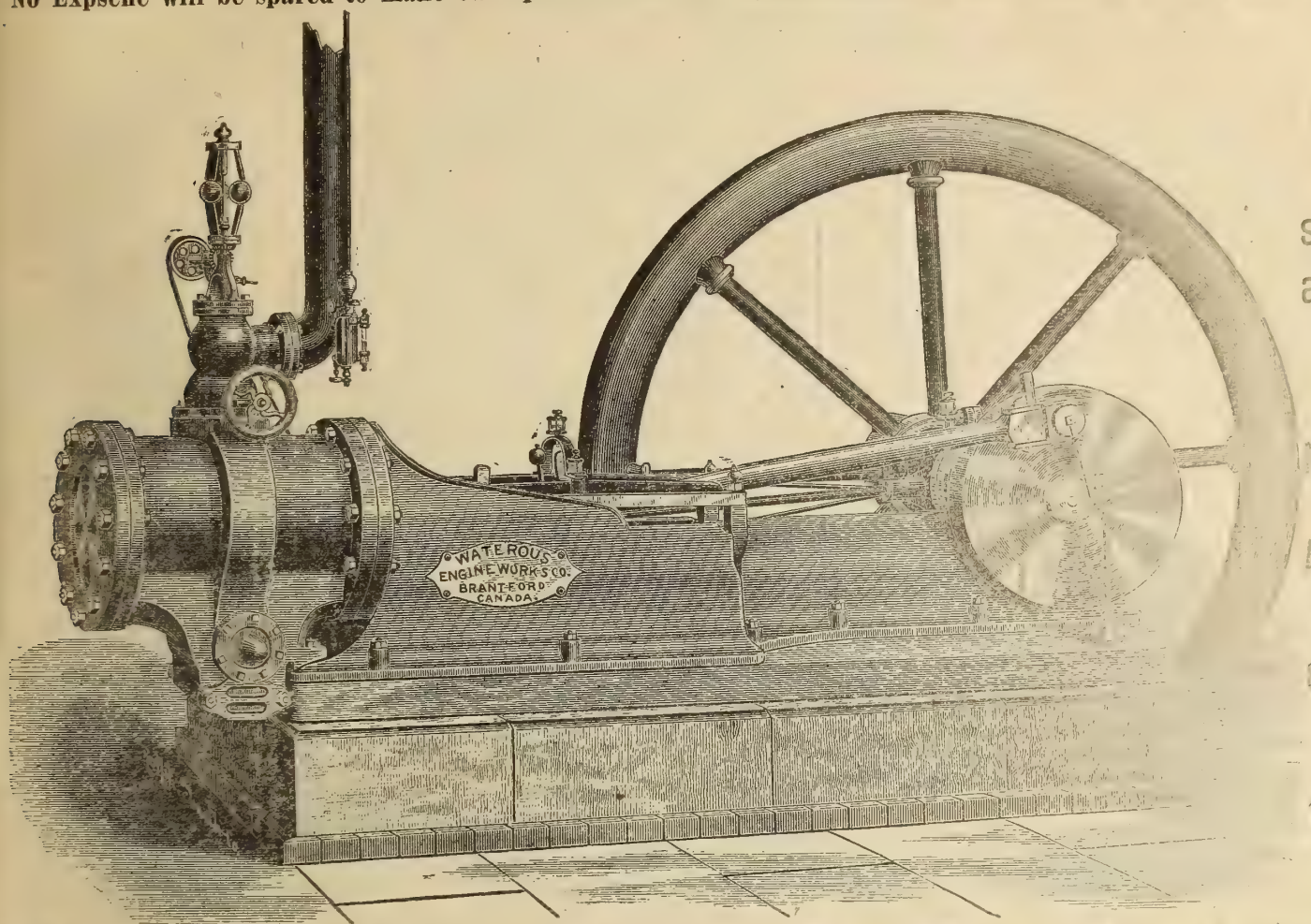

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CHICAGO SHINGLE TRADE.

The movement of shingles in the Chicago market during 1885 was something remarkable —not on account of the large comparative amount handled, for much less than 1884, but because it was so disappointing of expectations, and so unevenly distributed through the year. In 1884 the sales and shipments of shingles from the yards of this city reached a total of 1,007,458,385, while in 1885 the total was but 662,240,011 or nearly 400,000,000 less. This comparatively meagre movement of shingles from Chicago yards is another proof of what the *Lumberman* declared throughout 1885, that the strictly rural or farmers' demand for yard stocks was small in proportion to the city demand. Where there is a heavy distribution of lumber into country districts, there is a proportionate large call for shingles. There may be a great consumption of lumber in city building, but since a large majority of urban houses are covered with other roofing material than wood, there are fewer shingles required than in country building.

The Chicago trade in shingles in 1885 started out with sales and shipments of but 1,675,336 in January, and 5,310,500 in February, as compared to 26,787,246 and 82,139,000 in corresponding months of 1884. But in March of last year the demand for shingles took a spurt, and the yards in that month got rid of 116,071,975 as compared to 66,823,747 in March 1984. This exhibit shows again how lively the wholesale yard trade was in March last year, and how it was largely the result of a country demand, which always calls for a greater proportion of shingles than the city trade. But after March the shingle trade last year fell off sadly in comparison with the year previous. In July it amounted to but 3,699,350, while during the same month in 1884 89,116,955 were disposed of. During December, the last month of the year, the amount moved out of the yards was about the same as the year before, namely, 14,246,009.

It is probable that no difference in the prices of shingles caused the relative difference in distribution between the two years. The supply in 1884 crowded the market more than it did in 1885, receipts in the former being 895,528,000, and in the latter 770,727,000. We are forced to the conclusion that the falling off in the shingle trade last year was wholly owing to a relative decline in the strictly rural demand for both lumber and shingles.—*Northwestern Lumberman.*

PRESERVATION OF FORESTS.

The rapid destruction of the forests of New York state, and the consequent droughts in summer and destructive floods in spring, led last spring to the appointment of a forestry commission, whose first report has been presented to the State Legislature. They remark that it has not been possible for them to more than familiarize themselves with their duties, and to acquire knowledge as to the wants and dangers of the forests through the intelligent exertions of special agents under their direction. The Commission ask time to prepare and present a further report, and recommend certain amendments to existing laws, such as the prevention of forest fires, trespassing on forest lands of the state, and the removal of timber, the injury of forests by railroads, and a provision for the conveyance of certain lands now forming part, but it is believed by the Commission erroneously, of the forest preserves. Our neighbors are taking active and practical steps to remedy a serious evil. In Canada we are already brought face to face with a problem of a similar character—how to prevent the rapid destruction of our forests without retarding the settlement of our wild lands. Hitherto the object of the Crown Lands Departments in Ontario and Quebec has been to destroy the forests with all possible speed. No settler could acquire a title to his property without removing from its surface at least ten per cent of the standing timber within a period of two or three years, even though, in its removal, he should find it necessary to burn the forests for miles around. Failure to destroy the timber entails, in the Province of Quebec, confiscation of the property and forfeiture of the amount paid for it, and of all improvements. It may yet dawn on the minds of those who manage the public domain that the forests are not only a source of public wealth, but that they are necessary to protect the country from disastrous floods in spring, and parching droughts in summer.

Lately a disposition has been manifested to exclude parts of the country, which are mainly valuable for their pine forests, from settlement. It has been found, as the result of a painful and costly experience, that to sell a lot in such a district to a settler is to destroy pineries of inestimable value. It has taken a long time to get this idea into the heads of Crown lands officials, but the fact that they have learned a a lesson, even at the price which has been paid for it, gives reason to hope that they, or their successors, may yet realize the importance of preserving our diminished and diminishing forests before they cease to be any left to preserve.—*Ottawa Journal.*

FORESTRY.

The necessity of the preservation of forests is conceded by all civilized nations. So pressing has become the necessity of restricting this waste in other countries that laws have been enacted for that purpose by several of the governments of continental Europe.

The bureau of the forest administration of France reports that the French forests yield an annual surplus of about $3.500,000. It states that France has about 17.3 per cent. of her superficial area in forests. The public or domain forests amount to 10.7 per cent of the forest area. The forests of Algeria are new and undeveloped as yet, and are a charge upon the state to the extent of $300,000, and in spite of this burden the care of the forests clear annually $3,500,000 above expenses; and while securing this handsome revenue France is securing by the maintenance of her forests the best climatic conditions for the health of her people and the success of her agriculture, and is preserving the flow of her streams in a condition serviceable to agriculture, manufacturers and commerce.

Efforts are now being made by prominent naturalists in England to make the forests and woodlands of that country more productive by the establishment of a public forestry school.

The United Kingdom has about 3,000,000 acres of forest and it is estimated that in the colonies belonging to the empire there are no less than 340,000,000 acres of woodland.

So far is this, however, from being generally recognized that there is no place in England where pupils can learn the principles of forest conservation and management, and the officers intended for the Indian Forest Service are sent to the French forest school at Nancy to be instructed, while the public woodlands in Cypress, at the Cape of Good Hope, are intrusted to the care of foreigners, for want of British subjects capable of looking after them.

To show the advantages which would follow the adoption of a better system, Sir John Lubbock, the distinguished naturalist, moved lately in the British House of Commons that a committee be appointed to ascertain whether the forests and woodlands of England could be made more productive of by the establishment of a public school of forestry, such as now exists in nearly every other civilized country. He said that the interests of Great Britain on the subject are really greater than that of any other nation. He cited the example of the Landes, a vast plain on the west coast of France which 30 years ago was a marshy waste, over which a few shepherds, perched on long stilts to keep themselves out of the mud, and drove their poor flocks, but which is now, thanks to Brementier, who took the first step towards its reclamation by planting a few maritime pines along the sand hills which line the shore, one of the most prosperous districts in the Republic, busy with the manufacture of turpentine and timber from more than a hundred thousand acres of recently planted forest, and officially rated as having increased in valuation about $200,000,000 within less than a generation. To this illustration he added one more for the recent history of India, where 15 years ago the annual public revenue from forest property was $110,000.

Soon after that time an Indian Forest Department was established, which provides expert direction for the maintenance and increase of woodland, and the forest revenue has since rapidly increased, amounting now to more than $2,000,000 a year, or about 20 times as much as it was just before the establishment of the Forest Department.

In seconding the motion of Sir John Lubbock, Dr. Lyons remarked that the best authorities now believe that in order to keep a cultivated country in the most productive condition from one-fourth to one-third of its area should be covered with woodland, as a protection; and Mr. Gladstone, whose fancy for wielding an axe is well known, showed his knowledge of the subject by remarking, in answer to a rather personal allusion from one of the speakers, that the judicious felling of trees is necessary to the proper maintenance of a forest; and that nothing tended more to perpetuate the neglected and useless condition which educated foresters observed in English woodland than the superstition of the owners, who looked upon the cutting down of a tree as a sort of sacrilege, instead of the means of developing the saplings about it.—*Exchange.*

CIRCULAR SAWS.

I. T. Landon writes in *Cabinet Making and Upholstering*: We cannot do much sawing until we have got a saw in and set it to work. But I believe we have already done that. The table and arbor and saw are in due position. The saw plate is perfect. The teeth are filed and set, and we are standing with coat off and sleeves rolled up waiting for a job to try and see what we can do. Well, here comes the first job. A very simple one if we knew how to do it. A square stick to be split from corner to corner. Don't set your gauge that tips, to a miter, and fasten on a block to the table to keep it from slipping down, but just measure across with a rule from corner to corner and set your gauge to half the distance allowing for the width of saw kerf. Tip the piece to be sawed up on the corner and bring the other corner up to the guage, so that when you push it up to the saw the saw will cut in the centre of the corner that is up. Hold the stick firmly in that position till the whole length of the stick is sawed and you find the piece very nicely cut from corner to corner. Any number of pieces may be sawed in that way with no more trouble than sawing straight flat work; only you must keep the stuff up so the saw will always cut exactly through the top corner.

The next job that comes along is this: A man has a round tank to build that is smaller at one end than at the other, and the staves all of a size. There are two ways to do this job; but one is better than the other. With either we must saw a pattern. After the pattern is nicely made put the small end up against the gauge and measure off the width of the wide part of the stave between the saw and the pattern, keeping the piece to be sawed up close to the pattern and even at one end or the other, push through steadily and you will find that you will have an exact duplicate pattern. Turn the pattern for every piece you saw and your stuff will come out even. The other way is to lay your pattern on and mark out every piece by it and saw by the lines. This line sawing is a nice job, and there are but very few good line sawyers in the market. Unless the stock is knotty and you are obliged to mark out every piece to save stock, it is much better to saw with the pattern against the gauge. Where there is plenty of carriage sawing you may find good line sawyers, but in ordinary shops the good ones are few and far between.

While speaking of line sawing I will offer a few suggestions about it. Never take a board or a plank up and stand on one side of it if you wish to come anywhere near the line for any distance. Hold the piece to be sawed directly in front of the saw, and when you start in strike the line fair and square in the centre. If you are not much used to sawing, push along the work carefully so you may keep directly on the line. Don't push along heedlesaly and then condemn the saw for spoiling the work, when a little patience and care would have saved both the stock and bad words too. If you saw the first cut well, you will gain confidence; only don't let your confidence lead you into carelessness. With this kind of sawing, especially, there must be care taken till you know just how to do the work well. Then you can go ahead and do it fast. But always be sure you can do it well before you try to rush it. Band sawing is a splendid school for line sawyers and yet there is a difference in sawing to a line with the different kinds of saws.

I ought to have said when speaking of sawing stuff cornerwise, that the same principle might be used in sawing square timber if we did not want to go to the middle. Run a gauge along on two sides of the stick, measure the distance from the corner to the guage line, and set the saw guage just that distance, turn the stick up till the saw cuts the line, which follow closely and the work will come out good every time. Let's go into a place now where they are sawing large circulars like freight car rafters out of good hard oak or ash planks. You will see a lot of heavy planks two inches thick piled up with a circle marked on the edge of each one just the shape of the top of the rafter. They are all sawed to this line and piled up again by the saw bench where a curved guage is kept and used for just this purpose.

After adjusting the gauge a little the planks are pushed through as easily as if they were straight pieces; every one has the right curve and they go directly to the molder to be finished cornered. This is work that might be done on band saw, but if it was done there each rafter would have to be marked out by a pattern; the work can be done faster on a circular saw than with a band saw. There is of course a limit to using the circular saw for cutting carved work, but where the circle is large enough the circular saw does the work quicker and better.

A vast amount of beveled work, as well as cutting stuff at all possible angles, can be done on common wooden top saw benches, if we only have the ingenuity to get up some simple rigs, which, once made, are of great value for jobs that otherwise would be long and tedious. Two grooves in the top of any saw table will put almost any one in the way of doing a great variety of very nice work.

THE LUMBER TRADE.

A shipment of 150 standards of white pine has been made from Ottawa to Liverpool via New York on a through rate of freight of 70s. A Norwegian vessel has been chartered to take on a cargo of lumber and deals at Quebec for London at 20s. lumber, and 50s. deals. The outlook is certainly favorable for a good lumber trade during the coming season, both for export and home consumption. A local dealer stated that he had good reasons for believing that building in Montreal would be fairly active during the present year.

Advices from Duluth report the heaviest transactions in lumber that has taken place there for a long time past, the sale being made by the Carleton Lumber Company to D. H. McEwen, of St. Paul, comprising 1,300,000 feet of lumber to be delivered in St. Paul within a month. Reports from Detroit state that the prospects for the coming season are bright and that operators are very hopeful.—*Trade Bulletin.*

A SILLY SUPERSTITION.

QUEBEC, Jan. 27.—Hector Bouchard, who is imployed in the shanties of Messrs. Price Bros., at St. Etienne, on the Saguenay, was instantly killed on Sunday by the discharging of a gun. It appears that it is the habit of these shantymen to blow in the barrel of a gun, believing, through superstition, that any request they ask will be granted by performing this strange freak, which is enacted by placing a cap on the nipple, and while the performer is in the act of blowing in the muzzle to pull the trigger and fire off the cap. If the performer displays any fear his prayer will not be answered, he being regarded as unfaithful. It was during this performance that the gun, which was loaded, suddenly discharged and the bullet entering Bouchard's mouth and coming out at the back of his head, killed him instantaneously.

THE Grand Rapids Chair Company has bought 3,000,000 feet of maple logs at Kalkaska, Mich., paying $4 a thousand for them.

RISK ABOUT STEAM POWER.

It would hardly seem possible, says the *Manufacturer's Gazette*, when we are told so much about mechanical, social, moral and other branches of progress, that men should be found who really believe, if we are to judge from their actions, that a steam boiler is safe as long as there is water inside of it, and the more water the safer the boiler. We have recently enconntered an instance of this which would do credit to the old witchcraft days of 1,600 and something, which was no more or less than a pair of tubular boilers, being worked to drive a mechanical establishment; one boiler has been set 13 years, had never been insured, was working under ninety pounds of steam, and the safety valve to all appearances had not been tested for months. With the growth of the concern another boiler had been added, larger in diameter, longer, much larger fire-pit, and capable relatively of doing twice as much as the old one. An engine which may have been imported in the ark, or the Mayflower, or anywhere between those two dates, was doing service, probably on the plan that the older the engine the better the mechanical work on it, contrary to the general supposition that the better use of steam made, the cheaper the engine no matter what it costs. In conversation with the engineer we received a very frank expression of opinion, and it is, perhaps, needless to say, that this conversation was limited to about five minutes. This man expressed the opinion frankly and evidently perfectly sincere, that, so long as he had plenty of water, it was impossible for an accident to occnr. He didn't know but that gas might, under certain conditions, be formed, and, "Of course," he said, "if gas gets into the biler, then she's got to go." We questioned him as to how often he tried his safety valve levers. His answer was chracteristic of the man—"Had 'nuff to attend to without monkeying with them there fixings." Here was the solid extract of ignorance and prejudice—ignorance of his business and prejudice of toward the adoption of any regulations to insure the safety of those about him. He considered inspection, or to use his own words, "fooling around with a lamp or pick," as altogether unnecessary, and the idea of hydraulic test—he thought the best test "was to put hot water into a biler, be sure and keep plenty of water, and be sure on't." When asked about his blow off, he sometimes "blowed off when steam was low; didn't remember when he blowed off last." After seeing his safety valves had neither chain, lever, nor cord, so that they might be tested from the floor of the boiler-room, noticing that the steam gauges stood plump ninety pounds, with a boiler thirteen years old, and no one knew when it had been last examined carefully, although there was an inspection certificate hung up in the room, we bade the man good day and left.

It is one of the things to us that is totally unaccounted for, how any employer can hire a man who knows no more about his business than to weigh down the safety valve of an old boiler to carry steam at 90 pounds, when neither the man nor the foreman of the place can name the date ween the boiler received an internal inspection. "So long as there's plenty of water she's all right," is the estimation of the gnoramus who was in charge. He had not ven time to examine the safety valves occasionally, say once a week or month. Whether he was in a hurry when six o'clock at night came to adjourn to a jin mill, or some other place where his kind of intelligence was disseminated, we have no means of knowing, and, contrary to the genefally accepted theory among intelligent men, this man had a standard of his own, that the more water he had, the safer he was. Whether his safety valve was capable of raising at all or not he did not know, and evidently did not care. He was to all appearances totally ignorant of one important fact, that any accumulation of pres-sure beyond the strength of the of the boiler, of which nobody knew anything for certain, would make a blow-out somewhere, or if a rupture commenced, the more water he had in the boiler the worse for him and everbody near what would be a first-class explosion. He seemed to be perfectly ignorant of the fact that the more water the worse when anything did occur, and we presume the idea never entered his head that carrying water six inches too high in a boiler with a lively circulation would carry over a good deal of water into the cylinder, and instead of no danger, he was really threatened with several elements, each one of which only tended to aggravate the other, and as matters seldom go by contraries in this respect, we make a meutal calculation about as follows: An ignorant engineer, evidently hired because he could be employed at a cheaper rate than an intelligent, capable man. This was a negative quantity. Corroborative of this was the fact that the owners of the property did not believe in boiler inspection and insurance by people who back up their opinion from careful examination, by writing a policy for several thousand dollars upon the risk, so that the parties who saved money be employing an incompetent man, entirely ignorant of the first principle of his business, also, judging from their actions, saved money by not insuring their boilers any further than a certificate of inspection went. It is probable that hundreds of this same class of risks, which we should deem extraordinarly hazardous, do exist to-day, and that hundreds of this class of men are in charge of steam plants, when they should be carefully resting at home or breaking stone on the street, shovelling coal or snow; but they should never be permitted to have charge of a steam boiler under any circumstances or conditions. It is like an electric spark and a nitro-glycerine cartridge, we never know when the explosion is to take place. If it does take place, then we shall be treated to a digest of supernatural, providential, and the profanity of visitation. We shall be told that some "occult," "mysterious," "invisible," "gaseous," "detotation," or some other ridiculous subterfuge to avoid personal and criminal responsibility, is the cause, when, if the true fact should be rendered, it would be two brief but emphatic words—avarice and ignorance.

In many cases like this there is no doubt whatever that human life is frequently the penalty, and all too often a working man, who has not much choice of where he works, and who is generally the mainstay of a little family, is killed, crippled, seriously injured, and from two to a half-dozen people are left to the cold charity of the world, or the colder charity of employers who assume no responsibilities, in too many cases, entirely. There may be some day a change in public opinion, and a change in practice, and while intelligent men have settled all these questions in their own minds, it seems to be a farce on information and scientific investigation that men are still found that are so heedlessly negligent, who are so criminally careless that they will allow avarice to enter into their plans, while their own property and the lives of their workmen, as well as others, are projudiced by their own ignorance, stupidity and cupidity.

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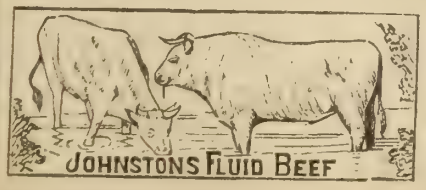
RATES REASONABLE, CENTRAL LOCATION, FREE BUS TO AND FROM ALL TRAINS.

☞ Every accommodation for Commercial and LUMBERMEN.

1Ltf W. D. McDONALD, Proprietor.

Johnston's Fluid Beef



The nourishing, palatable and warmth giving qualities of Johnston's Fluid Beef has caused this invaluable preparation to before a favorite and fashionable beverage for the winter season. It is now obtainable on draught at the leading hotels and restaurants throughout the Dominion 18t7

Wrought Iron Shanty Cook Stoves

The Best Article Ever Offered to the Trade.

I have much pleasure in drawing attention to my **WROUGHT IRON COOKING STOVE, for Shanty, Hotel and Boarding House use.** These stoves are made of **Heavy Sheet Iron**, the top and lining of the fire-box being of **Heavy Cast Metal** and all the connecting parts of substantial **Wrought Iron Work.** The dimensions of these Stoves are as follows

SINGLE OVEN STOVE

Top surface contains six 10-inch holes, with ample room between, and one oven 28 x 24 x 19. Fire box takes 28-inch wood.

DOUBLE OVEN STOVE

The Double Oven has a top surface containing twelve 10-inch pot holes, with two ovens, each 28 x 24 x 19. One fire-box of suitable size for area to be heated. Below will be found Testimonials from some of the leading Lumbermen, who have used my **Wrought Iron Cook Stoves** since I commenced manufacturing them. They are the names of gentlemen who are well known and reliable, and will carry more weight than any recommendation of my own could do.

The Best Stove I have ever Used.

PETERBOROUGH, May 31, 1880.

ADAM HALL, Esq., Peterborough. Dear Sir,—I have used your Wrought Iron Cooking Stove in our lumbering operations since its introduction here, and have no hesitation in saying that I prefer it to any other. For durability, economy and efficiency, where a large number of men are employed, it is the best stove I have ever used. You can, with confidence, offer it to hotels, boarding houses and lumbermen.

Yours truly, THOS. GEO. HAZLITT.

The Stove for Lumbermen.

PETERBOROUGH, June 1st 1880.

ADAM HALL, Esq., Peterborough. My Dear Sir,—We have used your Wrought Iron Cooking Stove and find it is very satisfactory for lumber operations, especially so on drives. We can recommend it highly.

Yours truly, J M. IRWIN

In addition to the above I can refer you to the following lumber firms who use my Wrought Iron Range exclusively in their camps:—

THE GEORGIAN BAY LUMBER CO.....Waubaushene
THE LONGFORD LUMBER CO.....Longford Mills
MESSRS. GILMOUR & CO.....Trenton and Ottawa
MESSRS. RATHBUN & CO.....Deseronto
THE MUSKOKA LUMBER CO.....Gravenhurst

EVERY STOVE GUARANTEED.

All the necessary TINWARE and CUTLERY for Shanties Supplied at the Lowest Prices.

ADAM HALL, Peterborough.

THE HENDERSON LUMBER CO. Limited.

DAVID H. HENDERSON, *President*; NORMAN HENDERSON, *Vice-President*; CHAS. H. WALTERS, *Sec-Treas.*

Dealers in, and manufacturers of, Dimension and Bridge Timber, Sawn Lumber, Clapboards, Shingles and Lath. Packing Cases and Boxes a Specialty.

OFFICE, MILLS AND YARDS: 342 to 396 William Street, MONTREAL, and at ROXTON FALLS, . Q

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ORDERS FOR DIMENSIONS AND ALL OTHER KINDS AND GRADES OF

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THE MAIL has become

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THE CANADA
LUMBERMAN

DEVOTED TO THE LUMBER AND TIMBER INTERESTS OF THE DOMINION.

PUBLISHED SEMI-MONTHLY BY THE
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Per line, for first insertion..... 10
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All communications, orders and remittances should be addressed and made payable to THE PETERBOROUGH REVIEW PRINTING AND PUBLISHING COMPANY (LIMITED) Peterborough, Ont.

Communications intended for insertion in the CANADA LUMBERMAN, must be accompanied by the name of the writer, not necessarily for publication, but as a guarantee of good faith. Communications to insure insertion (if accepted) in the following number, should be in the hands of the publishers a week before the date of the next issue.

The CANADA LUMBERMAN is filed at the Offices of MESSRS SAMUEL DEACON & CO., 154 Leadenhall Street London, England, who also receive advertisements and subscriptions for this paper.

PETERBOROUGH, Ont, FEB. 15, 1886.

EXPORT DUTY ON LOGS.

THE Ottawa *Free Press* publishes an interview with a lumberman, in regard to the export duty on logs, and makes it the occasion of giving its own views on the subject. It is opposed to the views of the lumbermen, and, writing on the supposition that there is no such duty now, it objects to any duty being placed on the export of unsawn lumber. It says:—

"We are at one with the lumberman, in believing it desirable that, so far as possible, al raw material or produce should be manufactured within our limits, and give employment to the largest number of hands possible; but all experience points to the fact that it is most economical in the long run to allow the laws of supply and demand –the convenience of producer and consumer—to govern these matters and not vainly at attempt their control by the the imposition of import or export duties. The moment an export duty is imposed on logs, tha moment the timber limits of Ontario become less valuable in proportion to the export duty; and the loss will fall upon the Provincial treasury."

The theory that the laws of supply and demand should govern these matters is a very nice one, and those laws will govern the general price of lumber. But the theory is not now in practice, and that is how the Canadian lumbermen are placed at a disadvantage, and where the injustice is done. When a Canadian manufacturer exports lumber to the United States he is forced to pay $2 per M duty, but when a United States manufacturer exports the raw material, and saws it up across the lines, he is only required to pay $1 per M, board measure, and the foreign manufacturer is thus given an advantage of $1 per M. This is an injustice that should be removed, and it can be removed by increasing the export duty on logs. If the United States will not consent to reciprocity, by removing their import duty on lumber, the Canadian Government can, and should, place the Canadian dealer on a reciprocial footing by increasing the export duty on logs. This is a simple matter, easily understood, and no finely spun theories can obscure the plain facts.

The *Free Press* is oppressed with another fear. It fears that the imposition of an export duty on logs will decrease the value of the Ontario timber limits and that the Provincial treasury will suffer, which fear leads it to say:—

"A decreased Provincial revenue means one of two results necessarily—either that the Province resorts to difect taxation, or that the cost of maintaining the inmates of a number of Provincial institutions be thrown back upon the municipalities. Will the electors of this Province favor this proposal? We think not."

This result is to follow, according to the *Free Press*, if an export duty is imposed, but it has overlooked the fact that the present duty has not forced the Ontario Government to resort to direct taxation, nor to throw the cost of maintaining Provincial institutions upon the municipalities. There are, also, other considerations. It may well be considered whether it is not penny wise and pound foolish to force itmber limits wholesale upon the market and dispose of this valuable capital rapidly, instead of husbanding it so that it will increase in value and be a permanent source of revenue. If the limits are disposed of at the rate they have been direct taxation must come, but if they are husbanded more carefully and economy practiced to keep the expenditure within the revenue, that evil will be postponed much longer; so that the lumbermen are the real friends of the people in endeavoring to stop the slaughter of their timber by foreign manufacturers.

The *Free Press* has still another objection, and a not very sound one. It is thus stated:—

"Another objection, and one which weighs much with many lumbermen who see beneath the surface in this matter, is that the non-imposition of an export duty upon logs in Canada, will in a measure weaken the hostility in the United to reciprocity in lumber. The American, and especially the Michigan lumbermen, who own Canadian limits, will be favorable to reciprocity in lumber, now that their old limits in Michigan are nearly exhausted. The imposition in Canada of an export duty on logs, will cripple the sale of, or competition for, limits upon the north shore of Lakes Superior and Huron, without promoting the establishment of a single mill. Why? Because, while the logs are now exported free of duty—giving employment to Canadian backwoodsmen —giving a market to farmers and others who have supplies to sell—the moment a log is sawn into lumber and imported into the United States, it becomes subject to a duty so high that competition in the western markets with American sawn lumber becomes almost impossible."

And the *Free Press* imagines that the Michigan lumbermen who own limits in Canada will use their influence to have the United States import duty on lumber removed. Not at all. By retaining that duty the Michigan owner of Canadian limits, who exports the raw material, is given an advantage over his Canadian competitor, and this advantage he will be loth to lose, so that, instead of promoting the object the *Free Press* has in view(a reciprocity treaty), allowing matters to remain as they are is a pretty certain method of keeping up in the United States a strong opposition to such a treaty. By increasing the export duty on logs the United States owners will not find it so profitable to export the raw material, and they will then be more likely to build mills nearer their timber, in which case they would become advocates of reciprocity. So that, instead of injuring the prospects of reciprocity, the increase of the export duty would improve them.

The dream of the *Free Press* about the employment of Canadian backwoodsmen and the market for farmers is a delusive one. The United States manufacturers who own limits in Canada bring from the other side of the lines their own workmen and supplies, and the Canadian workmen find no work with them and the farmer little or no market. They receive little or no benefit from the work in the woods, and as the logs are then exported unmanufactured, Canadians are deprived of the benefit of the labor of manufacturing, and the Canadian manufacturer, who would give employment and a market to Canadians, is placed at a disadvantage to the benefit of a foreigner.

Such is the situation. Will it be allowed to continue as at present? That is the important question. It is encouraging to find a man of such generally recognized ability as the Hon. H. G. Joly giving the influence of his voice in favor of the lumbermen's view, and though his influence with the Government may not be great, his opinion should have some effect in silencing such critics as the *Free Press*. The closing paragraph of Mr. Joly's letter is significant: "It is not often," he says, "that Government can interfere, beneficially, with trade; but they can in the present case, and it is full time that they should do so." We commend Mr. Joly's opinion and the facts we have stated to those who oppose the demand of the lumbermen to be placed on an equal footing with foreigners in their own country.

TWO AIMS, ONE RESULT.

WE are pleased to note that the influential Hamilton *Spectator* adds its voice to those who are asking for an increase of the export duty on logs. The object of the Hamilton paper is primarily to conserve the forests, but it also sees the injustice done to Canadians by the present arrangement of the duties. Whether the duty is increased in order to conserve the forests, or to remove the disadvantage at which the Canadian lumberman are placed, the result will be beneficial to Canada. With two such good objects to be gained there should be no difficulty in getting the necessary increase. The following is the *Spectator's* article:—

"The appeal in behalf of Canadian forests recently made by Mr. Joly is one which deserves earnest consideration. Canada has in her timber a rich heritage, which, with proper care, might be made an inexhaustible source of wealth. Unfortunately no care is given it. Indeed, the authorities of the several Provinces seem madly bent on destroying this magnificent property instead of caring for and conserving it. For export purposes, the United States has ceased to produce timber. That country now buys more than she sells. And her remaining pine forests are being depleted at an alarmingly rapid rate. Great Britain imports wood of all descriptions in enormous quantities. In 1883 the import of wood and timber were valued at $90,000,000. That excluded wood pulp for paper, tanbark, dyewoods and other products of wood. Nearly 6,000,000 tons were of pine and fir; and of that one-fourth was from Canada. Sweden sent a little more; Russia was not far behind Canada, and the United States sent nearly a fourth as much as Canada.

Europe has nearly 750,000,000 acres under forest, of which more than two-thirds are in Russia. But Canada has more than 1,000,000,000 acres, or vastly more than all Europe. Except black walnut, which is rapidly disappearing, we have none of the more expensive woods. Our principal wealth is in pine. This timber is yearly coming into greater demand, while the sources of supply are rapidly decreasing, and prices are continually rising. In 1855 Great Britain imported less than 2,000,000 tons of fir; in 1883, almost 6,000,000 tons. Except in Austria the forests are not eared for, and the supply is becoming scarcer and more difficult of access.

Under these circumstances wisdom counsels the people of Canada to carefully preserve their pine forests—to protect them, so far as possible, from the ravages of fire, not to force their products upon a gorged market at insufficient prices, and to discourage exports of saw logs and other timber in their natural state.

Fire is the worst enemy of the pine tree. And the lumbermen themselves are principally responsible for the fires. They slash down the trees, cut out the logs and leave the chips and branches upon the ground. In a year these are as dry as tinder, and a spark from a hunter's fire or even from a pipe, sets them in a blaze. Fanned by a breeze the flames run with amazing rapidity over miles of territory, roaring through the resinous branches of the living trees, and destroying every living thing in their course. The blackened trunks of the pines stand for years but they are valueless. In Sweden the refuse of the forests is carefully collected and converted into charcoal, which is used in smelting the iron for which that country is so famous. Our pineries are so far from any point at which charcoal could be used that it would not pay to follow that plan in this country, except to a limited extent; but it surely would be profitable to destroy the refuse so that it would not become a means of loss and a source of danger. There are large tracts of timber land in Ontario which can never be subjected to cultivation by reason of the rocky and broken nature of the soil. It would be wise both for economic and climatic reasons to preserve the forests on these. The timber might be cut out as it matures and a vast preserve thus maintained for all time to come.

Mr Joly's contention that a higher export duty should be put upon saw logs is most wise. At present the United States lumberman finds it to his profit to take logs from Canada into the States and there cut them into lumber. The duty on lumber is $2 per 1,000 feet, while the logs enter free. Canadian lumbermen are thus deprived of the opportunity to cut our own logs into lumber. The Dominion has since confederation charged an export duty of $1 per 1,000 feet, calculated at board measure, on the logs exported. It would certainly be wise to increase this to at least the rate of the import duty on sawn lumber in the United States, so that there would be no pecuniary temptation to take logs rather than lumber into that country.

Next to the pine, the black birch is probably the most valuable of Canadian forest trees. In the northern country these trees grow to fine proportions, and the wood is fine grained and easily worked, while in color it is suitable for cabinet work and office furnishings. The outer part is white, while the heart of the tree is almost as black as ebony. This wood has been strangely neglected hitherto; but if its value were known it would certainly come into general use. The Pacific Junction railway, just finished, runs through a district in which millions of these trees are to be found, many of them from three to four feet in diameter."

THE PROBABLE OUTLOOK.

The Ohio *Lumber Journal*, of Cleveland makes the following observations upon the outlook in the lumber trade. The stocks of lumber in the different markets are of a sufficiency to meet moderate demands, yet there is no over surplus of any one class of stock. We take it from our reports published in this issue that there will be a firm advance as the spring buds, but we do not look for an advance that will be beyond reason. The natural tendency of all commodities is towards an advance, and we do not think there is a person in the whole world that will begrudge any advance that is likely to follow. Good business, economy and prudence warrant it; and when that warantee is so universal it strengthens and stimulates every branch of trade. The lumber merchants at the present time are feeling very conservative and are in nowise disposed to make any concessions on present prices. Many of the wholesale trade in this market are quite as busy now in filling orders as they can be with small winter forces. In a jaunt through the different arteries of the lumber trade we were surprised to note the number of customers that one meets looking over the stocks and figuring on purchases for early shipment. Reports coming to this office from all the leading markets east and west are of the same tendency and what we find of the large cities we find equally true of all the prominent small cities and interior towns throughaut the entire country. We, however, do not wish to be understood that we think the coming season will be that of a building boom. Far from it; it will, however, be one of renewed activity, such as would emanate from a successful season. As a year of railroad building we do not think it will show an exaggeration, but one where better facilities of transportation is a necessity to complete roads already commenced or in the course of construction. As to prices we think the first of April will find prices materially higher than they are at the present time; but that advance will be steady and firm. What will follow later on is a mere matter of speculation.

HARRIS, HEENAN & Co.

124 AND 126 QUEEN STREET, - - MONTREAL.

Patent Stitched–Steam Power Pressure Stretched–Oak Tanned

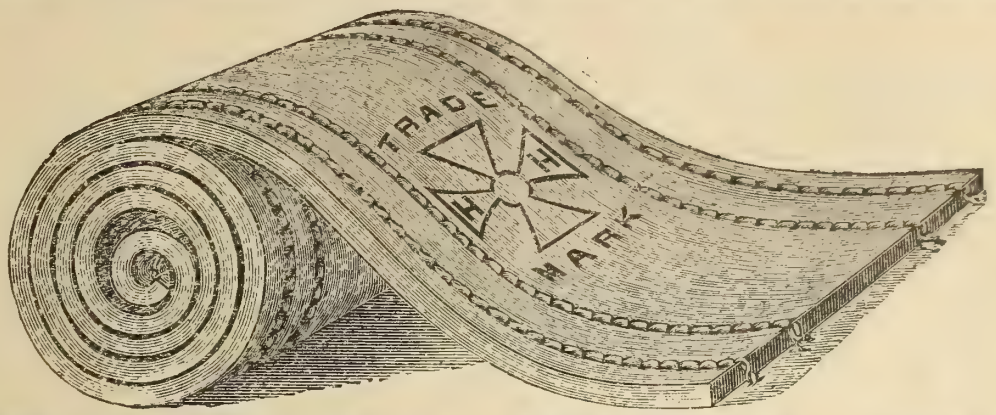
TESTIMONIAL

IRA GOULD & SONS, CITY MILLS, Nov. 13th, 1884.

Harris, Heenan & Co.

DEAR SIRS.—Your Patent Sewed Belt has been in use in our "City Mills" for some time. We are thoroughly convinced of its superiority over any belt, American or Canadian, we have used in an experience of over 35 years. It stretches so little, and gives so little trouble, that compared with riveted belting, the sewed belt saves double its price in time and laces saved. We heartily recommend it to manufacturers as the cheapest and most satisfactory belt in the market.

Yours respectfully,
W. C. MARSHALL,



TESTIMONIAL.

PECK, BENNY & Co., CANAL HORSE SHOE AND NAIL WORKS, MONTREAL, 15th Nov. 1884.

Messrs. Harris, Heenan & Co., Montreal.

I have pleasure in recommending the belting manufactured by Messrs. Harris, Heenan & Co., of this city. After thoroughly testing it, I find it greatly superior to any belting that has come under my notice and fully equal to all they claim for it, and certainly without an equal for cross or double belting.

CHAS. R. ELLACOTT,
Supt. H. S. & H. N. Dept.

LEATHER BELTING!

The Best, therefore the Cheapest, Belt in the market.
Replaces, when used, all others.
More Pliable and Durable, especially at the splices.
Stretches but little, always retains it original wid h.
Superior for Cross or Double Belts.
Runs sraight and true, does not start at the laps.
Single equals medium double.

25 per cent Stronger, 33 More Lasting, and 12⅓ Heavier, than any other Leather Belt

NORTH SHORE LUMBERERS.

"Something must be doue," remarked a lumberman prominent in the trade to a *Free Press* reporter lately, "by our legislators if we ever hope to hold our own with those Michigan men, many of whom now hold limits in the Nipissing and Lake Superior sections. Their own forests are thinned out, and they have taken a hold on ours.

"Of course I don't object to their coming to Canada for lumber," continued the gentleman, "for the more capitalists embark in such enterprises all the better for the country, but what I do object to, and strongly object to, is that they are permitted to ship crude lumber to their Michigan mills free of duty, while we, when we export sawn lumber to the United States have to pay a pretty high duty. This is most unfair to us, and we feel that we are handicapped in the race of competition. I am not speaking individually. My sentiments on this question are shared by all the prominent lumbermen on the Ottawa river."

"What are the Canadian lumbermen going to do about it?" queried the reporter.

"Well they are going to bring all the pressure they can upon the Government that a scheme may be devised whereby things will be equalized. It is certainly too bad that strange men should be allowed to use our forests and pay nothing to the treasury of the country for the permission. We have to pay our share of the country's taxation, and we consider we are entitled to a measure of protection to our business."

"What do you think would meet the wants of the trade?"

"An export duty on all logs or other timber taken out of the country in a crude state."

"What duty would be about right?"

"Well, we have discussed the matter among ourselves, and we consider that three dollars per thousand feet would about meet the case."

"Have any Americans taken over logs in the way you state?"

"Yes, and the prospects are that this business will increase. One Michigan lumbering company on the Whanapitae, called the Emery Lumbering Company, are now getting out seventy or eighty thousand logs for transportation in this manner. This firm have got barges built specially for the purpose of taking these logs over to their mills at Bay City. These barges are five hundred feet long and about fifty wide. They will be loaded with an endless chain similar to those used at saw mills. Each barge is capable of holding from four to five thousand logs. They are constructed with an elevated deck. When they reach the Bay City booms, such is the construction of the barges that their sides can be let down, and the logs thus tumbled into the water very expeditiously. This Emery Company is not the only firm with which we have to contend. I can count four such firms on the Whanapitae river alone."

"Do you think the Government will act in this matter?"

"They must. It will be brought up for discussion at the first opportunity after Parliament assembles, and we won't cease our agitation until we get justice."—*Ottawa Fress Press.*

WOOD-WORKING PATENTS.

The following list of patents relating to the wood-working interests, granted by the United States Patent Office, February 2nd, 1886, is specially reported by Franklyn H. Hough, solicitor of American and Foreign patents, 925 F. Street, N. W., Washingston, D. C.

335,335—Dovetailing machine—E. M. Byrkit, Indianapolis Ind.

335,258— Logging motor —W. M. Victor, Marinette, Wis.

335,419—Saw mill dog—W. H. Bennett, Peru, Ind.

335,319—Saw mill, gang—J. C. Slocum, Marinette, Wis.

335,167.—Saw mill gang—T. S. Wilkin, Milwaukee, Wis.

A young man named Manson Gould, of Dartford, Ont., has returned home from the woods with both feet badly frozen.

BREAKAGE AND BAND SAWS.

In reply to this query, says the *London Timber Trade Journal* amongst the most frequent cases of breakages in band-saws the following may be named :—

The use of inferior blades; unsuitable guage for the size of the saw pulleys; pulleys of machine being of too small diameter; pulley being out of balance, or too heavy; the use of improper tension arrangements; saw running on a hard and unyielding covering saw pulleys, instead of rubber bands; not slakening saws after use, thus preventing the free contraction of the saw-blade on cooling down after work; the framing of machine column being of too light a section, or too high, thus causing excessive vibration; joint in saw not being of same thickness as the rest of the blade; imperfect guides above and below the table; improper method of receiving the back thrust of saw, consequently case-hardening the back of saw-blade, and cracking same; using band-saws with angular instead of with rounded gullets at root of teeth; top pulley overturning saw; working dull saws; feeding up work too quickly to the saw; allowing sawdust to collect on the face of the saw wheel, thus causing it to become lumpy and uneven; operating the band-saw with too heavy a top wheel; stopping or starting a machine too suddenly, especially whilst using a light blade will almost certainly snap a saw in two. When it is considered that a band-saw will run from 6,000 to 9,000 lineal feet per minute, for days and weeks, and every month straight off, without breakage, and when the incalculable number of times that a saw bends over the two pulleys, and then straightens out again, is taken into consideration, it is surprising that band-saws do not break oftener. Their endurance is somewhat marvelous to contemplate. With regard to the second question, spider or velocipede wheels are now being extensively used by some makers, and seem to be a great advantage over the old cast-iron top wheel, and in mills using light saws they are certainly a saving, by preventing the breakage of the saws from the top pulley overrunning saws.

LOGS FOR 1886.

Two weeks ago the *Gazette* expressed the belief that in spite of the improvements in the condition in the woods where logging is going on, by the fall of snow and the steady cold weather it would not be impossible to get a full stock of logs for the Saginaw River mills, so much time having been lost on account of the open weather in December. The same view is now taken by the *Courier* of East Saginaw, which publishes the following rough estimate of the product that is likely to be gathered :

Tittabawassee and tributaries,	375,000,000
Rifle River	70,000,000
Au Gres' main stream	40,000,000
Smaller streams	30,000,000
Total	515,000,000

It may be safely calculated that 175,000,000 feet of railroad logs will come to the river dur the year, and as the foregoing figures show we have 34,300,000 feet of logs in the boom of the several streams, aud 48,279,512 feet of old logs now in the mill boom of the Saginaw river, the total stock for the supply of the mills should every log come out will foot up about as follows:

To be rafted	515,000,000
Railroad logs	175,000,000
Old logs	82,579,512
Total	772,579,512

About 15,000,000 feet of logs will be brought to the Saginaw from Georgian Bay, and probably about 10 000,000 feet will be towed to the river from the upper Peniusular, making a grand total of 797,000,000 feet in round numbers. Under the most favorable circumstances the output will fall short of the capacity of the mills of the Saginaw river 150,000,000 feet.—*Lumberman's Gazette.*

IN A DANGEROUS CONDITION.—Any man, woman or child is in a dangerous condition when neglecting a constipated state of the bowels. There can be no perfect health without a regular action of this funtion. Burdock Blood Bitters cure constipation by imparting a healthy tone to all the secretions

BACKWOODS DEPRAVITY.

While equally beyond reach and control of the influences of civilization, there is a strong contrast between the moral status of the Ottawa lumbering camps and those of Michigan and Northern Wisconsin. In the latter facilities are easy for the exercise of the grossest immorality, and a species of depravity appears to prevail which is wholly foreign to shanty life in the lumbering regions of Ontario. An industrious Detroiter, who has spent several winters travelling in the various camps of the Menominee district, in Northern Michigan, gives the *News* of that city a faithful report of the state of affairs in that section. "Last winter," he says, "there was about 6,000 men distributed through this section getting out the logs for the many companies which carry on winter operations there. They are of every nationality and all ages from young fellows of 18 to old men of 50. In the fall they go into the woods with a spree and in the spring they come out with a spree, which they keep up until the winter's earnings are gone.

"I shall never forget a night I spent in camp about 10 miles from Crystal Falls. There were about 200 men quartered there. It was a bitter cold night in January, and after supper some of the boys being off for a dance, they said, and as the shanty promised little except to tumble into a bunk and battle with vermin, I went with the rest. After a run of about twenty minutes we came in sight of a small clearing. In the centre stood a rudely constructed shanty, tightly enclosed by a high board fence. One of the men pulled a string. Soon after the gate was opened by a big, villaineus looking fellow, and the men followed each other through the narrow yard and into the shanty. The lower floor was one large room. At one end was a platform railed off, where an old fellow rasped a wheezy fiddle while half a dozen girls danced with their partners. A rough bar was at the other end where the old woman of the house served out whisky and cigars of the vilest kind. This woman looked well worn out for 40, but I afterwards learned she was only 26. The fiddler ceased his scraping and the dancers made a rush for the bar. All drank whisky and afterwards the women drank and smoked with the men as often as the treats went around. I observed soon that the custom was that after each dance the man had to treat his partner. The woodsmen from other camps continued to drop in for several hours and the drinking and dancing went on. At one time I counted 35 big, brawny, red-shirted fellows in the room, all taking turns in the dance.

"Of the six girls in the place only one had any marks of youth left in her face. I singled her out and asked her how long she had lived in the woods. In a careless way she related that she had followed her lover from Canada only a few months previous. That is how most of the girls got there, she said. He had brought her out to the place and then had gone away to another camp, and she was left behind because she could not pay her debt to the landlady. She had no hope of getting away before the place broke up in the spring. Even if she could get away she would not know where to go or what to do; besides, the old woman would keep all her clothes. That's what the high fence and the men on watch were for. I soon found that the women were in a living hell, from which their chances of escape were poor indeed. The girl told me that the old woman managed to keep them constantly in debt to her. She charged them for their board, rent for the bawdy short dresses in which they danced, took a percentage of their earnings, and if anything was left over she would charge up ficticious bar bills against them. The victim once caught, away from all civilization and law, is hopelessly in the toils from which she cannot escape until she has laid all her youth and vigor on the altar of sensuality. Many of the girls do not last more than one winter, so hard is their usuage. Girls who go there in the fall, fresh and in the bloom of youth, are turned out old hags in the spring. There is nothing left for them but to die. Those who survive are not acceptable any where except in a lumbering shanty, and then one year's service has detracted so much from their charms that they are pushed to the wall by the later and fresher victims. I have been around the woods enough to know that there are fully one thousand of these dance houses in Michigan and Northern Wisconsin in which there are yearly not less than seven thousand women worn out, and most of them start their mad career under protset. The men who supply the girls are the favored ones, and are all free to them.

"The lumber companies are endeavoring to abate the horrible practice by refusing to accept orders from the men for their pay. This cuts off the supply of cash, and in a few seasons the dance house of the lumbering camps will probably become only a tradition."—*Ottawa Free Press.*

CONTINUED INACTIVITY OF TRADE

The *Timber Trades Journal* of Janury 23rd says:—The dock deliveries, we observe, for 1886, as far as it has gone, compare unfavorably with 1885. Only a short time since we were lamenting 1885 being so short of its predecessor; is this declining tendency still to go on? Let us hope the novelty of the Queen in person opening Parliament will give a spurt to trade in the metropolis that will extend itself as far east as the Surrey Commercial Docks. What is wanted just now is confidence in the uprising of trade, and if those who have money could see a reasonable prospect of things taking a turn for the better, they would launch out, and hasten the very event they are desiring. But in what direction is the improvement to come from if things remain in their present normal state? Are shippers going to curtail their productions to help the timber market, is money to get any cheaper, or is some new goldfield to be discovered ere the lagging trade of the country receives the impetus necessary to bring locked up capital into circulation? As far as the timber trade is concerned there can be little question but that we import much more than we actually require. It is no use looking back a dozen years or so, because then there was a good export trade in the way of transhipments; while very little is now done in that way, the shipments being made direct from the producers to our colonial markets. If the imports to London, and to the outports as well, were limited to two-thirds of what they are for a season or two, the market might recover itself, but the chance of such a thing is not within the bounds of possibility. The forest exhaustion, too, which was made such a mountain of ten years ago, we have heard nothing more about. Judging from what happens at our own doors, we take it for granted that instead of exhausting the forests new ones are being cut into, and practically an inexhaustible and ever-increasing supply is to be the prospect of the future. While this surplusage goes on, with business running in a regular groove, the value of the wood cannot increase, and the efforts required to sustain it at its present level are palpable evidence of its artificial character. Till the laws of supply and demand have been left to their own regulation we shall experience the same state of uncertainty hanging over the market. Of course any new channels of distribution that may be developed will bring about a better state of things, and we are anxious that some extended area of consumption may be discovered, to lessen the strain on prices derived from a chronic over supply, but we must not be too sanguine about such a result happening.

Freights seem to be going anyhow, and the decline first noticeable on the other side of the Atlantic appears to have extended itself to the Baltic. Firewood at 32s. 6d. a fathom, sailing ships, is a contrast to the 45s. of two or three seasons ago.

In America there may be some revival, but the lumber papers speak of it rather as hoped for than confirmed.

It reported that the Canadian Pacific Railway Company has contracted for 25,000 cords of wood and 500,000 ties to be delivered along its lines.

A cedar tree, standing in Middle Branch township, Osceola county, Mich., measures 13 feet 10 inches in circumference 3 feet from the root, and is sound as a nut.

A STUMPAGE AGITATION.

The agitation in lumbering circles in New Brunswick against the excessive stumpage imposed by the Government is widening, and will scarcely end until a change for the better has been brought about. The large lumbermen, who are also sawmill owners in many cases, have a real grievance, and the Government and Legislature will be obliged to recognize the fact and govern themselves accordingly.

It is clearly proven that the stumpage of $1.25 per M feet, board measure, on spruce logs, is out of all proportion to the value. These logs are worth at the mill only about $5 per M feet; they are, of course, worth much less standing in the trees; so that the Government actually exacts more than 25 per cent of the value. Such a tax on an important industry is out of all proportion. Even if the Government were of any assistance to the lumbermen or gave back any portion of this excessive tax in any way, it would still be impossible to continue lumbering at a profit in many parts of that Province, but the Government does nothing of the kind. In fact, its policy is handicapping the lumbermen of the Province in competition with those of other Provinces and countries. The competition with Norway is never ending and the odds are against New Brunswick, but against such competitors as Quebec with its 40 cents stumpage on spruce and Nova Scotia where the Government exacts only 60 cents, how is the New Brunswick lumberman to bear up with his $1.25 per M feet imposition? Moreover, in recent years, when the English timber and deal markets have been growing more and more uncertain, and the legitimate expenses of lumbering have been steadily augmenting, the New Brunswick Government have gone on increasing stumpage from 60 cents per M feet in 1875 to $1.25 in 1885. The business will only stand so much squeezing; beyond that the power of taxation avails nothing. It is easy to say that the lumbermen and the lumber manufacturers must go on, but they can't go on; their resources are not equal to the steady losses which in many cases must be sustained. At the very best their operations must be curtailed, only the choicest territory will be operated upon, and a serious reduction of lumber exports must result. This has been the case in New Brunswick for several years past, and it now remains with the Provincial Government to say how long this drying up process is to last, for the end must come before many years unless the Government and Legislature change their tactics.

We notice that in a recent address in the Northumberland County Council, a councillor from Chatham, Mr. D. G. Smith, took occasion to deal with this subject at length and satisfactorily. The circumstance show that the subject comes home to the people, and we should not be surprised to find it becoming a topic of discussion at most of the municipal gatherings in that Province, where the lumbering business is so universally connected and interwoven with all other industries end business operations. In fact, there more than in most parts of the world the lumberman's industry is the real basis of the country's prosperity or want of prosperity. It sets all other wheels in motion; and now that the shipbuilding business is under a cloud it has become a more important factor in the industrial situation than ever. Hence the interest that is taken in the stumpage question and the importance it is likely to assume at the next sitting of the New Brunswick Legislature. It is one of these questions around which all commercial interests and all local industrial interests will rally.—*Montreal Herald.*

WORK IN THE WOODS.

Mr. Thomas Hale, a well-known Upper Ottawa lumberman, was in the city yesterday, and in answer to a query by a *Press Press* reporter said:—"The prospects for the coming season in the lumber business are good, in fact I may say bright. In the woods everything is going on as well as any reasonable person could expect. On the north side of Lake Nipissing, where I am working, things are quite brisk. I intend to get out about 70,000 logs which will be drawn to the lake, then towed to Mr. J. R. Booth's railway and by that transported to Nosbonsing lake, and then by the Mattawa to the Ottawa river. With regard to square timber, Messrs. Barnet & Mackay are getting out some fine timber on Sturgeon river, as is also Mr. Hugh Coburn. Barnet & Mackay's timber will be brought to the Quebec market by the C. P. R. Further up the railroad line Messrs. Timmins & Gorman are getting out two rafts of square timber which will also be shipped by the C. P. R. Shipping by rail has this advantage over the water route, that it is got very early into the market, and another thing it is not subject to the drawbacks which often follow from a lack of water in driving.

"Is that portion of Nipissing well wooded?" questioned the reporter.

"About the Whanapitae country the pine is of a very good quality, and I may say of almost unlimited extent. In fact, the country may be said to be as yet unexplored, but what has been travelled over is very rich in timber resources."

"You think a large timber trade will be developed up there?"

"It must. The timber is there and the facilities for getting it out are very good, and you may be sure that the country will not be long left unoccupied. Many American lumber companies are casting greedy eyes on the territory, and it would not be surprising if some of these companies would be found operating them next winter. The pine is of good quality and abundant."

"Have you much snow up north?" asked the reporter.

"About two feet, I should judge, and the roads could not be better."—*Ottawa Free Press.*

THE LONGFORD LUMBER COMPANY.

To the Editor of the Canada Lumberman.

Sir,—Having received an invitation from the secretary of the Longford Lumber Company to visit the operations of that company I availed myself of the opportunity. Accordingly I took the Midland railway on Monday morning and arrived at the Longford mills and partook of dinner, and in about half an hour set off with the company's splendid span of brown horses in company with the secretary—who, by the way, is one of our own town boys—who did everything to make my trip comfortable and pleasant. After we set out from the mills we crossed a beautiful little lake called St. John, and then proceeded on our way up the Muck road, to what is known as the company's

"DIGBY FARM,"

24 miles distant. Arriving before dark I proceeded to make an inspection of that fine property. The farm is situated in the township of Digby, county of Victoria: it is composed of some 360 acres, beautifully situated, cornering on the two townships. The buildings on it are a commodious farm house, a fine store and storehouse, capable of storing sufficient grain, meat and other supplies to supply their eight camps; large barns, and immense cattle byres, where they have 90 head of cattle, all good grades, and stables for eight span of horses, an immense piggery large enough to hold 25 to 30 hogs, and also a large henery filled with fowl. The woods manager, Mr. Jas. Porter, lives here and John McRae is in charge of the store and is paymaster for the camps.

AN IMMENSE VOLUME

of business is done, upwards of 14,000 bushels of oats, 250 ton of hay and 35 to 40 ton of pork and beef are annually purchased and paid for in cash, and all kinds of farm produce is readily disposed off by the farmers of the surrounding country, who seem to be exceedingly well satisfied with all their dealing with the company. In addition to the above supplies about 15 car loads of other supplies are brought over the G. T. R. to Victoria Road and thence teamed in to this point some 11 miles.

On Tuesday morning we started north for the

TOWNSHIP OF LONGFORD.

At 10 o'clock we arrived at the first camp and a right royal welcome we received. Mr. N. Whalen has charge here, and after many years of practical experience he seems to have his part in first-class shape, and his drawing well in hand, expecting to be through about the middle of February. The next camp was then visited, Mr. P. Dwyr is forman, he is well along

with his work. Having partaken of an excellent dinner we proceeded to the next camp, having to cross a nice large lake before arriving at M. Murphy's camp, where we spent the night. Arriving early here we pushed off to see part of the work of loading the big one beam sleighs with immense saw logs off tremendous skidways. We were informed here that this camp will produce some of the largest and finest logs cut this year in the township. We enjoyed camp life in good earnest during the night and next moring set out on our journey to camp 4 managed by Mark Hartley. Here we found one of the most

COMPLETE AND PICTURESQUE

places to be seen in that country; the camp buildings are situated on the shore of a lovely little lake and everything looked so tidy and comfortable it would make anyone enjoy a meal with a relish in such a lovely spot. After an inspection of his roads and drawing to the dumping ground on Brown's Lake, and having partaken of dinner, we started down the lake to Thos. Archer's camp at the mouth of a creek where the logs from this section enter, when being driven in the spring to the main river. On this creek the company have

ERECTED TWELVE DAMS

capable of holding back sufficient water to run the creek with ease. We stopped over night with Mr. Archer and in the morning started for Mr. A. Ross' camp, which we reached about ten o'clock. We passed over several of his roads and saw a number of fine roads got out at this camp. We passed over a very rough piece of rocky country to the next camp managed by B. Pearson, where we partook of an excellent dinner, having seen a very large number of his logs on our way down the creek, which we followed some twelve miles, arriving at a junction south where it enters the west branch of the Black river, which we crossed and took our way north on the old Victoria road to N. Tallman's camp, where we remained for the night. On our arrival at this camp we got aboard of a pair of immense one beam saw log sleighs and visited some large skidways of fine logs and followed them to the dump on Black river. Friday morning we started on our homeward trip via Digby farm to Longford Mills, after being absent from home one week. After this description of this unmense concern, which to my mind is the most compact and complete in every department of its management, your readers will no doubt be glad to know something of the

OUTPUT OF THIS COMPANY,

which I will try to give you a faint idea of.

The number of logs cut in the eight camps and by four jobbers is about 150,000 pieces, which are being measured and counted by two competent cullers, Mr. Geo. J. Overend and Mr. Edward Adair. One very important feature is the accurate manner of marking the logs. It is done in this way: Each camp is numbered, viz., 1, 2, 3, 4, 5, 6, 7 and 8, and each foreman marks his logs with hammers of his own number, so that the management may detect any logs not properly taken out and the foreman is accordingly held responsible.

This company is managed

ALL BY YOUNG MEN

who are native born boys of Peterborough. The president is Mr. Wm. Thomson, and one of the directors Mr. Geo. Thomson, with Mr. Maxwell Hall as secretary.

In addition to this concern the same directorate manage two large farms and another large company known as the Rama Timber Transport Company, of Rama, Ont. To the pluck and energy of the directorate, together with good sound judgment and an army of the most faithful men it has ever been my lot to meet with, belong the success of these gigantic enterprises. Hoping, Mr. Editor, I have not wearied you with my long letter, I am,

YOUR CORRESPONDENT.

Peterborough, Jan. 1st, 1886.

TWENTY or thrity years ago, walnut wood was cut up into fence rails or even sold as fuel to steamers in Western Ontario. Now, when our forests are denuded of it, and it is worth from $30 to $140 per thousand feet, dealers are glad to buy the walnut fence rails, seasoned by 20 years exposure, and to make them into legs, spindles or backs of chairs.

Chips.

THE log cut at Machias river, Me, will this year amount to 12,000,000 feet.

MR. W. H. LAKE, who has for many years been in charge of Eagle Mill at Rossmore, has been appointed manager of the Rathbun Company agency at Picton.

IN making the halfpenny bundles of wood £250 000 is paid annually in the shape of wages, 20,000 persons being actively employed in the work in the metropolitan district.

CHICAGO agents are in Door county, Wisconsin, offering 16 to 20 cents for cedar railway ties, delivered on the piers of that locality, and 26 to 38 cents delivered in Chicago. This is an advance of three to four cents on the price of last year.

EIGHT years ago 5,000 acres of pine land on Salt river, Mich., was purchased for 62½ cents an acre. The purchaser took 40,000,000 feet of logs off the land, and finally sold it for one dollar acre. That's how pine land owners get rich.

TWO Germans of Wabash, Ind, were loading logs in the woods near there when a log rolled back on Jacob Christman and caught him by the hips. His companion, unable to move the log any other way, rolled it over his body and head, inflicting fatal injuries.

ENGLISH oak has lately been exported to New York, selling there at 20 cents a foot; but our cousins have "Englished" or "doctored" a lot of American oak, and it would puzzle an expert, says the *Manufacturer's Gazette*, to tell the two woods apart; and the local wood can be sold for five cents.

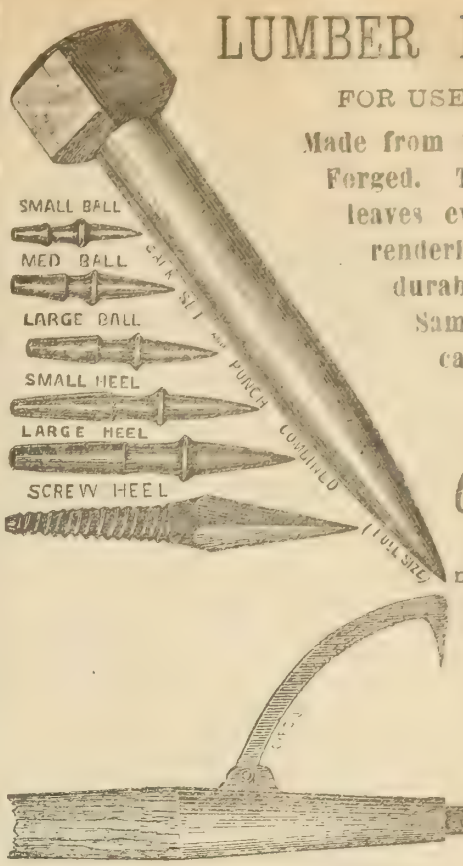
ADRIAN NELSON, of Little split Rock, Lake Winnipeg, Manitoba, has written a letter to the *Free Press*, Winnipeg, Manitoba, correcting a former statement made by himself that there was no Norway pine on the east side of Lake Winnipeg. He now says that there are forests of very fine trees, but they do not stand thickly on the ground. He thinks that thorough exploration will disclose the fact that there are extensive belts of Norway pine that touch the lake at different points.

A VERACIOUS writer in the American *Rural Home* tells that "in the lumbering camps of Canada" the men eat ants in lieu of pickles. The lumbering camps of Canada are run during the winter, and, admitting that lumbermen like ants better than pickles, perhaps the veracious correspondent of the *Rural Home* will tell us if it is not a little rough on the ants to make them walk around on the top of two or three feet of snow, for the purpose of being caught and eaten.

ON January 22nd, C. W. Richardson, F. W. Gilchrist and W. H. & E. K. Potter purchased of a Mr. Smithson, of Chicago, a large tract of pine timber in the Province of Ontario, Canada, on the north shore of Lake Huron. It is limit No. 169, a tract six miles square, or a township, containing between 100,000,000 and 150,000,000 feet of timber. The parties named each own a third. The purchase price was $75,000. Including this last purchase about $400,000 has been invested by Alpena parties in Canadian pine within a year.

Catarrh—A New Treatment.

Perhaps the most extraordinary that success has been achieved in modern science has been attained by the Dixon treatment for Catarrh Out of 2,000 patients treated during the past six months, fully ninety per cent. have been cured of this stubborn malady. This is none the less startling when it is remembered that not five per cent. of the patients presenting themselves to the regular practitioner are benefitted, while the patent medicines and other advertised cures never record a cure at all. Starting with the claim now generally believed by the most scientific men that the disease is due to the presence of living parasites in the tissues, Mr. Dixon at once adapted his cure to their extermination; this accomplished the Catarrh is practically cured, and the permanency is unquestioned, as cures effected by him four years ago are cures still. No one else has ever attempted to cure Catarrh in this manner, and no other treatment has ever cured Catarrh. The application of the remedy is simple and can be done at home, and the present season of the year is the most favorable for a speedy and permanent cure, the majority of cases being cured at one treatment. Sufferers should correspond with Messrs. A. H. DIXON & SON, 305 King street west, Toronto, Canada, and enclose a stamp for their treatise on Catarrh.—*Montreal Star.* 1y12,



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THE

Orono Cant Dog

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Market Reports.

TORONTO.

From Our Own Correspondent.

FEB. 9.— Trade, considering the severe weather of the past two weeks, has been fair; wholesale dealers, in fact, have been able to dispose of the greater part of their stocks as fast as it came in by rail. More especially has this been the case in regard to cutting up and better, 1½ in. and 2 in., much more of this class of lumber could be disposed of if it could be obtained. Enquiries from the west have come in freely since the present month opened. Several American buyers have also put in their appearance lately, but as predicted in some of my previous letters, we have nothing to sell of the class of lumber they require. Everything in the shape of good cuts and better is shipped out from the mills and factory men will have to keep their dry kilns in operation until the new stock is in fit condition to ship.

It is generally conceded that the outlook for the spring trade is good, although brick building cannot be pushed forward until late in the spring, as bricks are entirely run out, and builders will have to wait until the first kilns are burnt.

The larger part of the wholesale dealers have taken a step in the right direction by resolving not to break up car loads. This will give the retail men a much better chance and the wholesalemen will be better off at the end of season. Car load lots when piled off by the track side and broken up rarely hold out in measurement and sometimes disappear entirely, perhaps not in all cases by direct theft, but hauled away by mistake for other lumber, but unfortunately the mistake is rarely found out and rectified. Retail men also have hitherto been able to get parts of cars, but under the present rule if they desire any part of a car load they will have to purchase the entire load in order to obtain the particular portion they desire. It only remains for the wholesale men to go a step further and let the retail men do the entire trade with the consumer. There would be nothing lost by taking this additional step. The same amount of lumber would be disposed of and in a more satisfactory way, and the retailers by reason of better trade, or more of it, would be in better shape to meet their engagements with wholesale men.

Prices remain at the yards about the same, except on dressing and better plank, the latter will command from $3.00 to $4.00 per M above former quotations, owing, of course to its present scarcity. Bill stuff will likely advance 50 cents per M with the opening of the spring work, this being the advance now on car load ots.

Mill cull boards and scantling	$10 00
Shipping cull boards, promiscuous widths	12 00
" stocks	13 00
Scantling and joist, up to 16 ft	13 00
" " " 18 ft	14 00
" " " 20 ft	15 00
" " " 22 ft	16 00
" " " 24 ft	17 00
" " " 26 ft	18 00
" " " 28 ft	19 00
" " " 30 ft	20 00
" " " 32 ft	21 00
" " " 34 ft	22 50@22 50
" " " 36 ft	24 00
" " " 38 ft	27 00
" " " 40 to 44 ft	30 00
Cutting up planks to dry	20 00@25 00
" boards "	20 00
ound dressing stocks	16 00@18 00
Picks Am. inspection	30 00
Three uppers, Am. inspection	35 00@40 00
B. M.	
1½-inch flooring, dressed	25 00@30 00
1½ " " rough	14 00@15 00
1½ " " dressed	23 00@25 00
1½ " " undressed	14 00
1 " " dressed	16 00@20 00
1 " " undressed	12 00@14 00
⅜ Beaded Sheeting, dressed	18 00@20 00
Clapboarding, dressed	12 50
XXX sawn shingles, ℔ M	2 75@ 2 90
Sawn Lath	2 25
Red oak	20 00@25 00
White "	25 00@30 00
Basswood, No. 1 & 2	18 00@20 00
Cherry, No. 1 & 2	50 00@60 00
White ash 1 & 2	25 00@30 00
Black ash 1 & 2	20 00@25 00

OTTAWA.

From Our Own Correspondent.

FEB. 8.—The chief lumbermen of this district are awakening to the fact that there is competition in the field which will have a tendency to reduce their profits and curtail their operations in no inconsiderable manner. I refer to the export of unsawn lumber from the Nipissing and Lake Superior section to the saw mills in Michigan. I had a talk with several of the prominent men in the trade on this subject, and they give it as their opinion that unless an export duty is placed on all crude lumber taken out of Canada their prospects will be seriously crippled. "We don't object," said one well known Ottawa river lumberman, "to Americans, or American capital coming in here, for the more money comes in the better for the country, but we do strongly object to these men coming in here, cutting logs and exporting them to their mills on the other side, without paying one cent into the revenue of the country, while the lumber which we export we have to pay a high duty on. This is uufair to us and we shall do all in our power to bring this matter before parliament as soon as convenient after the session opens. The way things stand now we are materially handicapped, and I think the Dominion Government should place an export duty of $3 per thousand feet on all crude lumber shipped out of the Dominion. For some time past Michigan millowners have been quietly buying up untouched timber limits on the Nipissing and Lake Superior section with a view to supplying their mills. Their own forests are thinned out, and looking around for new fields they have selected the sections I have named on account of their convenience. Several of these American companies have already secured valuable limits on the Whanapitae river alone, and own hundreds of miles of territory over which they can operate. One of these companies, the Emery Lumber Company, have a very large limit on the stream referred to, and are now putting out logs to the number of 70,000. As the stream is particularly easy of driving no difficulty will be experienced in getting them into Georgian Bay. The company have had two barges specially constructed for the transportation of these logs. These barges will be 500 feet long and 50 wide, and will be loaded with an endless chain, similar to that used in a saw mill. The motive power will be supplied by a small engine. The deck of these barges will be elevated, and on arriving at the Bay City booms the sides of the barge can be lowered so that the process of unloading can be done very expeditiously. Each of these barges are capable of carrying from four to five thousand logs in one cargo. This process," continued the lumberman, "gives them a great advantage. We have to drive our logs and other timber for hundreds of miles, construct costly improvements for the purpose of forwarding the work, and even then run the risk of having the logs stuck and our capital lying idle for a year, while these American firms are certain of getting their logs to the saw, and at an early date in the season. This, with their not paying any export duty, gives them an unfair advantage over us which should be remedied, and we are bound to bring all the pressure we can on the Government to protect the native industry of the Ottawa Valley. If these men erected mills on their limits and sawed the lumber here, giving employment to Canadian labor and making a market for Canadian produce, it would be all right enough. But to strip our forests of their best timber, and pay nothing for the privilege, save the price for the limit, is asking too much."

The feeling is very strong amongst the Ottawa river lumbermen just now on this question, and most likely the Dominion Parliament will be called upon to devise a scheme whereby the lumber industry may be protected against foreign competition.

WINNIPEG.

The *Commercial* says:—There has been no factor of any kind to induce a movement in this trade. No building operations are being gone on with at present, and there is no apparent disposition to anticipate wants for the future. Consequently business is dead, so far as any present movement is concerned. Some shipments were made to the new stations along the lately constructed railway lines, but these are now about supplied. The next move will probably be towards far western points, where the building season commences considerably earlier than in Manitoba.

LIVERPOOL.

The *Timber Trades Journal* of Jan. 30th says:—With the exception of the interest created by the public sales of this week, the trade has evidently relapsed into the same dreary groove in which it ran so long last year, and from the general run of conversation there is not likely to be any material change in it for some time to come.

Importers do not seem disposed to contract for cargoes to arrive, and it is probable that sellers will experience quite as great difficulties as they have already done in placing future supplies upon the market.

There is a general opinion amongst the leading merchants and bankers that some signs of improvement in trade are discernible in America, and as such a movement is not unfrequently followed on this side, there may be better times in store for us at no distant date, but the timber trade is generally the last to participate in any upward movement.

Then again, this market is likely to be fully supplied with pitch-pine and spruce during the coming season, which with the sufficient stocks on hand, will tend to keep prices down to a low level. If your neighbors in Manchester could only get their Ship Canal scheme floated and their set works going, we should, no doubt, participate in the general spending of the money, as a considerable quantity of timber of one kind or another will necessarily be used during and in its construction. At present, however, the necessary funds do not seem to be forth coming with that rapidity its sanguine promoters expected. Many of your readers will be acquainted with the old-established timber yard of the late firm of Messrs. Thomas Bryde and Son, of Grenville Street, in this city, which we see is to be sold by tender, including the and goodwill. It has been carried on for about three-quarters of a century, and is well known in the North and Midland districts for its high reputation in wainscot, mahogany, and other furniture goods.

LONDON.

The *Timber Trade Journal* of Jan. 30th says, The gathering at Messrs. Churchill & Sims' sale on Wednesday last was one of the largest that we have seen this year, the regular London trade being augmented by a good sprinkling of county buyers, who, however, by the few provincial names that we recognise opposite the prices, came with the expectation of getting what they wanted at much lower prices than actually ruled. Not that prices took a high range; on the contrary they were on the same depressed scale to which we have so long become accustomed, and which the news of transfer of power from the Royal Commission on Trade to the party pledged to internal reforms is hardly likely to assist. The chief attraction on the first day was the Quebec pine, and the red descriptions, ex Persia we consider sold remarkably well. The yellow pine was not particularly choice, and the 2nds bright 2in., ex Suffolk we reckon realized fully what they were worth. The 1st boards ex Florida, a transhipment at £28 15s. and £29, we cannot find much fault with on the score of value, though the current price for similar description direct from Quebec to the docks stands at £32 10s which holders experience no difficulty in obtaining. It makes all the difference whether goods of this high class have been picked over or not. The parcel in the West India Docks, ex Kalliope 13 ft. best regulars, for rather fresh goods of this kind 1sts are now realising £28, and 2nds £19; so that the sale-buyer after all has very little pull.

Timber sold rather low; the square pine logs 33 ft. long and upwards being knocked down to one buyer at 75s. per load is not so bad considering the slackness of the demand and the quantities in the dock ponds. Waney also was cheap at 55s. to 57s 6d. Ash and elm prices also harmonise with the dull state of trade, and show no recovery.

Uleaborg goods are generally well represented in Messrs Churchill & Sims' sales, but on Wednesday the parcels offered were almost entirely batten sizes. Lathwood seems to rally, and most of the lots submitted reached £5 5s.

Flooring was active, inch being particularly so, but the recorded prices do not show much benifical result, 1st Christiania yellow 1x7 falling at 9s 6d., and 3rd Soderham red at 7s. 3d., while a lot of Sundswall of this quality, J.A E. mark fetched only 6s. 6d. There are plenty of bidders at a price; you see a crowded room and an apparent anxiety to secure what is offered, but if you happen to ask an acquaintance why he stopped short at a low figure when another 3d. would have to secure the goods—the invariably answer is, "Let them go; I don't want them." They attend to buy in the hopes of getting something they may have a call for much under value, not because they are short of the stock they bid for. All are not like this but that undoubtedly is the position of the majority of the trade.

Thursday's sale fell very flat; there was nothing like the attendance of the previous day, and the bidding lacked spirit throughout. Perhaps when the flooring was submitted there was a little more life imparted to the sale, but prices ruled low throughout. There was the same readiness to secure the lots going, but only at a low limit, which bidders very seldom exceed. It was plain that the bidding was not stimulated by any actual want of the stuff, and had no backbone in it.

GLASGOW.

The *Timber Trades Journal* of Jan., 30th, says:—A cargo of teak timber at Greenock is the principal arrival we have to note for the week; other wood imports consisting of small parcels of staves &c., at Glascow per steamers. Two auction sales have taken place, one of log timber, chiefly at Greenock, and the other at Glasgow, the goods offered consisted of deals, and also included some Yeymouth birch timber for which, however, there were no bidding.

Notes of prices is appended; a quiet demand was experienced at these sales, and of the goods offered only a small portion was sold.

For a number of the lots withdrawn their was bidding, which, however, did not come up to a figure acceptable to the brokers; there were some sales made afterwards privately.

The transactions publicly at the sale of deals here were chiefly Miramichi pine deals, the stock of which, as is well known, is comparatively low.

AUCTION SALES.

On 21st inst., at Greenock, Messrs. Allison Cousland & Hamilton, brokers:—

		per c. ft
Quebec waney boardwood		s. d.
53 cub. ft. av. per log		1 8
Quebec square boxwood (1st class)—		
49 cub. ft. av. per log		1 10
Quebec Yellow pine—		
55 cub. ft. av. per log		1 3½
9 logs, 593 ft.		1 1½
Quebec red pine—		
35 cub. ft. av. per log		1 0½
31½ " "		1 0½
Quebec ash—		
31 cub. ft. av. per log		1
Hewn pitch pine—		
17 logs 1,552 ft.		1 1½
Quebec 1st yellow pine deals—		
11 to 23 ft.	7/16×3	2 0
Quebec 1st yellow pine deal ends—		
7 & 8 ft.	7/19×3	2 1
Quebec 1st yellow pine deals—		
6 ft	7/18×3	2 2
5 "	7/20×3	1 8½
Quebec 4th yellow pine deal ends—		
4 to 8 ft.	7/19×3	0 10

On 27th inst., at Glasgow, Messrs, Humber, Shea & Co., brokers:—

		Per
Michigan 1st pine deals—		s.
14 ft.	14/16×3	3
Miramichi, N. B., pine deals—		
14 to 24 ft.	11×3	0 11½
12 & 13 "	11×3	0 11½
10 " 11 "	11×3	0 11
10 to 24 ft.	10×3	0 10½
12 & 13 "	9×3	0
10 " 11 "	9×3	0 10
10 to 24 "	8×3	0
15 " 26 "	7×3	0
13 " 14 "	7×3	0
12 "	7×3	0
10 " 11 "	7×3	0
Miramichi spruce deals—		
18 " 24 ft.	11×3	0 10
St. John, N. B., spruce deals—		
19 ft.	11×3	0 10½
12 "	9×3	0 9½
9 to 10 "	9×3	0 8½
Weymouth hemlock deals—		
10 to 17 ft.	10×3	0 7½

CHICAGO.

AT THE YARDS.

The *Northwestern Lumberman* says:—The weather for the past week has been particularly unfavorable to trade. If there was any previous tendency to revival, the snowstorms and cold wave were sufficent to check it. The yards now look dreary and unbuisness-like in their mantle of snow. As a general thing no attempt has been made to keep all the alleys clear or shovel the snow off the piles. The snow has come for a month past in a succession of heavy and light falls alternating, with some thawing and freezing, so that the snow is exceedingly solid, and to a large degree resembling ice more than snow. The accumulation in the alleys and roadways has been packed as hard as pavement almost, so that it will require many days of warm weather to render the yards easy to work in.

Yet there has been a steady call for lumber all winter. Many dealers say that their sales during January were considerably in excess of those of January 1885. The demand has been like the dropping of a slow rain in May—hardly noticeable, but coming a little all the time. Dealers who make a specialty of supplying yards with assortments state that they have had a good wagon trade all winter—better than usual at this season. This shows that there has been a constant distribution; for yards do not need a replenishment of assorts when there is no trade. It likewise shows that there is a scarcity of special kinds of dry lumber, and that a sudden start of trade in the latter part of this month, or the first of March, would render this shortage of dry stock still more pronounced; for the winter has not been favorable to drying lumber.

The demand for car-building stuff has served to keep a little life in winter trade. This call does not take a wide scope in yard stock, but it enables dealers to work off short white pine strips and Norway two-inch common for decking, and Norway clear strips for lining, at good prices, often at an advance on corresponding, grades for other purposes. This demand is still well maintained, and gives no sign of abatement. It has already been sufficient to nearly clean out of market the specialities called for, and prices have lately stiffened.

There begins to be a little stir in the thick lumber market. The movement eastward is increasing, and the call from the sash and door factories is beginning to be felt. No fear need be entertained by the holders of thick selects and uppers. There is not such a surplus of these classes of lumber in the country at large as to lead to apprehension of a decline in prices, while an advance is possible.

The movement of lumber to eastern points is increasing, as can plainly be seen by the large sprinkling of eastern line cars in the make-up of trains. The slight reduction of eastwise freight rates may have acted as a stimulus to movement in that direction, and it is barely possible that heavy shippers are getting rates lower than the open ones.

Country yard men are not yet making violent effort toward the replenishment of their stocks. The winter has been against them and their farmer customers. Roads are blocked with snow in some sections, the weather has been extremely cold, and prices of grain are so low that farmers feel poor. Yet enquiries for estimates begin to come, and in such a number as shows trade in the near future. A few days of mild weather would bring new life into the district

The question of spring prices is now a vital one to holders of lumber and intending purchasers. As a general statement, wholesale dealers are insisting on firmer prices than prevailed last fall. Of course the pertinacity of their grip will be fully tested only when the traveling men take the road. At the present it is safe to say that values range from 75 cents to $1 a thousand higher than they were last fall. There may be exceptions to this general rule, but as yet trading has been too light for such exceptions to make the market. Sellers to the local trade insist on firm prices on dry lumber for assortments. There can be no motive for serious cuts in prices, unless some house catches a fright at imaginary evil in prospects, and resolves to unload. In such a case there is no stopping a man in his wild career. One house has resolved to go out of business on May 1. There will probably be others, but such determination is yet to developed. The fewer spring close outs there are the easier it will be to maintain prices.

Receipts of lumber and shingles, for the week ending Feb. 4th as reported from the Lumberman's Exchange:—

	RECEIPTS. Lumber.	Shingles.
1886	3,936,000	883.000
1885	3,234,000	952,000

FROM JAN. 1, TO FEB. 4 INCLUSIVE.

	RECEIPTS. Lumber.	Shingles.
1886	17,092,000	5,449,000
1885	11,643,000	4,057,000
Increase	5,449,000	1,592,000

STOCK ON HAND JAN. 1.

	1886.	1885.
Lumber & timber	626,692,473	623,910,097
Shingles	348,313,350	332,533,611
Lath	95,653,678	88,160,599
Pickets	4,446,752	2,528 738
Cedar posts	1,962,947	397,825

EASTERN FREIGHT RATES.

FROM CHICAGO AND COMMON POINTS ON CAR LOAD LOTS OF HARD AND SOFT LUMBER.

IN EFFECT NOV. 1.

To New York	30c.
Boston	35c.
Philadelphia	2[illegible]c.
Baltimore	28c.
Washington	28c.
Albany	28c.
Troy	28c
Buffalo and Pittsburgh	15c.
Shenectady	28c.
Wheeling	15c.
Suspension Bridge	15c.
Salamanca	15c.
Black Rock	15c.
Dunkirk	15c.
Erie	15c.
Toronto	15c.

ALBANY.

Quotations at the yards are as follows:—

Pine, clear, ₩ M	$53 00@55 00
Pine, fourths	48 00@50 00
Pine, selects	45 00@47 00
Pine, good box	22 00@33 00
Pine, common box	11 00@13 00
Pine, 10-in. plank, each	00 42@00 45
Pine, 10-in. plank, culls, each	00 23@00 25
Pine boards, 10-in	00 28@00 32
Pine, 10-in. boards, culls	00 16@00 20
Pine, 10-in. boards, 16 ft., ₩ M	28 00@32 00
Pine, 12-in. boards, 16 ft	28 00@32 00
Pine, 12-in. boards, 13 ft	28 00@00 00
Pine, 1½ in. siding, select	40 00@43 00
Pine, 1¼-in. siding, common	15 00@18 00
Pine, 1-in. siding, select	40 00@42 00
Pine, inch siding, common	13 00@15 00
Spruce, boards, each	00 00@00 16
Spruce, plank, 1¼-in., each	00 00@00 20
Spruce, plank, 2-in., each	00 00@00 30
Spruce, wall strips, each	00 12@00 12
Hemlock, boards, each	00 00@00 14
Hemlock, joist, 4x6, each	00 00@00 32
Hemlock, joist, 2½x4, each	00 00@00 14
Hemlock, wall strips, 2x4, each	00 00@00 11
Black walnut, gook, ₩ M	100 @120 00
Black waluut, ⅞ inch	80 00@90 00
Black walnut, ¾ inch	00 00@85 00
Scaymore, 1-inch	28 00@30 00
Scaymore, ⅞-inch	21 00@23 00
White wood, 1-inch and thicker	38 00@40 00
White wood, ⅞-inch	28 00@30 00
Ash, good, ₩ M	40 00@43 00
Ash, second quality, ₩ M	25 00@30 00
Cherry, good, ₩ M	60 00@85 00
Cherry, common, ₩ M	25 00@30 00
Oak, good, ₩ M	40 00@43 00
Oak, second quality, ₩ M	20 00@25 00
Basswood, ₩ M	25 00@30 00
Hickory, ₩ M	40 00@40 00
Maple, Canada, ₩ M	28 00@30 00
Maple, American, per M	26 00@28 00
Chestnut, ₩ M	38 00@40 00
Shingles, shaved, pine, ₩ M	0 00@ 6 50
" 2nd quality	0 00@ 5 00
" extra, sawed, pine	4 30@ 4 50
" clear, "	0 00@ 3 00
" cedar, mixed	0 00@ 3 30
" cedar, XXX	0 00@ 0 00
" hemlock	2 25@ 2 37
Lath, hemlock, ₩ M	0 00@ 2 20
Lath, spruce, "	0 00@ 1 30

OSWEGO, N.Y.

From Our Own Correspondent

Three uppers	$42 00@46 00
Picking	32 00@35 00
Cutting up	24 00@26 00
Fine Common	22 00@25 00
Common	14 00@18 00
Culls	11 00@14 00
Mill run lots	16 00@22 00
Sidings, selected, 1 in	30 00@35 00
" 1¼ in	32 00@36 00
Mill run, 1x10, 13 to 16 ft	16 00@21 00
Selected	21 00@24 00
Shippers	14 00@16 00
Mill run, 1¼x10	17 00@20 00
Selected	21 00@30 00
Shippers	14 00@16 00
Mill run, 1 & 1¼ in, strips	15 00@18 00
Selected	22 00@30 00
Culls	11 00@13 00
1x6 selected for clapboards	25 00@35 00
Shingles, XXX, 18 in. pine	3 10@ 3 50
XXX Cedar	2 75@ 3 00
Lath 1½, No 1	1 80@ 1 90
No 2	1 00@ 1 25

TONAWANDA.

CARGO LOTS—MICHIGAN INSPECTION.

Three uppers	$42 00@44 00
Common	18 00@24 00
Culls	10 00@18 00

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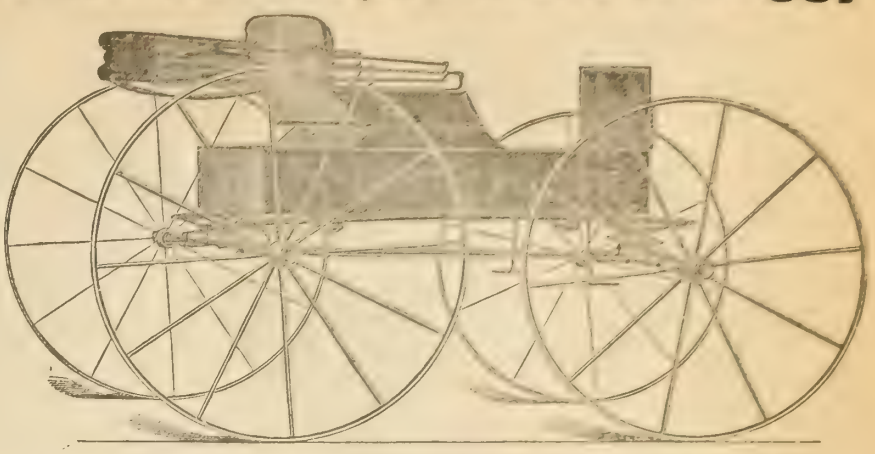

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Circular and Consultation Free.

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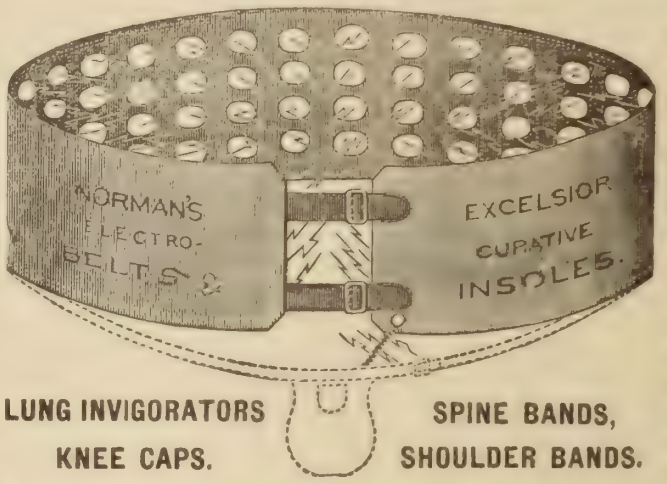

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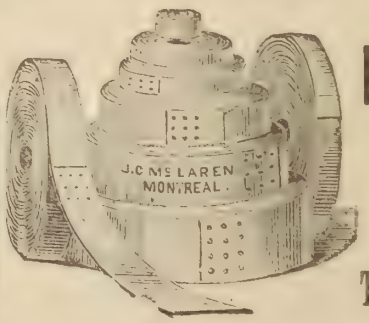

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It has a circulation among saw mill owners, manufacturers, lumber and timber dealers and all classes connected with the timber business.

Examine the field, count the cost, and you will at once decide that the CANADA LUMBERMAN is the

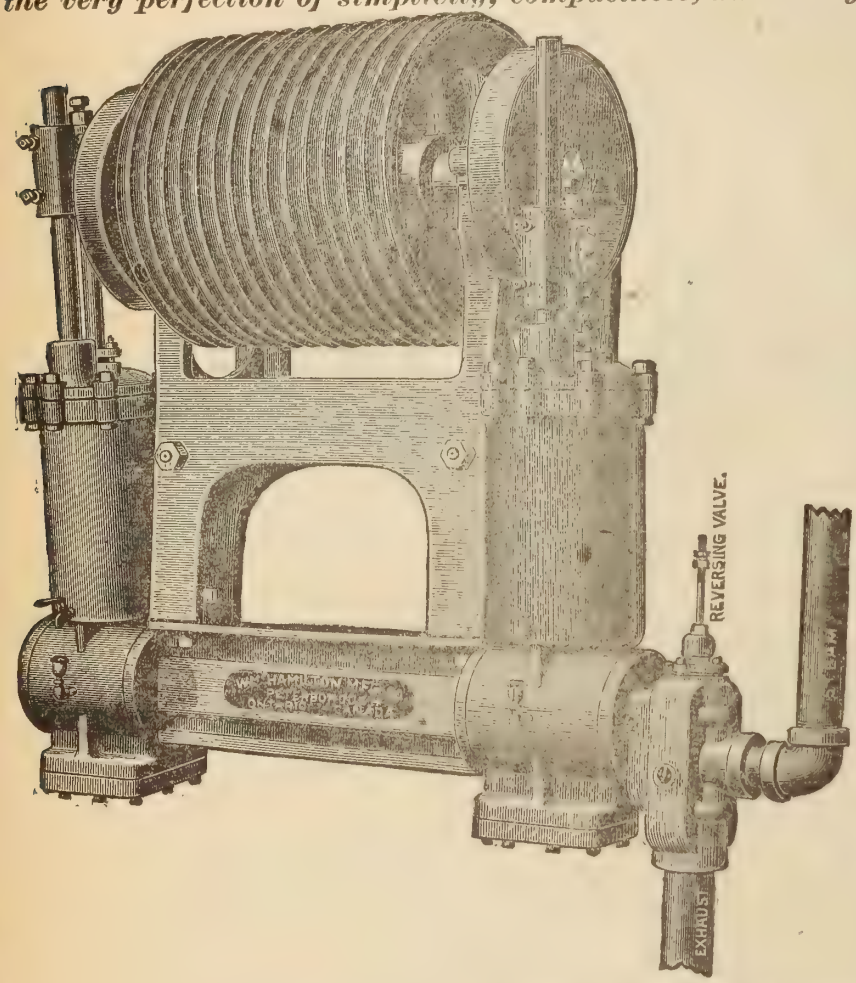
——CHEAPEST, BEST, MOST RELIABLE and ONLY TRUE MEDIUM——

for placing your goods or wares before the saw-mill men and lumber and timber dealers of the Dominion.

CUNNINGHAM'S
PATENT OSCILLATING TWIN ENGINE

FOR STEAM FED IN CIRCULAR MILLS WITH RACK OR ROPE.

This Engine has practically but two moving parts, aside from cranks and shafts. The whole array of eccentrics, valves, valve rods, connecting rods, cross heads, slides, levers, rock shafts, bell cranks, etc., is done away with, and the very perfection of simplicity, compactness, durability and cheapness attained.



The above engraving illustrates the Twin Engine, 10x16, for Rope Feed, for Saw Mill Carriages. The spool is 27 in. diameter, 30 in. face, is grooved 2 in. pitch for $1\frac{1}{2}$ in. rope. The shaft is steel, $4\frac{1}{2}$ in. diameter, with disk cranks. No connecting rods, eccentrics or valve rods to get loose and out of order. The ports are in the trunions, and worked by an oscilliation of the cylinders, and are held in their place in the downward motion by a steam cushion below. The sawyer's valve is a perfect balance, and by moving this valve the engine can be reversed, stopped or started almost instantaneously if necessary, as the sawyer has perfect control of it by his lever either to go fast or slow. Should the sawyer let go of his lever either by mistake or any other cause, it is balanced so that the valve will come to the centre and cut the steam off both cylinders and stop the feed. When standing, the lever is locked or fastended, so that is is impossible for it to start off itself. The engine stands upright below the carriage, and bolted to two upright beams, placed on the mill for the purpose. When a rack is preferred in place of the rope, we put on a steel wheel 30 in. in diameter, and the engine placed high enough to work into the rack on carriage bar, or if the beams come in the way, an idler wheel can be used between engine and rack segs; or, the engine can be placed at a distance and have a shaft from it to the carriage; or it can be placed in the engine room, where it is under the control of the engineer for oiling, thence by shaft and pinion to carriage rack bars. These engines are well adapted for cutting long logs, or where the logs are mixed, the advantage of this feed will be apparent to mill men. When the carriages are used in two or more sections, the coupling and uncoup ling of each section is quick and simple.

There were two of these feeds working this summer and giving the best of satisfaction, one with rope feed at James Playfair & Co's Mill, Sturgeon Bay, near Waubaushene, and one at the new mill furnished by us to Francis Carswell & Co., at Calabogie Lake, on the Kingston and Pembroke R. R. This mill is working with the Rack and Pinion feed, and drops from fifteen to seventeen stock boards per minute. We have also sent one to the Rathbun Company, Deseronto, to put in to feed their heavy Circular Mills. They will also commend themselves for various other cases, especially for running Elevators, hoisting Engines, and wherever a simple and easily reversible motion is required.

We would also call attention to our Improved Hand Saw-Mill for cutting logs

☞*We guarantee this to be the best Mill of its kind got up, and would ask any one wanting a good Band Saw-Mill to communicate with us. We would also call the attention of Mill Men to our new IRON GANGS, CIRCULAR MILLS and MILL MACHINERY. For further information, prices, &c., address the Manufacturers,*

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NORTHEY & CO'S STEAM PUMPS, TORONTO, ONT.

Pumps for Fire Protection a Specialty.

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Our Combined Boiler Feed and Fire Pumps are a NECESSITY IN EVERY WELL ORDERED STEAM MILL or FACTORY.

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Cheaper than any Pump built.

Our Independent AIR PUMPS and Condensers will effect a saving of 30 to 50 per cent. when applied to high pressure Engines.

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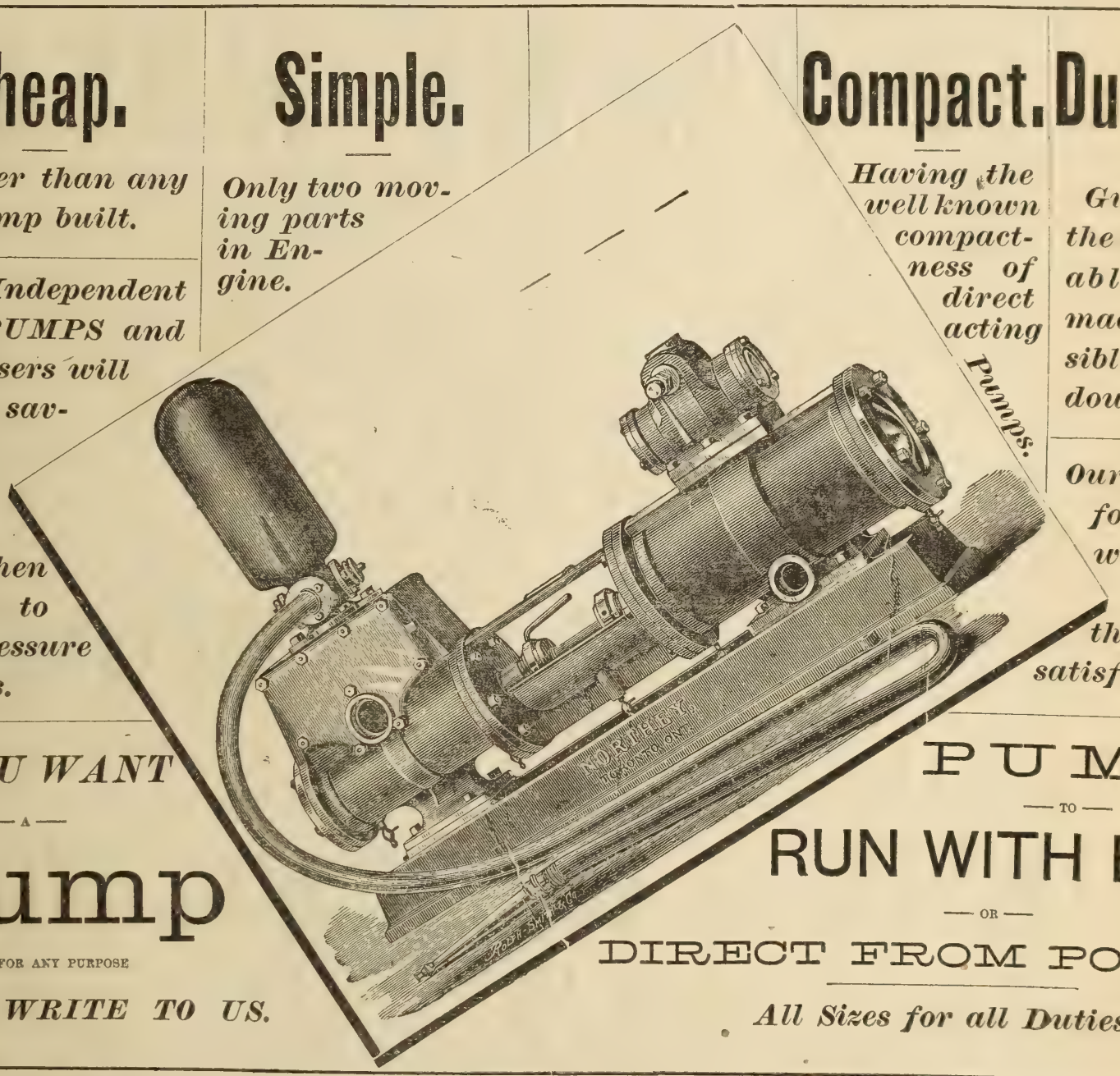
Only two moving parts in Engine.



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Having the well known compactness of direct acting Pumps.

Durable.

Guaranteed the most durable Pump made; impossible to break down.

Our PUMPS for general water supply give the greatest satisfaction.

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FOR ANY PURPOSE

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PUMPS

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RUN WITH BELT

— OR —

DIRECT FROM POWER

All Sizes for all Duties.

Our make of Pump is specially adapted to Mills in out of the way places, as they can be absolutely relied on, and occasion no vexatious stoppages for repairs.

WE INVITE CORRESPONDENCE ON ANY POINT CONNECTED WITH PUMPS.

SEND FOR CIRCULAR AND STATE YOUR REQUIREMENTS.

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STROUDSBURG,

MONROE COUNTY PENNSYLVANIA, U.S.

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AND SHARPENING MACHINERY.

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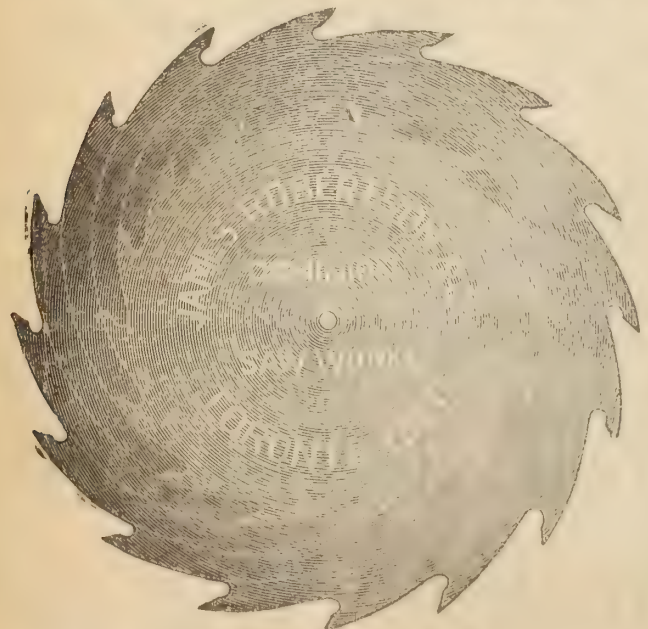

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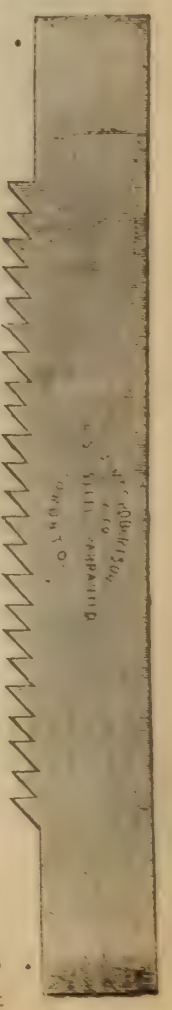

THE CANADA LUMBERMAN

AND MILLERS' MANUFACTURERS AND MINERS GAZETTE.

PUBLISHED SEMI-MONTHLY.

The only Newspaper devoted to the Lumber and Timber Industries published in Canada

SUBSCRIPTION $2.00 PER ANNUM

VOL. 6. PETERBOROUGH, ONT., MARCH 1, 1886. NO. 5.

FORESTRY AND FOREST PRODUCTS.

The importance of "Forestry and Forest Products" is beginning to receive that recognition to which the subject is entitled. We have received from Mr. Douglas, the well-known bookseller of Edinburgh, a copy of a work recently published by him, bearing the title quoted above. The volume, edited by Messrs. John Rattray, M. A., B. Sc, and Hugh Robert Mill, B. Sc., is the result of the public spirit displayed by the promoters and managers of the Exhibition of Forestry held two years ago in Edinburgh. Prizes were offered by them for essays on matters connected with the science it was their purpose to illustrate and advance. Out of the material supplied by the successful competitors, the editors of this work have succeeded in producing one of the most valuable contributions to the literature of woodcraft, in all its ramifications, that perhaps was ever laid before the public. The volume is alike comprehensive and succinct, and will, when a few corrections have been made, undoubtedly come to be regarded as invaluable text-books by the students in that School of Forestry which, sooner or later must inevitably be established. The subjects dealt with are numerous and varied in their nature, and have deep interest not alone for botanists and experts in a knowledge of trees, but for those who are concerned in the development of the timber trade, and industries immediately connected with that important branch of commerce. The work comprises essays on the formation of nurseries and plantations, the utilization of forest products, the supply of timber, the ravages of forest insects, the present and prospective sources of the timber supplies of Great Britain, the growth of teak in India and Burmah; paper making from wood, and a "monograph" on the natural history and cultivation of the lacquer tree, by a Japanese gentleman who is chemist to the Imperial Geological Survey of his native land. Bearing in mind the fact that a Committee of the House of Commons has been appointed to collect facts and opinions, and that a scheme will probably be submitted to Parliament during the present session with a view to insure systematic instruction in scientific and practical forestry, it will be admitted that the appearance of this volume is singularly opportune.

With reference to the present and prospective sources of timber supplies of Great Britain, Mr. Robert Carrick, of Gefle, Sweden, has much to say in an elaborate essay on the subject. On one point of peculiar interest he observes:—

"Hewn and sawn yellow pine is a most valuable description of timber, and when of the finest grades is unrivalled for many purposes, such as house building and other wood-work. It has been largely and continously imported into this country for over fifty years, and a fully equivalent substitute will be difficult to find. The White Sea red wood approaches nearest to it in point of quality, but the latter, in addition to its smaller dimensions and greater knottiness, has other defects that diminish its value in comparison with the former. The quantity of hewn yellow pine received at the principal port from which we receive our supplies (viz., Quebec) was, in 1876, about 19,243,733 cubic feet, whereas, in 1883, it was but 11,108,557 cubic feet; or taking average for the years 1871 to 1875 inclusive, it exceeded 14,000,000 cubic feet per annum: while for the last five seasons, 1879 to 1883 inclusive, it was but 8,412,654 cubic feet. On the other hand the supply of yellow pine deals to Quebec has not decreased in so pronounced a manner, for although in 1876 it reached 278,363 loads, and only 147,979 loads in 1883, the average of the last five years was 187,187 loads, against 238,731 loads on an average for the five years ending with 1880. Such figures, in conjunction with the history of the quantity exported of late years, bear abundant evidence to the fact that a diminished quantity is available for export to Europe."

Another matter of the highest moment is dealt with in this essay. In discussing the duration of the yellow pine forests of Canada in relation to the timber supply of this country, the writer remarks:—

"The question is fast becoming one of but secondary importance to our timber consumers, as far as the lower qualities of the wood are concerned. In spite of the fact that prices have been steadily rising in Canada for the growing wood, and that a diminished supply has at the same time been brought to this country, the prices obtainable here at present, and for some years past heve left no commensurate profit to the exporters. The conclusion, therefore, to which a diminution in evport points is: that, except for a small quantity of prime yellow pine, a substitute for which cannot be found in Europe, Great Britain is economically unable to pay a price equivalent to what the United States can do, and must consequently be content to see the latter country intercepting an ever-increasing proportion of this fine wood. To make this clear, reference may be made to the attempt which was made in connection with the last census of the American Republic to ascertain the quantity of mature yellow pine then existent in that country and ready for the axe. Professor Sargent, who had charge of this part of the census, reported in 1882 in these words: 'The entire supply of white pine growing in the United States, and ready for axe, does not to-day greatly, if at all, exceed 80,000,000,000 feet; and this estimate includes the small and inferior trees which, a few years ago, would not have been considered worth counting. The annual production of this timber is not far from 10,000,000,000 feet, and the demand is constantly and rapidly increasing."

It is a reproach to the "Old Dominion" if the neglect of a due regard for the requirements of statistical science charged against the officials by Mr. Carrick, is really founded in fact. On this point he says:—

"As far as we are aware, no systematic attempt has been made by the Canadian authorities to reduce to figures the available quantities of mature spruce now growing in New Brunswick, Nova Scotia, and the immense forest belt before referred to, which lies between the Ottawa river basin in the west and Mingan in the east. All these districts, however, according to Mr. Joly, late Premier of the Province of Quebec, contain immense quantities of spruce, and it seems likely that there will be sufficient for many years' home consumption, unless it be swallowed up by the United States, after the people of that territory have used up all their own yellow pine and spruce."

In further support of the opinion expressed regarding the abundance of timber, the essayist observes:—

"The immense area of nearly primæval forest possessed by British Columbia must also be referred to, because, although not directly of importance to the timber consumers of this country, it will in the future doubtless relieve the North of Europe from what would otherwise become a very heavy demand from our fellow-subjects beneath the Southern Cross. That the requirements of Australia have already reached large proportions will be apparent from the fact that, with the exception of Great Britain, no country is now buying more Norwegian planed wood than the colonies of that continent. The most important tree in British Columbia is the Douglas fir."

It is gratifying to learn from an essay on "Paper Pulp from Wood, Straw and other Fibres, in the Past and Present," by Mr. W. J. Stonhill, of London, editor of the *Paper Trade Review*, there are grounds for believing that in British possessions where the cultivation of sugar no longer forms a profitable branch of industry, another is likely to supersede it. He says:—

"There is still a probability of the British sugar-growing possessions being of value as a field for the supply of paper stock. The fact that in 1884 capital is forthcoming to re-open the industry in Demerara—it failed in Jamaica—should remind the paper trade of the publicly expressed opinions of Thomas Routledge. In his early career, paper-makers were just as dubious concerning the possibilities of esparto, yet its advantages are admitted on all sides, and but for its very low price in 1883 many mills would never have been able to tide over the almost ruinous sudden advance in the cost of bleach. Fortunately esparto fell about £2 per ton (quoting from Ide and Christie's circular), equalizing £4 per ton of paper produced, whereas the increased cost of bleach per ton of paper was a shade less, even at the high 'scare price. This fact should induce paper-makers to be less reluctant to experiment in any direction where there is a large and regular supply fo neglected raw material containing a good fibre."

The economic aspect of the subject, has not been strongly dwelt upon by the writer, on the ground that it must be considered, when the question of the future staple material for paper comes under review. Mr. Stonhill's concluding remarks on this branch of industry, however, deserve careful attention:—

"If the British paper trade is not to suffer severely, many authorities assert that it will be necessary to fall back upon some raw material of home growth, which can be supplied cheaply and in any quantity. Straw, and straw only, meets the requirements of the case. By Lennings new chemical process for treating straw, the details of which are not made public, although its efficacy is vouched for by satisfactory authority, paper can be produced from straw which is hardly to be distinguished from that manufactured from cotton rags; and it can be made from about £12 a ton, not taking into account the saving produced by recovery of the chemicals employed. This process is now being adopted at a large Kentish mill, and if the published cost of manufacture be correct, it cannot be doubted that the system must introduce great and most beneficial changes in the British paper trade."

Further notice of this useful and compendious volume must stand over to a future day. Members of the timber trade, and the public at large, however, will gather from a perusal of the foregoing remarks upon, and extracts from, its pages, that the work is of considerable importance as an aid to the correct understanding of forestry in all its ramifications.—*Timber.*

Art and Design in Manufactures.

At the late meeting of the Dominion manufacturers' association it was decided to offer three silver medals for competition in the art schools of the Province, for the purpose of encouraging art design in relation to manufactures. At a meeting of the executive committee of the association, held yesterday afternoon, the schools and subjects were decided upon. The first medal will be given for competition among the students of the Toronto school of art and design; subject, best design in wall paper. The second medal will be offered to the Hamilton school of art and design; subject, best design of wrought-iron fence suitable for public buildings. The third medal will be offered to the London school of art and design; subject, best desgn of mantel and over mantel in wood.—*Tororto Mail.*

THE Pullman Car Works pay $600 per thousand feet for rosewood.

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Patent Cedar Rib Canoes, Patent Longitudinal Rib Canoes, Basswood Canoes, Folding Canoes, Paddles, Oars, Tents, etc., etc.

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SAW MILL DOGS

The Sawyer's Favorite

For Holding Logs upon a Saw Mill Carriage while being Sawn into Lumber.

These Milldogs I guarantee to give satisfaction in every case. They will hold a frozen log as well as a soft one, for cutting Scantling, Square Timber, &c. These Dogs cannot be excelled, I sell them all on their own merits, give ten or fifteen days trial, and then, if not satisfactory, return them to my order, as I have no agents on the road this year, I will sell them at a reduced price. Send for Circular and price list.

Manufactured by HUGH GIBSON, CHATHAM. EXCELSIOR DOG.

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THE CANADA LUMBERMAN.

THE UPPER OTTAWA.

The directors of the Upper Ottawa Improvement Company propose collecting for the year 1886 the following rates of toll :—

THROUGH DES JOACHIMS BOOM.

	Per Piece.
Saw logs, 17 ft. and under	1-10 cent.
Red and white pine, tamarac, spruce and hemlock, round or flatted, over 17 ft. and under 25 ft. long	2-15 "
do do 25 to 35 ft. long	1-6 "
do do 35 ft. and upwards in length	4-15 "
Red and white pine, tamarac, spruce and hemlock, square	2-5 "
Oak, elm, and other hardwood, square or flattened	3-5 "

THROUGH FORT WILLIAM BOOM.

Saw logs, 17 ft. and under	½ "
Red and white pine, tamarac, spruce and hemlock, round or flatted, over 17 ft. and under 25 ft. long	½ "
do do 25 to 35 ft. long	5-12 "
do do 35 ft. and upwards in length	⅝ "
Red and white pine, tamarac, spruce and hemlock, square	1 "
Oak, elm, and other hardwood, square or flatted	1½ "

THROUGH MELONS CHENAIL BOOM.

Saw logs, 17 ft. and under	1-10 "
Red and white pine, tamarac, spruce and hemlock, round or flatted, over 17 ft. and under 25 ft. long	2-15 "
do do 25 to 35 ft. long	1-6 "
do do 35 ft. and upwards in length	4-15 "
Red and white pine, tamarac, spruce and hemlock, square	2-5 "
Oak, elm and other hardwood, square or flatted	3-5 "

PASSING LAPASSE BOOM.

Saw logs 17 ft, and under	1-10 "
Red and white pine, tamarac, spruce and hemlock, round or flatted, over 17 feet and under 25 ft. long	2-15 "
do do 25 to 35 ft. long	
do do 35 feet and upwards in length	4-15 "
Red and white pine, tamarac, spruce and hemlock, square	
Oak, elm and other hardwood, square or flatted	"

THROUGH IMPROVEMENTS IN MISSISSIPPI CHENAIL, CHATS RAPIDS AND QUIO BOOM OR ANY OF THEM.

Saw logs, 17 feet and under	1 "
Red and white pine, tamarac, spruce and hemlock, round or flatted, over 17 ft. and under 25 ft. long	1½ "
do do 25 to 35 ft. long	1⅞ "
do do 35 feet and upwards in length	2⅝ "
Red and white pine, tamarac, spruce and hemlock, square	4 "
Oak, elm and other hardwood, square or flatted	6 "

THROUGH IMPROVEMENTS FROM DESCHENES TO HEAD OF HULL SLIDE, NORTH SIDE.

Saw logs, 17 ft. and under	¾ "
Red and white pine, tamarac, spruce and hemlock, round or flatted, over 17 ft. and under 25 ft. long	1 "
do do 25 to 35 ft. long	1½ "
do do 35 feet and upwards in length	2
Red and white pine, tamarac, spruce and hemlock, square	3 "
Oak, elm, and other hardwood, square or flatted	4½ "

THROUGH IMPROVEMENTS IN THOMSON'S BAY.

Saw logs, 17 ft. and under	1 "
Red and white pine, tamarac, spruce and hemlock, round or flatted over 17 ft. and under 25 feet long	1½ "
do do 25 to 35 ft. long	1⅞ "
do do 35 ft. and upwards in length	2⅝ "
Red and white pine, tamarac, spruce and hemlock, square	4 "
Oak, elm, and other hardwood, square or flatted	6 "

THROUGH IMPROVEMENTS IN LIMEKILN EDDY.

Saw logs, 17 ft. and under	¼ "
Red and white pine, tamarac, spruce and hemlock, round or flatted, over 17 ft. and under 25 ft. long	½ "
do do 25 to 35 ft. long	5-12 "
do do 35 feet and upwards in length	⅝ "
Red and white pine, tamarac, spruce and hemlock, square	1 "
Oak, elm, and other hardwood, square or flatted	1½ "

THROUGH THE BOOM BELOW THE OUTLET OF HULL SLIDE.

Saw logs, 17 ft. and under	1-5 "
Red and white pine, tamarac, spruce and hemlock, round or flatted, over 17 ft. and under 25 ft. long	4-15 "
do do 25 to 35 ft. long	½ "
do do 35 feet and upwards in length	8-15 "
Red and white pine, tamarac, spruce and hemlock, square	4-5 "
Oak, elm, and other hardwood, square or flatted	1 1 5 "

The directors also propose collecting for the year 1886, the following boom working expense rates :—

THROUGH DES JOACHIMS BOOM.

	Per Piece.
Saw logs, 17 ft. and under	1½ cent.
Red and white pine, tamarac, spruce and hemlock, round or flatted, over 17 ft. and under 25 ft. long	2 "
do do 25 to 35 ft. long	2½ "
do do 35 ft. and upwards in length	4 "
Red and white pine, tamarac, spruce and hemlock, square	6 "
Oak, elm, and other hardwood, square or flatted	9 "

THROUGH FORT WILLIAM BOOM.

Saw logs, 17 ft. and under	1 "
Red and white pine, tamarac, spruce and hemlock, round or flatted, over 17 ft. and under 25 ft. long	1½ "
do do 25 to 35 ft. long	1⅞ "
do do 35 ft. and upwards in length	2⅝ "
Red and white pine, tamarac, spruce and hemlock, square	4 "
Oak, elm, or other hardwood, square or flatted	6 "

THROUGH ALLUMETTE BOOM.

Saw logs, 17 ft. and under	1 "
Red and white pine, tamarac, spruce, and hemlock, round or flatted, over 17 ft. and under 25 ft. long	1½ "
do do 25 ft. to 35 ft. long	1⅞ "
do do 35 ft. and upwards in length	2⅝ "
Red and white pine, tamarac, spruce and hemlock, square	4 "
Oak, elm, and other hardwood, square or flatted	6 "

THROUGH MELONS CHENAIL BOOM.

Saw logs, 17 ft, and under	1 "
Red and white pine, tamarac, spruce and hemlock, round or flatted, over 17 ft. and under 25 ft. long	1½ "
do do 25 to 35 ft. long	1⅞ "
do do 35 ft. and upwards in length	2⅝ "
Red and white pine, tamarac, spruce and hemlock, square	4 "
Oak, elm, and other hardwood, square or flatted	6 "

THROUGH IMPROVEMENTS IN MISSISSIPPI CHENAIL, CHATS RAPIDS AND QUIO BOOM, OR ANY OF THEM.

Saw logs 17 ft. and under	1 cent.
Red and white pine, tamarac, spruce and hemlock, round or flatted, over 17 ft. and under 25 ft. long	2⅝ "
do do 25 to 35 ft. long	3½ "
do do 35 feet and upwards in length	5½ "
Red and white pine, tamarac, spruce and hemlock, square	8 "
Oak, elm, and other hardwood, square or flatted	12 "

THROUGH IMPROVEMENTS IN THOMSON'S BAY.

Saw logs, 17 ft. and under	1 cent.
Red and white pine, tamarac, spruce and hemlock, round or flatted, over 17 ft. and under 25 ft. long	1½ "
do do 25 to 35 ft. long	1⅞ "
do do 35 ft. and upwards in length	2⅝ "
Red and white pine, tamarac, spruce and hemlock, square	4 "
Oak, elm and other hardwood, squaie or flatted	6 "

This tariff of tolls, etc., was approved by His Excellency the Governor General in Council, in pursuance of the Act 38 Vic., chap. 77 (1875), on Feb. 17th.

SLEEPLESS NIGHTS, made miserable by that terrible cough. Shiloh's Cure is the remedy for you. For sale by Ormond & Walsh, druggists, Peterborough.

had been a miserable sufferer from dyspepsia and tried all known remedies and the best of medical skill of my acquaintance, but still grew worse, until unable to eat anything without great suffering, or do any kind of work. I began to think there was no hope for me, and that I must surely die; when like a drowning man catching at a straw, I determined to give McGregor's Speedy Cure a trial, I at once began to improve so rapidly that in two months I was as well as I had ever been in my life.—Wm. Evers, Leamington. Sold by J. McKee, druggist. Free trial bottles.

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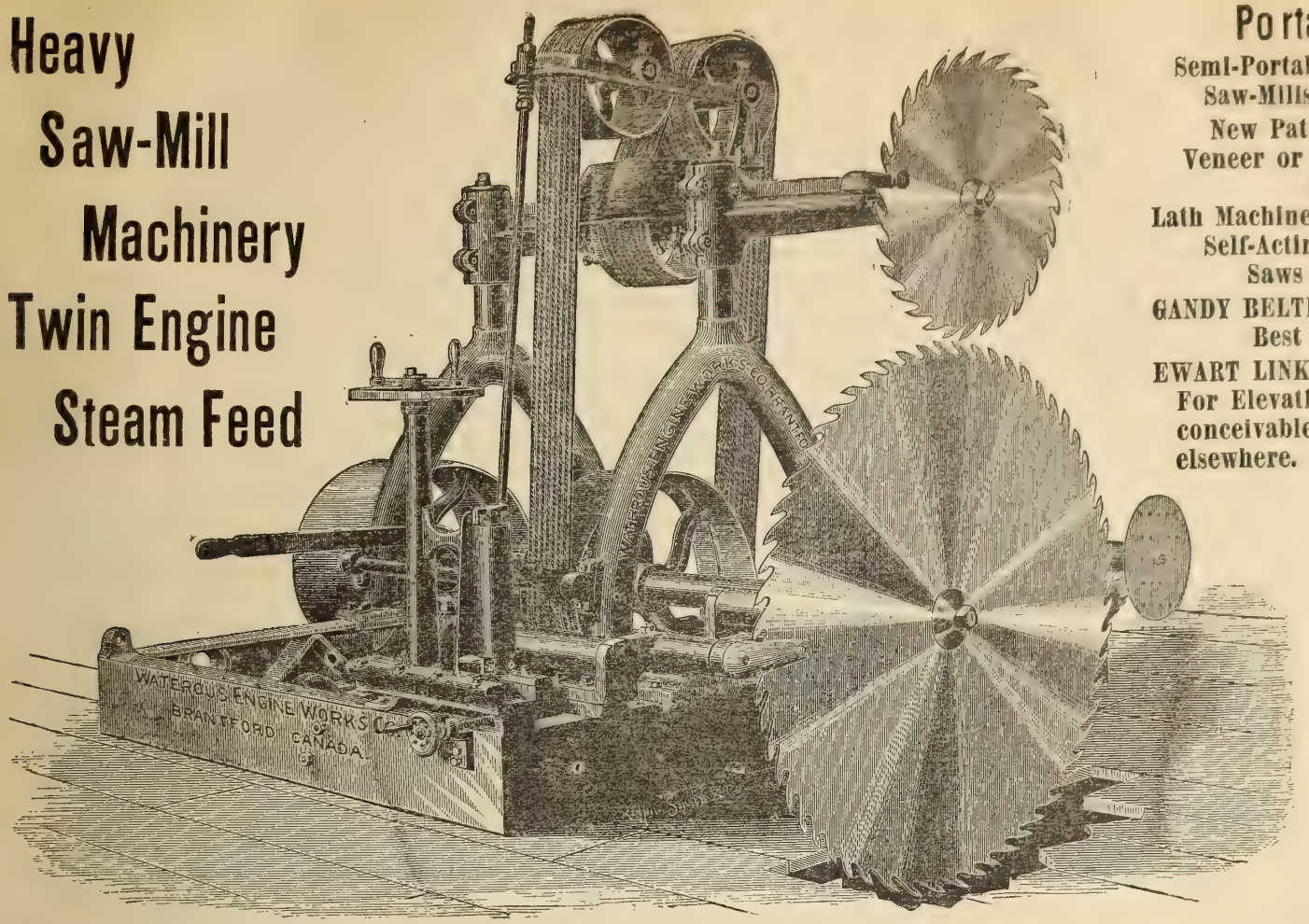
Twin Engine
Steam Feed



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MONTREAL.

Waterous Engine Works Co., Brantford and Winnipeg

THE FIRST TRADE RETURNS OF THE NEW YEAR.

The Timber Trades Jaurnal of Feb. 13th says—Whatever our hopes, our wishes, and opinions in social life, in politics, or in trade, if the outside facts that bear upon them will not adapt themselves to our theories, we have only to reconcile our ideas to the facts, and make the best we can of them

It was a pleasant anticipation that the new year was to bring us a revival of business. The depression in trade was to run itself out with the termination of 1885; and even men of experience and authority did not refrain from committing themselfes publicly to the opinion that the dawn of a better day was already breaking ere Christmas was well over our heads. But what do we see now? Here are the Board of Trade returns for January before us, and they tell the same tale of retrogression that was related of every month last year. 1885 was a year of declining trade all through in comparison of '84, which itself was also a year of lessening business. But this January, in our over sea trade, is nearly £8,000,000 behind the January preceding. There is, however, one redeeming point in our estimation, and that is that the bulk of the falling away has been in the import department, which has receded in the past month to the extent of £6,685,966. In our exports, if we include foreign goods re-exported, the decrease is stated to be £1,181,637, total £7,867,603. Now, the average decrease per month, last year, in the value of our exports, amounted to nearly £1,700,000, so that there was an appreciable check to the rate of diminution at least to the extent of £500,000 last month, which is a sort of peg to hang a hope upon. And it is rather strengthened by the con-current circumstance that the volume of business done is almost as great as it was twelve months ago, but at a less valuation on account of the retrogression of prices; from which it may also be argued that, although the difference is chiefly taken from the the wages of the people, it does not necessarily follow that they are thereby thrown out of employment. If the same quantity of goods is turned out, the same labour, or nearly so, must be employed to produce them. The misfortune is that the workmen have to submit to smaller pay. Hence the strikes and lock-outs. When an employer finds that he is undersold in the market, though at his current price he is hardly, to use a homely phrase, "getting salt to his porridge," he has no alternative but to reduce his expenditure or to close his works, and the ready money outflow being that which pinches hardest, it is very naturally that which demands the first restraining hand.

A constantly dimishing banking account, where a less and less balance is found with every returning Monday morning, is a state of things that cannot be trifled with, and one of the best masters in the world, like that poor unfortunate Frenchman, M. Watrin, at Decazeville, the other day, may, in trying to save his firm from ruin by reducing the people's wages, become all at once as unpopular as if he had been a persecutor of them all his life long.

In 1884 and 1885 our oversea trade decreased by about £77,000,000, export and import together that is in two years. But last month it decreased by £7,867,603 which is at the rate of £94,000,000 for one year. So that to those who regard our imports as the best standard of prosperity this will be a severe shock, as five-sixths of the deficiency falls to the import department. On the other hand it may be fairly argued that a suspension of certain imports is a good ground for hope of a trade revival. When stocks here are allowed to run off before a general replenishing comes forward, a sharp reaction may be expected to occur, as the demand will then exceed the supply, and we can always get goods from abroad when we want them. But the decay of our export trade offers us no consolation of that sort. Foreign tariffs and foreign competition with our manufacturers are increasing as shown by the statistics, which are constantly coming forward in the daily papers and the leading class journals.

The importation of Spanish lead, for instance has almost annihilated that industry at home, as we learn from *Iron*, of last week, and now it seems they are sending hematite pig-iron into Staffordshire cheaper than it can be manufactured on the spot. They have long been accustomed to send the ore here, which is really good, and was used both in the Welsh and in the north-country iron works; but in a crude form of manufacture they now presume to dare our ironmasters to compete with them, and the result may be most disastrous to that important British industry. Not very long ago it will be remembered by buyers, that lead was worth over £20 per ton, and 30,000 people were said to be employed in our lead mines. But the Spaniards found by a few experiments that they could send their lead into England at a much less price, and do well by it, and the export from Spain to this country now is near 100,000 tons per annum. The most of our lead mines are consequently closed, while those remaining are said to be working without profit and employing but few people. It is true the price has come down to £12 15s., and the Spanish lead is offered at 10s. less. But, wherever the benefit of this reduction goes, the consumer shares very little of it, as the price of leaden pipes and fittings in the building trade appears to be very little reduced; so that a whole British industry is asserted to have been sacrificed for no appreciable benefit to the public at large. And the worst is that the iron trade is now threatened in much the same way, as the cases are precisely similar. For it is self-evident that if the Spanish ironmasters can offer rich hematite pig cheaper than the Cleveland masters, there is nothing to prevent them from turning that branch of the iron trade away from our mining districts, just as they have done with their lead.

We shall only remark on this topic that with so many people clamouring for employment among us, it must be well worth the careful study of our rulers to try and find how best such a state of things may be remedied, and that with as little delay as possible. The timber trade may have some trifling benefit from the cheapening of lead, but it is likely to be much more damaged by the ruin it has brought on a standard national industry.

To sum up the Board of Trade general returns, they amount to this: that our imports for January were valued at £25,501,930, as against £31,903,003 last year as same date; and our exports were to the amount of £17,212,781, against £18,109,525 in 1885.

Of the timber trade importation at this early period it is not customary to take much account, but as we have to exhibit the returns as they come out, a few words may not be inappropriate on introducing them.

The state of this interest for the past month, as regards importation, sympathizes with the general returns, in exhibiting a decrease in comparison of the same month in either of the two preceding years. But when we consider the sort of weather which has prevailed, we are more surprised that so much has come forward than so little. As customary at this period of the year, the arrivals of hewn timber exceed those of sawn and split, but altogether the quantity that came into the United Kingdom during January only amounted to 104,854 loads, against 135,903 last year, and 137,941 loads in 1884. Of staves there is some increase, but of mahogany, also, the quantity imported is smaller by several cargoes; and nothing has yet come forward to interfere to any appreciable extent with the stocks already in the hands of the dealers. The severity of the weather up to the present date is likely to put back the Norway spring trade by at least a fortnight, which will be favourable to the holders of stock at home, and is likely to enable them to get clear of their winter storage at fair prices before the shipping ports are in full business for the coming season.

The *role* is to furnish information from which our readers can draw their own conclusions. But the old precept may occasionally be suggested "It is good to make hay while the sun shines," and to part with your timber goods when you can get a fair profit on them, at all events, the chance is very likely to occur during this and the next month; but alter that the shrewdest calculator may find himself all at sea. No one can safely predict what turn the trade will take when all the ports of the Gulf of Bothnia and those of our Canadian possessions are clear of ice, and their shipping season fairly begun, which, from a trading point of view, may as yet be rather a remote contingency. But we may reasonably expect that there will be a good deal of business dong in Norway, and the lower ports of the Baltic, before May comes round. Let us hope that another month will exhibit the trade as visibly improving.

WEST'S Pain King works like a charm in relieving pain in the stomach, all bowel difficulties and cholera. No traveller should be without it. Should always be in the house. Cost but 25 cents. Sold by J. D. Tully, Druggist.

WHY WILL YOU cough when Shiloch's Cure will give give immediate relief Price 10 cts, 50 cts. and $1. For sale by Ormond & Walsh, druggists, Peterborough.

A CHANGE.

The circular announcing the retirement of Mr. Henry White Castle, from the old-established firm of Browning, Castle & Co., of Aldhurch Yark, is already in the hands of the rade, but will not take anybody by surprise, he contemplated dissolution having been known or some time past. Mr. Castle was connected rith the firm for the past 24 years, and has herefore established some claim to resign usiness duties after such a long spell of commercial activity. The retirement, however, be ond altering the title of the firm, which will in uture be Browning & Co., will bring about no ther change, the business being continued by he remaining partners in the usual way. These will be Mr. W. Browning, Mr. H. A. Mott, and Mr. J. G. Drummond. We understand the firm have already made their usual Quebec purchases, following the plan which luring the past few years they have adopted of ecuring large proportions of some of the leading stocks in Canada. We wish the firm under ts new arrangement every success, and hope hat the time will be favorable for them in the rosecution of their large and increasing trade. —*Timber Trades Journal.*

LUMBER LEFT OVER.

The *Lumbermuns' Gazette* says:—A statement of the amounts of lumber on hand, logs held over, logs put in 1884-5, the cut of 1885 and the intended cut of 1886, has been issued by E. S. Hotchkiss, secretary of the Lumber Manufacturer's Association of the Northwest. The figures, it is stated, were obtained from reports made by manufacturers only and supplemented by estimates in about a dozen instances, where reports could not be obtained from individuals. The secretary's statement says it is probable that 10 per cent. added for admissions would no more than cover the multitude of small operators from whom no reports were obtained, but in one instance, at least, his figures are greatly in excess of what they should be, He places the amount of lumber over in 1885 on the Saginaw river at an even 100,000,000 feet more than was reported by the manufacturers to the *Lumberman's Gazette* for the statement published January 6th, this year, and there is about the same excess in the amount for 1884. The amount of lumber reported on hand on the Saginaw river in 1884 was 449,000,000 feet, and the amount reported on hand at the close of 1885 was 329,000,000, including vmount sold, some 68,000,000 feet, and the amount held for the car trade, some 60,000,000 feet. We give the totals of the amount on hand in the different states of the northwest, for what they may be worth, hoping there is not such an excess at other points as on the Saginaw river:—

LUMBER CARRIED OVER.

	1884.	1885.
Michigan, lower Peninsula....	1,540,303,201	1,265,244,526
Michigan upper Peninsula....	101,028,201	143,655,800
Wisconsin	814,179,564	916,221,775
Minnesota	515,068,000	515,162,000
Iowa (Mississippi river).....	327,175,000	323,630,639
Illinois (Mississippi river)..	75,650,000	62,200,000
Missouri (Mississippi river).	57,000,000	99,000,000
Total.....	3,450,404,365	3,325,105,690

LOGS FOR 1886.

The statement gives the amounts of logs left over and the intended cut of 1886 at the various points, and suggests very properly that allowance must be made for the operations of outside parties who are not mill owners and have not reported. There are comparatively few of them in Michigan, but they abound in Wisconsin and Minnesota, and the Mississippi river mills depend upon such operations largely for their supplies. Following are the reports:—

	Logs over 1886.	Intended cut, 1886.
Michigan, lower peninsula.....	236,450,000	2,944,500,000
Michigan, upper peninsula	89,370,000	480,000,000
Wisconsin.....	281,333,000	1,511,950,000
Minnesota	55,684,800	535,523,300
Iowa mills (Mississippi river..	116,519,670	141,000,000
Illinois mills(Mississippi river..	27,845,231	26,000,000
Missouri Mills (Miss. river)..	12,070,480	24,500,000
Totals.....	819,273,206	5,561,473,300

The total amount of logs over in 1884 in the states named was 1,266,066,176.

LUMBER MANUFACTURED IN 1885.

The report of lumber and shingles manufactured in 1885 in the states named is undoubtedly somewhat below the total cut of the year. Many small mills exist at outside points the products of which can not well be obtained.

The report of Secretary Hotchkiss gives the following figures to which he suggests an addition of 10 per cent:—

	Lumber.	Shingles.
Michigan, lower peninsula....	2,985,493,097	2,350,627,000
Michigan, upper peninsula....	545,264,589	188,587,000
Wisconsin	1,884,814,753	1,051,604,350
Minnesota	882,053,908	338,573,080
Iowa	550,509,432	226,018,000
Illinois	134,200,000	29,689,750
Missouri	48,656,000	18,300,000
Total.....	7,030,901,779	4,203,399,180

MICHIGAN HARDWOODS.

It is a very common thing to find in the columns of the contemporary press, says the Michigan *Tradesman*, exhaustive articles deprecating the rapid destruction of the pine timber in northern Michigan, accompanied by startling statistics showing that, at the present rate of denudation the supply of pine will be practically exhausted in a few years. While in many instances these statistics and conclusions are very wide of the mark, there is pith in the main idea underlying them, and ample material for reflection. But the apostles of forestry in their eagerness to inveigh against the wholesale conversion of pine forests into lumber, too often overlook a species of waste which is infinitely more mischievous than the operations of the pine industry, viz., the waste of hardwoods by the logging operations of settlers. If this destruction were confined to legitimate lumbering processes the case would at least have mitigating features. But in many instances the waste is purely wanton; and wanton waste is under all circumstances to be deplored. The soil which grows hardwood timber is well known to be richer, and more perfectly suited for agricultural purposes, than that on which pine is commonly found. For this reason the hardwood lands suffer most severely from the hands of the settler. The fact that the ultimate value of Michigan hardwoods is but imperfectly, and not generally, understood, also favors the destruction. The average settler knows that the immediate revenue to be derived from his hardwood lands will be greater if he brings them under cultivation than if he leaves the forests inviolate; hence he proceeds to get rid of the timber as quickly as possible, by gathering into log-heaps and reducing it to ashes.

The exigencies of agriculture, of course, are not to be ignored. It is absolutely necessary that a certain proportion of the land should be cleared and placed under cultivation. But American farmers too often labor under the mistake that the measure of successful husbandry is in the area of land under tillage. Many of them have yet to learn that a small farm, well cultivated, may be made more profitable than a large faim carelessly cultivated; and that it would be true economy to clear a much smaller proportion of their hardwood lands than is customary, leaving the timber on the remainder to increase in value, as it will inevitably do in the near future.

Northern Michigan possesses magnificient possibilites (which can be realized if she husbands her resources) for the manufacture of hardwood products. Situated in the central portion of the vast northwest, between two great inland seas, which afford easy and cheap transportation to the markets both of the east and west, her facilities for the profitable disposal of her wares are all that can be desired. Her forests abound in an excellent variety of woods suitable for manufacture, and her numerous streams, flowing through the heart of the hardwood regions, afford cheap and abundant power for manufacturing purposes. In short, the natural advantages of northern Michigan for wood manufacture are unsurpassed, and only await the enlistment of extensive capita and enterprise to raise them to an important position. Already the good work has begun. Handle factories, bowl mills, spoke and hub factories, basket factories, etc, have been established at various points with favorable results. But the development of these industries is yet in an incipient stage. For the full realization of the manufacturing possibilities of northern Michigan, we must look to the future. A large proportion of the smaller class of articles manufactured from hardwoods, now comes from Maine and other New England states. There is no good reason why the markets of the west and northwest should not be supplied from the vast reserve of raw materials lying at their thresholds; and they certainly will be so supplied in the not distant future, if the settlers of northern Michigan do not, in the meantime, render such a result impracticable, by the wanton destruction of the vast tracts of forest wealth which are indispensable to the establishment of an extensive manufacturing system in the line of hardwood products.

MODERN LUMBERING.

A correspondent writing from Otsego Lake, Mich., to the Detroit *Free Press*, furnishes the following interesting account of lumbering operations thereabout:—

This place presents a sense of more than ordinary business activity this winter. Twenty-five lumber camps are in operation, the suppl es for which come here. There will be about 100,000,000 feet of logs "banked" by these 25 camps.

The extent of the lumber operations of Michigan are understood or appreciated by very few; what it means to be a lumberman at the present time differs materially from that of twenty, or even ten years ago. There is probable no business that has made more rapid advance or has seen greater improvements in the mode of operating than lumbering.

Only a few years ago the best pine standing away from a stream was of little value, the only method of marketing logs being the "drive" down the stream; now, railroading in connection with any large lumbering operation is considered a necessity and by this means the most remote tracts of pine are brought into the market.

A lumberman twenty years ago was a man who went into the woods in the early fall with a crew of men, rarely numbering 50, built his camps, surveyed and cut out his log-roads, leading to the inevitable stream where his logs were to be hauled and banked. These operations he superintended himself, often remaining in the woods the entire winter and only coming out with the drive at the mouth of the stream late in the spring. The logs were then turned over to the mill owner and either sawed on shares or purchased outright. The mill men and the lumbermen were as distinct a class as the farmer and the owner of the grist mill who ground his grain. It was necessary for the woodsmen simply to understand his part of the profession; the mill men then took the logs, manufactured the lumber and again turned over their product to the eastern dealer, who conducted the mercantile part of placing the lumber on sale.

Now, to be a successful lumberman, means that a man must have more requirements than for almost any other business. As nearly all heavy lumbering operations are conducted with a railroad, he must understand railroading. Several plants in this state are now operating from twenty to thirty miles of well constructed and ballasted track, with good rolling stock. He must be a thorough woodsman, for upon his own judgment of the quality and quantity of the pine it will yield he purchases large tracts of land. He must understand the river work, and know when his interests are properly served on the drives, and that his logs may not be hung-up ere the flood subsides. He owns his own mills; he must therefore be a mechanic mechinist, and as this is very important he must be a good one. He must be a navigator and a vessel owner, as after manufacturing his lumber he transports it in his own monster steam barges to his yards in the east. As he requires large quantities of supplies he raises them himself, and some of the model farms of Michigan are owned and conducted by the lumbermen. He is therefore a farmer. He must, furthermore, be a close observer of human nature, understanding and being able to control large bodies of men, for the heavy lumber firms of this state have in their employ from 500 to 1,500 men each. To control and manage them successfully requires a diplomat. How successfully this is done one illustration will show. Messrs. Henry Stephens & Co. are extensive lumbermen at St. Helen, Roscommon county. From one of the proprietors the following facts were obtained. There are at present employed 400 men. Of this number 150 have been in their employ over six years, 25 over 10 years, 15 over 15 years, 10 over 20 years, and five for over 30 years. In these days of change and dissatisfaction, strikes and lock-outs the above figures are indeed refreshing, and there are many other firms whose records would prove equally complimentary to employer and men.

There is no term that implies a greater knowledge of business methods, of a greater diversity and development of abilities, than the modern "lumberman."

MECHANISM OF A TREE.

A tree receives its nourishment from the roots. These correspond to the mouth in the human frame. Now, as in the human frame the nourishment received is, after being supplied to the blood, exposed to the operation of air in the lungs before it is fit to give material to the body; so in a tree, the nourishment taken in at these tree mouths, the roots, passes to the lungs of the tree, and there, by contact with the air, is rendered fit to supply fresh material to the tree. These tree lungs are the leaves. This operation is affected by the passage upward from the soil around the roots, through the trunk, the branches, and every twig of the tree to the leaves, of a large quantity of water, containing in solution the nutriment for the tree. Arrived at the leaves, a process takes place which separates, by means of contact with the air, the most of the water the roots had taken in from the valuable nutriment, and throws off, in vapor, the surplus water into the air. At this time certain constituent portions of the air are utilized and mingled with the nourishment retained. This is all, now a small portion in comparison with what had arisen from the roots, yet retaining enough water to serve as a vehicle back, returned towards the roots, depositing in its way, in leaf, bark and root, what is needed there for the growth of the tree. In these they undergo, especially in the bark, further fitting and digesting processes before they assimilate with the substance of the tree. The water which was retained to carry them down, being no longer needed, passes out at the roots. . . In the back of the leaf are numerous stomates or mouths. . . Of the extent of the provision made for evaporation by the leaves, some idea may be formed from a consideration of the number of stomata or stomates to be found in the leaves of plants. The number varies in different plants, for which variation a reason may be found in the different conditions of growth to which they are subjected in their several natural habitats. In the back of the leaf of the apple tree there are about twenty-four thousand stomates to the square inch. In the leaf of the lilac there are one hundred and sixty thousand of them to the square inch. In the leaves of the cherry laurel there are none on the upper surface of the leaf, but ninety thousand have been counted on the lower surface.—*Exchange.*

A Washington Treasury Decision.

WASHINGTON, Feb. 17.—The Treasury Department has declined to grant the request for permission either to resaw in bond certain lumber imported from Canada, or to export for a drawback, under 3,019 of the revised statutes the lumber re-sawed after the payment of the duty.

A MYSTERIOUS FIRE.

In a former article on the subject of lubricating machinery we refer to some of the villianous compounds that were sold under the name of lubricating oils. In this case only the damage to machinery was considered. This, however, is not all the danger that grows out of the use of those adulterations. Illuminating oils, with the adulterations that are put upon the market are still worse, for while only the damage to machinery may arise from the adultrations of lubricating oils, the danger to life and property from illuminating oils is still greater. The discovery of petroleum is no doubt one of the blessings of the present age, and when honestly and properly prepared, is the best for illuminating purposes of anything we have outside of gas, but the rascally mixture of benzine and other inflammable substances that are put upon the market is a fruitful cause of nine-tenths of the accidents that occur. A fellow with no character, knowledge or principal, goes into the oil trade ; his stock consists of a barrel of benzine, a barrel of kerosene oil, a few pounds of rosin or some other stuff to give it body, and then advertise a new illumiuating oil, made upon scientific principles, and warranted to give a brighter light and stand a high fire test, and no danger of explosion, etc., and cheaper than any oil ever put on the market. He will pour some of it into a shallow dish, and drop a burning match into it to satisfy his customers that it will not explode and in this way people are humbugged into buying a compound that is more dangerous than gunpowder.

It is well known to any who has given this subject any attention, that even clear benzine, when put into a hollow dish, will not explode ; it will burn rapidly, but is easily put out by throwing a cloth over it ; but when it is confined in a tight vessel, only partly filled, then is the time when it becomes dangerous, for the gas which it generates, from the volatile nature of it, soon fills the can, and if the cork is removed and it comes in contact with fire, it will explode like dynamite, and is about as dangerous to have it around. Even the best oil needs care, for it is impossible, with all the care that can be had in refining, to entirely deprive it of volatile matters, that will generate gas if left standing in a warm place. A lamp that has been used in the evening and stood over night, partly full of oil, should never be lighted in the morning without allowing the gas to escape. Blowing out lamps in the evening is another practice that should never be indulged in ; the air that is blown down the chimney is often forced down the tube, carrying the blaze with it, and if the oil should happen to be low, an explosion is likely to take place. The only safety is by buying nothing but the best, no matter about the price, a few cents on a gallon of oil is a small matter when compared to the destruction of life and property that almost every day occurs from the careless use of kerosene oil. Kindling the fire in the morning with kerosene is another practice that has cost many lives and a great destruction to property ; and if Bridget must light the fire with kerosene oil, by pouring it out of the can, impress upon her mind the oil must be poured upon the wood, and the can corked up and put away before the match is lighted. Kerosene oil is not the only element of danger that we have in our factories and dwellings to guard against. There are many other fruitful sources that are entirely overlooked, that cause most of the mysterious fires.

The careless use of matches is one constant source of danger ; not but which the matches may be harmless enough in themselves, if left alone, put when dropped upon the floor of a wood shop, covered with shavings, or in a barn where hay and straw is cattered about, if stepped on or picked up by mice, they become one of the sources of mysterious fires. It is well known that rats and mice will carry off matches for the phosphorus which they contain, and of which they seem to be fond ; but if one of them ignites while Mr. Rat is endeavoring to extract the phosphorus, he never stops to sound the alarm of fire, but takes himself off to some place of safety, and as no fire has been used in the building it is considered a clear case of incendiarism, but Mr. Rat is the last one to be suspected of being the incendiary. Spontaneous combustion is another cause of mysterious fires, that are put down as incendiary, but I believe that nine-tenths of them are from this cause.

That there are some fires that can be traced to incendiarism there is no doubt, but I am not willing to believe that mankind are so depraved as to be guilty of all the arts of incendiarism that are laid to their door.

Vapors arising from volatile matter take fire with less heat than many suppose. A steam pipe running through a box of pine saw dust has been known to take fire several times, and the heat of the steam was probably never over 300, the inflammable vapor that was destilled out of the turpentine contained in the saw dust furnished in the means of ignition.

Oily rags or cotton waste used around machinery, and saturated with oil, is another fruitful cause of mysterious fires, that occur where no fire is used. The statistics show that a great majority of the fires that take place in manufacturing establishments happen betwe en Saturday night and Monday morning, and as it is the custom in all well regulated mills to require the operatives to clean up their machines on Saturday afternoon, unless the oil waste used for that purpose is carefully collected and removed to some safe place, the chances are that before Sunday night, fire may be generated from spontaneous combustion.

In a discussion of this subject a few years ago in order to satisfy ourselves on this subject, we made a number of experments with different fibrous substances and oil. We found that cotton waste that had been used in cleaning machinery, and well saturated with oil, when covered up with iron turnings and dirt, which is found under the laths of all machine shops, took fire so as to smoke in two hours, and when partially uncovered and a portion of it is exposed to the air it burns up freely until the waste is all consumed. When saturated with linseed oil it took fire much sooner.

Some painters were at work in a house where a portion of the wood work was being finished in oil, and rags rubbing it were thrown into a closet. At noon, when all the workmen were absent to their dinner except one, who happened to have his dinner with him, and while sitting in the room adjoining the closet, discover smoke issuing from it. Upon opening the door he discovered the rags on fire, which blazed up lively, until the timely application of a few pails of water, which as good luck would have it were near at hand. The fire was extinguished with but little damage, whereas if the building had been left alone at the time, or the fire broke out at night, in all probability it would have been consumed, and another mysterious fire would have been recorded, "probably the work of an incandiary."

Another case of spontaneous ignition occurred in a store. A bottle of olive oil was spilled upon the floor, a quantity of saw dust was thrown over it to soak it up. The sun happened to be shining in upon it at the time, and in less than an hour it took fire.

In planing mills where the machinery is scarcely ever cleaned up, I will admit that there is little danger for greasy waste being thrown around, but there is an element that is quite as dangerous as waste. The fine dust that collects around and under the machines becomes saturated with oil and grease, together with the villainous compounds, under the name of lubricated oils, and as they scarcely ever are cleaned up they are only waiting for favorable conditions to develop into a first class fire.

The statistics of the insurance department in most states show the average time for planing mills, sash and door factories, furniture factories to burn in eight years ; while foundries, machine shops, black smith shops and other working establishments is about twenty. Now why is it so many wood-working establishments is burned up? There is no reason why a planing mill should burn any more than any other shop, if proper precaution is taken. It is true that there is a great deal of combustable matter in and around it, but even that is no good reason why they should burn up so often. With the improved devices for taking away the shavings and dust, a planing mill can be kept as clean as any other shop, and if the machines were brushed off and the accumulations of dust and grease scraped off every day there would be but little danger from that source.

Most of the mills that are built at the present time are well protected from fire, so far as the engine is concerned, with fire-proof shaving room, but with all the care that may be bestowed upon these two important parts of the mill unless proper precaution is taken to keep the machines free from those accumulations of of grease and dust, mysterious fires will still continue to break out when they are least expected, and planing mill owners will be obliged to continue to pay double the insurance which they ought to pay.—[*C. R. Tompkirs, M. E., in Journal of Progress.*

NORTHWESTERN ONTARIO.

Year by year the operations of the lumbermen in Muskoka are becoming less and the pine limits are decreasing or rapidly disappearing.—*Herald.*

A man named Dennis, of Detroit, has taken his mill machinery to Lynch Lake, Joly township, where he intends cutting birch lumber for the Toronto market. He will ship by the N. & P. J. R.

Two large saw mills are to be built on Casselman's farm, near Katrine, to cut lumber for the firm of Flatt & Bradley. The pine around Doe Lake is said to be sufficient to last twenty years—if not too rapidly consumed.

Messrs. R. & G. Strickland, of Lakefield, are carrying on a large lumbering business in Oakley this winter. They have four camps in operation in which forty-four teams are employed ; in the one camp alone—that of which James Taylor is foreman—there are nineteen teams. The depot for supplies is Wood Lake camp, presided over by Mr. R. Kail. Mr. Alex. Moffatt, their managing clerk, lives here, and fills the position to the entire satisfaction of the company. Mr. Ketching, of Draper, has the contract for supplying the above camp with oats, pork, flower and other provisions. Mr. Jackson Foster is engaged to assist Mr. Ketching in teaming in the supplies from Gravenhurst.—*Banner.*

Mr. Martin, the timber and lumber inspector for the N. & P. J., returns next week from Bracebridge and Huntsville, where he has been looking after the erection of the fine station buildings nearly completed at those points, to lay out the work for the Burk's Fall's station.—*Arrow.*

"What Say You to a Piece of Roast Reef and Mustard?"

Well, there is much to be said. The question being asked of the banqueter at the average boarding house, calls up reminiscences of close contiguity to the horns, and beefsteak three cuts south thereof. He, of course, will pass unless it occurs to him that he needs a hinge for his trunk. Should there be any suffering the effects of an indulgence in such sinuous fare, use McGregor's Speedy Cure, a sure and effectual remedy for dyspepsia, constipation and affections of the stomach and liver. Sold by J. McKee. Trial bottles free.

Advice to Mothers.

Mrs. Winslow's Soothing Syrup should always be used when children are cutting teeth. It relieves the little sufferer at once ; it produces natural, quiet sleep by relieving the child from pain, and the little cherub awakes as "bright as a button." It is very pleasant to taste. It soothes the child, softens the gums, allays all pain, relieves wind, regulates the bowels, and is the best known remedy for diarrhoea, whether arising from teething or other causes. 25 cts a bottle. Be sure and ask for "Mrs. Winslow's Soothing Syrup," and take no other kind.

Perhaps the most extraordinary that success has been achieved in modern science has been attained by the Dixon treatment for Catarrh Out of 2,000 patients treated during the past six months, fully ninety per cent. have been cured of this stubborn malady. This is none the less startling when it is remembered that not five per cent. of the patients presenting themselves to the regular practitioner are benefitted, while the patent medicines and other advertised cures never record a cure at all. Starting with the claim now generally believed by the most scientific men that the disease is due to the presence of living parasites in the tissues, Mr. Dixon at once adapted his cure to their extermination ; this accomplished the Catarrh is practically cured, and the permanency is unquestioned, as cures effected by him four years ago are cures still. No one else has ever attempted to cure Catarrh in this manner, and no other treatment has ever cured Catarrh. The application of the remedy is simple and can be done at home, and the present season of the year is the most favorable for a speedy and permanent cure, the majority of cases being cured at one treatment. Sufferers should correspond with Messrs. A. H. DIXON & SON, 305 King street west, Toronto, Canada, and enclose a stamp for their treatise on Catarrh.—*Montreal Star.* 1y122.

J. K. POST & CO.
LUMBER MERCHANTS
And Shipping Agents.
OSWEGO, N. Y.
1tf

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ORDERS FOR DIMENSIONS AND ALL OTHER KINDS AND GRADES OF
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Timber Limits and the Square Timber Trade a Specialty.
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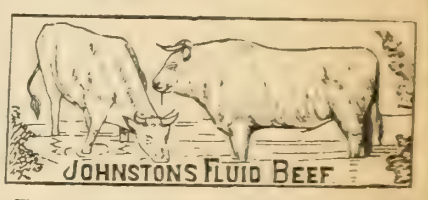
Johnston's Fluid Beef



The nourishing, palatable and warmth giving qualities of Johnston's Fluid Beef has caused this invaluable preparation to before a favorite and fashionable beverage for the winter season. It is now obtainable on draught at the leading hotels and restaurants throughout the Dominion 18t7

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Established in 1782. Canada Agency established 1804.
LOSSES PAID since the establishment of the Company have exceeded.....$60,000,000
(Sixty Millions of Dollars.)
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All classes of Fire Risks taken in town and country at the lowest current rates, and losses promptly adjusted and paid.
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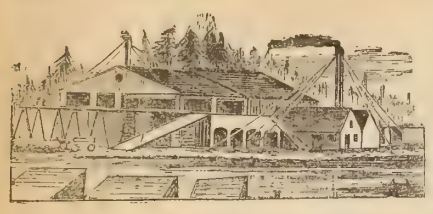

THE CANADA

LUMBERMAN

DEVOTED TO THE LUMBER AND TIMBER INTERESTS OF THE DOMINION.

PUBLISHED SEMI-MONTHLY BY THE

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Cards not occupying more than 12 lines (1 inch) for six months	5 00
Cards not occupying more than 6 lines per annum	5 00
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Advertisements intended for insertion in any particular issue should reach the office of publication at least four clear days before the day of publication, to insure insertion.

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Communications intended for insertion in the CANADA LUMBERMAN, must be accompanied by the name of the writer, not necessarily for publication, but as a guarantee of good faith. Communications to insure insertion (if accepted) in the following number, should be in the hands of the publishers a week before the date of the next issue.

The CANADA LUMBERMAN is filed at the Offices of MESSRS SAMUEL DEACON & Co., 154 Leadenhall Street, London, England, who also receive advertisements and subscriptions for this paper.

PETERBOROUGH, Ont, MAR. 1, 1886.

THE Chicago & Grand Trunk railway recently purchased of White & Henener, Lapees, Mich., 15,000 feet of choice black walnut lumber, and shipped it to Port Huron for use in car building.

THE William Hamilton Manufacturing Company, of Peterborough, has ready for shipment to the Royal Planing Mill Company, of New Westminister, British Columbia, two mills and one engine, ordered January 11th. The boilers are 42 inches in diameter and the engine 16x20. It is also filling an order from New York state for saws.

LUMBER men report, according the Kingston *News*, that the quantity of railway ties taken out along the line of the Kingston and Pembroke railway, this season, has been very large, while considerably less hemlock lumber has been cut this year than last. Cedar posts are a drug upon the market, as the supply greatly exceeds the demand.

BEAUCE, P. Q., lumberers complain of the absence of sufficient snow for their operations. The following are the approximate numbers of saw-logs that are being taken out this winter on the Chaudiere river and its tributaries:—Mr. John Breakey, 200,000; Mr. Hall, 100,000; Mr. Crawford, 100,000; Mr. Cahill, 30,000; Mr. A. Beaulieu, 30,000; total, 460,000.

THE last issue of the London *Economist* notices among new companies in Britain, Miller's Tanning Extract Co., Limited.—Issue of 8,000 shares of £10 each, of which 2,000 shares, fully paid, are allotted to the vendors. This company is formed to acquire and extend the business of Messrs. J. & J. Miller & Co., the inventors and original makers of tanning extracts. The price to be paid for the business, &c., is £41,750, of which £20,000 is represented by paid up shares.

A TELEGRAM from Duluth, on Lake Superior, states that the Duluth Lumber Company has contracted to ship 30,000,000 feet of lumber to Chicago by lake, most of which is to find a west and southwest market. The roads west and southwest of Chicago are to give rebate enough to pay for the lake freight from Duluth to Chicago, thus depriving the railroads leading southwest from St. Paul from getting this business with the high tariff. Last year 5,000,000 feet of lumber was shipped from Duluth to Saginaw by water and nearly 1,000,000 bushels of wheat to Milwaukee.

CAN England produce good axes? This seems to be a question over which there is some dispute. A correspondent of the *Ironmonger* recently critizes severely those of English make, and is somewhat curious to know what American manufacturers would think of having five-twelfths of their product returned as worthless. One of the English journals thinks that the case is not so bad as stated in the *Ironnonger*, and that their tool makers and inventors need only know that a strong and perfect axe is wanted for the Colonial market, for which a higher price than the average one will be paid, to set themselves to work to take the wind out of the sails of their American cousins.

THE Bobcaygeon *Independent* says:—Mr. J. M. Irwin, lumberman, has had trouble with diphtheria. And one of his shanties near Haliburton, a man became ill, and went home. The report was circulated that he had diphtheria and though it was afterwards proven that it was not, a scare took possession of the shanty and a number of men and teams left. As the men and teams left without notice, and as Mr. Irwin considered without sufficent cause, and demoralised the shanty, he declined to pay them. Timothy Crowley and some others entered action against Mr. Irwin at Peterboro. An arrangement was arrvied at with all except Crowley and the magistrate dismissed the cases with the exception of Crowleys. This is yet to be heard as time is required to obtain witnesses. His claim is for $40. [This case is also withdrawn.]

THE SALE OF TIMBER.

The following table shows the amount and value of the timber sold at the office of the Quebec Provincial Government during the past year:—

	Lots.	Price.
January	11,159	$ 9,335 00
February	11,122	8,767 00
March	12,783	11,028 90
April	11,678	9,777 10
May	11,441	10,231 30
June	11,203	9,339 30
July	7,479	5,382 20
August	7,879	55,444 80
September	13,940	11,750 30
October	14,281	10,076 00
November	12,712	10,629 90
December	11,881	9,840 20
Total	137,558	$112,601 50

THE EXPORT DUTY.

THE removal of the United States import duty on lumber is still so remote a contingency that the question of increasing the export duty on logs has not lost interest, and may still be considered apart from the contengency referred to. The Ottawa *Free Press*, having interviewed the Commissioner of Customs, returns to the subject. It represents the Commissioner, in the interview, as saying that it was almost impossible to collect the export duty. The *Free Press* drops its former contentions entirely, and wisely does so, and relies now altogether upon the alleged difficulty of collecting the duty.

The chief difficulty—the one on which greatest stress is laid—is thus stated by the *Free Press*:—

"Until the lumber crosses the line of demarcation it is in Canndian territory, and cannot be held for duty, so that the service of collecting this duty if strickly followed up would be far in excess of what could be collected."

If the logs could not be held for duty until they were into the centre of the lake, and there was no other remedy, the difficulty would be great. But has it not occurred to the *Free Press* that vessels going to the Uuited States are required to take out clearances, and that the regulations is inforced? The United States lumbermen who export logs from Canadian territory are owners of limits in Canada, and, were the Government to take up the matter earnestly, a way would be found of enforcing the law, and of compelling them to respect the laws of this country. The small quantity of logs that have heretofore been exported was not of sufficent importance to attract a great deal of attention, and the export duty may not have been enforced as it should have been. If the Commissioner is correctly reported in the *Free Press* it has not been. But when logs are exported wholesale, and Canadian lumbermen are placed at a disadvantage in their own country, to the advantage of foreigners; and when the country is losing largely through another country receiving the benefits connected with the manufacturing of her logs into lumber, the matter can no longer be ignored and it becomes of such importance that it merits the most careful at tention of our rulers.

Since writing the above we have received a communication from the Customs Department, in answer to a letter sent there, which puts a different face on the alleged interview and makes the alleged difficulty in collecting the export duty simply an idea of the *Free Press*.

The letter concludes as follows:—

"As respects the export duty, I can only say that is the law is to collect the same at one dollar per thousand feet upon all logs of pine or spruce, and that the officers of Customs have the most particular instructions with reference to this as well as all other duties; and I have no reason to suppose that its collection will be neglected by any of them under whose survey the exportation may take place."

This is sufficently explicit, as we have pointed out above, the collection of the duty is not as impossibility by any means, and it is absurd to suppose that the Customs Department would neglect to carry out the law. The objections urged against the increase asked for are very weak, and the arguments in its favor are strong and indisputable.

THE MORRISON BILL.

THE bill which Mr. Morrison has introduced into the United States Congress to change the tariff rates on many articles going into that country has attracted a great deal of attention. In the first place it is very doubtful if the bill will become law. It will take a hard fight to pass it through the House of Representatives, and if it is not strangled there it will have then to be passed through the Senate, with it Republican majority.

If this bill is not adopted by the American Congress, there will, for some time, be little hope of a reciprocity treaty between Canada and the States. It does not go so far as a comprehensive reciprocity treaty would go, and if its provisions are not acceptable a reciprocity treaty that would be beneficial to Canada would scarcely be accepted by them. And the proposition of the President to appoint a Commission to consider the fishery question and reciprocity, appears to meet with disfavor.

The part of the Morrison bill that our readers will be interested the most in is its provision for placing certain kinds of lumber on the free list. The telegraphic summaries of the bill led us at first to believe that all kinds of lumber were, if this bill was adopted, to be placed on the free list, the only proviso being that countries which levied an export duty should not be included. If this was the scope of the mill—and it may be the intention of its promoters—Canada would scarcely hesitate to remove the export duty on logs and thus reciprocate with our neighbors. It might be feared that the removal of the duties would tend to the depletion of our timber resources, but the benefits to be derived from the removal of the duties, thus freeing the trade from restriction, and increasing the value of the timber, would be of such a character that our Government and people would undoubtedly consent to the proviso.

Fuller particulars regarding the proposed changes, however, appear to show that they are not of such a character as to be so interesting to Canada as was at first supposed. Mr. Wm. Little, of Montreal, takes this view of the bill and writes:—

"We were led to expect would place pine and spruce lumber on the free list, but should the bill pass in its present shape the only kinds of lumber made free are those specially mentioned—hemlock, whitewood, sycamore and basswood—which now pay a duty of a dollar per 1,000 feet, board measure, or half the duty levied on pine and spruce.

"The first line of the bill leaves the impression that the intention is to have lumber hewn and sawed free; but this applies only to lumber and timber used for spars and in building wharves. The words hewn and sawn are simply descriptive of the lumber so to be used.

"A subsequent paragraph mentions the particular kinds of lumber that are to be free, viz, sawed boards, plank deals and other lumber of hemlock, whitewood, sycamore and basswood, and all other *articles* (not kinds) of sawed lumber.

"The only sawn articles in pine and spruce to be free are specially mentioned, such as clapboards, pickets, palings, lath, and shingles.

"This intention of the bill is clearly shown by a charge of 50 cents per 1,000 feet for each side planed or finished of all articles made from the particular kinds of lumber specified—hemlock, whitewood, sycamore and basswood.

"So that as regards Canadian lumber, the bill will have no effect whatever, but to give free admission to the limited amount of hemlock now going to the U. S., the other woods—whitewood, sycamore and basswood—not being produced in Canada in excess of home requirements."

The Montreal *Herald* believes, from the wording, that the intention was to include pine and spruce, but the bill, as reported by the newspapers, does certainly appear to sustain Mr. Little's construction of it. If the bill becomes law, it is to be hoped that its intention will be made plain, but if Mr. Little's view is correct, even if it does become law, in its present shape, it will not be of great importance to Canadian lumbermen, although it will be a step in the right direction, inasmuch as hemlock, shingles, etc., will be placed on the free list.

LUMBER DEALERS AND RAILWAYS.

To the Editor of the Canada Lumberman.

SIR,—Had the Toronto lumber dealers no means of knowing the season of the year the railroad officials would supply the information. No sooner do storms prevail than cars are weighed and excess charges from 60 cents to $10.00 each car are presented to dealers.

These charges are something positively apalling. The mere sight of a freight advice note, ornamented with red ink figures, causes the dealer to sigh deeply as he sees all the profit on the car load gone at one fell swoop.

It is beyond the ken of ordinary mortals how the charges are made. True, the gross weight is given, tare deducted, and the net weight, claimed to be the actual weight of the lumber, stands forth in all its immensity. To compare these freight advice notes will show the most glaring variations in the weight of lumber.

Permit us to present a few of these with their sanguinary figures:

1.	Gross	53,800 lbs.
	Tare	18,000 "
	Net	35,800 "
	Amount on car	10,000 ft.
2.	Gross	62,000 lbs.
	Tare	18,000 "
	Net	44,000 "
	Amunto on car	10,704 ft.
3.	Gross	56,600 lbs.
	Tare	18,400 "
	Net	38,200 "
	Amount on car	10,610 ft.
4.	Gross	46,000 lbs.
	Tare	17,800 "
	Net	28,200 "
	Amount on car	10,021 ft.
5.	Gross	45,800 lbs.

Tare	17,200	"
Net	28,600	"
Amount on car	10,097	ft.
6. Gross	53,000	lbs.
Tare	18,000	"
Net	35,000	"
Amount on car	10,084	ft.
7. Gross	56,000	lbs.
Tare	16,000	"
Net	40,000	"
Amount on car	10,016	ft.
8. Gross	58,000	lbs.
Tare	18,000	"
Net	40,000	"
Amount on car	10,046	"

So far as the above cars are concerned there is no deduction appearing on the notes for snow and ice. The lumber with which these cars were loaded is white pine, cut about sx months, and piled to dry, everything being practically equal with regard to these car loads.

It will be seen that the lowest weight of the lumber on the above cars is about 35.75 lbs. to cubic foot and the greatest is 48.75 lbs. to cubic foot, showing a difference of 15 lbs. to a cubic foot.

The quantity of ice and snow brought down on cars loaded with lumber is not correctly estimated, nor are the employes of the railroad qualified to judge, at a glance, of the weight of the snow and ice, and never make any allowance for the amount of moisture absorbed by the lumber, a very important item in the weighing of lumber.

What does an inch of ice on the car imply? It means that the lumber dealer has to pay an increased rate. Ice one inch thick, covering a car 8x30 ft., weighs about 1,160 pounds; snow packed as is found on flats, same sized car, weighs about 620 lbs.; snow as it falls, same dimensions, about 270 lbs.

Let an impartial person examine a flat car and he will find from 1½ to 3 in. of closely packed snow and ice. Take into consideration the snow on top of the lumber with that which is lying in the centre, between the two lengths of lumber as well as that on the ends, and there will be found a weight not by any means covered by the allowance sometimes made.

An estimate made from actual measurement of several cars give an average depth of snow and ice to be about 2 in. and of snow on top about 4 in.

Take the average weight of the packed snow and ice, allowing the snow to be ⅔ and the ice ½ covering a flat car, we have a weight of about 1,572 lbs. Again, taking the snow on top, centre and ends, we have another weight of about 1,080 lbs., or a total weight of about 2,652 lbs.

The length of time intervening between date of shipment and that of arrival is anywhere from three days to two weeks, during which the lumber is exposed to all the variations of temperature. The melting snow or rain finds its way between the courses of the lumber, by which a very considerable amount is absorbed.

The quantity of fluids absorbed by white pine, partially dry, is about 25 per cent. of its weight. Taking the weight to be 32 lbs. per cubic foot, by exposure to rain, etc., the weight will increase to 40 lbs., or equivalent to a car oaded with 10,000 feet, weighing about 34,000 lbs., instead of nearly 27,000 lbs.

The railroad authorities make no allowance but compel the dealer to pay excess charges on the amount of moisture absorbed by the lumber, which in the majority of cases has been caused by their neglect or inability to forward the lumber in a reasonable time.

Their is not that consideration shown to the dealers by railroads which is their due. From the nature of their business their goods are exposed to all the changes of weather, and it is manifestly unfair to take advantage of effects produced by causes beyond the control of the lumberman.

The lumber, when loaded, may weigh no more than 25,000 or 26,000 lbs., excepting in rare cases it never goes over, as no dealer will place green lumber on the market for obvious reasons, but through no fault of either seller or buyer, by the time it has reached its destination the weight is increased by 4,000 to 6,000 lbs.

There are many other greviance existing in the present unsatisfactory relations between the lumbermen and railroads. It is about time that our manufacturers and dealers combined to form an association in self-defence.

The railroad companies dealing with the lumberman individually can, and do, compel him to pay excessive charges, or throw away 2 or 3 days in attempting to obtain a reduction. On the other hand, were they united, the railroad officials would be much more inclined to moderate their charges, and, on proper representation of the actual state of affairs, would no doubt come to some understanding as to the quantity, *in feet*, of what constitutes a car load of lumber, thereby enabling the dealer to know the exact amount of their freight bills.

The great injustice in charging by weight lies in the fact that the lumber is weighed at the point of arrival instead of that of departure.

The writer trusts he has not encroached too much on your valuable space, nor on the patience of your readers.

Toronto, Feb. 22nd, 1886. LUMBER.

THE LUMBER DUTIES.

To the Editor of the Canada Lumberman.

SIR,—It is highly gratifying to see the press of this country almost unanimous in advising the country to adopt the very sensible suggestion of the Hon. H. G. Joly, of raising the export duty on saw logs to at least that of the duty imposed by the United States on sawn lumber, otherwise we had better remove our mills across the line, the comments of the Hamilton *Spectator* on this subject as published in the LUMBERMAN, being especially commendable.

Of course no one that knows anything about the subject anticipates a removal of United States duties from pine and spruce lumber, till the lumbermen of that country have at least bought up sufficient Canadian pine and spruce timber to make it to their interest to allow their Government to throw off the duty.

Even should Congress pass a measure with this end in view, it would be tricked out of its intent by their hirlings in Washington before it became a law.

Knowing the men and the means they would adopt to thwart any attempt at a removal of the duty from pine and spruce lumber, I was fully prepared to find, notwithstanding the Hon. Mr. Morrison's spirited speech last year on the subject, and the almost unanimous desire on the part of the press and people of the United States for free lumber, that unless he was especially careful he would be tricked into proposing a measure that did not apply to pine or spruce lumber at all; and such I find to be the case, he proposed bill not affecting any Canadian lumber but hemlock, which is placed on the free list, while pine and spruce are to be still subject to a duty of $2 per M feet as heretofore, being included in the clause which will still remain on the tariff, not having been repealed under the heading of "boards, planks, deals, and lumber sawed from other varieties of wood not elsewhere specified," and if you will examine the existing U. S. tariff and note what additions only are made to the list you will see that my conclusions are correct.

To show to what a length the tools of the lumbermen will go to satisfy their patrons, it is only necessary to revert to the bill proposed by the late Hon. Fernando Wood in 1878, putting a duty of $1 per M feet on pine, spruce and other sawn lumber, which appeared, when ready for passage, in these words: "Lumber of hemlock pine, whitewood, sycamore and basswood, $1 per M ft., board measure," spruce having been dropped, and the comma omitted between hemlock and pine, so that if the bill passed, they could insist it was *hemlock pine*, and not *white* or *red* pine that was placed at the reduced rate of duty.

It is to be hoped, however, that the answers to the enquiries made by the Committee of the Statistician, as to what extent the proposed changes would effect the existing tariff, will plainly show the fact that, as regards Canadian lumber, the proposed additions to the free list only effect hemlock. The other kinds mentioned, whitewood, sycamore and basswood being mere surplusage, as little or no lumber of these kinds of wood is imported into the United States, and that pine and spruce lumber are still subject to the existing tariff of $2 per M feet, board measure.

WILLIAM LITTLE.

Forestry Chambers, Montreal, Feb. 25, 1886.

WOOD-WORKING PATENTS.

The following list of patents relating to the wood-working interests, granted by the United States Patent Office, February 16th, 1886, is specially reported by Franklyn H. Hough, solicitor of American and Foreign patents, 925 F. Street, N. W., Washington, D. C.

336,782—Edger, gang—E. H. Barnes, Brooklyn, N. Y.

336,813—Lathe for turning irregular forms—O. Kromer, Sandusky, Ohio.

336,674—Plane—J. A. Traut, New Britain, Conn.

336,697—Saw—C. N. Clemson, Middleton, N. Y.

336,739—Saw—J. J. Parker, Aitkin, Minn.

336,661—Saw hanging—T. W. Peck, Milwaukee, Wis.

336,671—Saw mill head blocks, nose guard for—C. Esplin, Minneapolis, Minn.

336,693—Sawing machine, band—J. J. Bowen, San Francisco, Cal.

PATENTS ISSUED FEB. 16.

336,193—Edger and cant sawing machine—W. M. Wilkin, Erie, Pa.

336,511—Lumber drier—J. J. Curran, Chicago, Ill.

336,222—Edge guard for planes—J. H. Ferguson, Brooklyn, N. Y.

336,500—Re-sawing machine—G. Tintle, Newark, N. J.

336,380—Saw—A. Bertram, Toronto, Ontario, Canada.

336,208—Saw and lathe combined—F. J. Buckner, New York, N. Y.

335,407—Saw mill, band—F. M. Hanks, & H. N. Sibley, Midway, La.

336,194—Saw mill dog—W. H. Wilkin, Erie, Pa.

OTTAWA EXCITED,

Aocording to the news columns of the Ottawa *Journal*, the capital seems to expect the Morrison bill to become law. We fear the *Journal* has allowed itself to become unduly excited in the following:—

"It is confidently expected here by lumber merchants that the duty on lumber will be removed at the present session of the Congress.

"The abolition of the present duty will result in the introduction of the Canadian mill owners as a factor in the American dressed lumber market, to be detriment of thousands of smaller American dealers who procure lumber in an undressed state in Ottawa. The extensive lumbermen here propose to manufacture dressed lumber here on an enormous scale and several of them are already talking of adding the necessary machinery to their sespective mills. Messrs Bronton & Weston have already commenced to cut a tail-race, while a number of other manufacturers are about to follow their example. It is intended to manufacture dressed lumber of every grade, from the heavy stick of square timber, down to plane boards, and window sashes for which there is a growing demand across the lines. The proposed planing mills, according to the present intentions, will be run the year round, giving employment all winter to at least one thousand men otherwise obliged to go to distant shanties. The advantage that will be derived from the adoption of the measure by Congress can not be overestimated. An appreciaable feature of the shipment in dressed lumber, will be to accomplish a considerable saving, owing to the removal of the shavings. The frieght rates will also be proportionately reduced, as fifteen hundred feet of prepared lumber will be equivelent to the space occupied by one thousann feet of lumber in its undressed state.

"It is expected that next summer there will be considerable decrease in the output of the mills at Whitehall, Vt., Richford, Vt., and Burlington, Vt."

The Greatest Preparation Yet.

"Eureka," Dorenwend's world renowned Hair Destroyer, destroys all superfluous hair on the face or arms of Ladies or Gentlemen. It is harmless, causes no pain in using, and leaves no disfigurements; can be easily applied, and works quickly and surely. Thousands have used it and pronounce it to be the best article of the kind before the public. To be had from J. D. Tully, Druggist, agent for Peterborough.

GEORGE GALL

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HARDWOOD LUMBER

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Car Lots sold on Commission, railway switch in to yard and plenty of room for storage. Yard corner of Stachan and Wellington Ave. Office, 9 Victoria st.

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VALUABLE

Timber Limits

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50,000 SAW LOGS

ON SEVERN RIVER

The undersigned being desirous of confining their operations to their Lakefield Mills on the Trent waters, offer for sale the following limits:—

Township of Hindou, 70 square miles.
" Oakley, 45 " "
" Redout, 22 " "

An area of 137 square miles.

These limits are estimated to contain 180 million feet of Logs, well watered, and afford means of short hauling from all points, and quick and cheap driving to Georgian Bay. Are offered for sale together with plant, depots farms, 1,200 acres deeded lands and 50,000 logs, nearly all of which are on the main river, a large proportion of which are 16 feet long. Apply to

R. & G. Strickland,

3mL LAKEFIELD, ONT.

Welland Canal Enlargement.

NOTICE TO CONTRACTORS.

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for the Welland Canal," will be received at this office, from mechanical, skilled, practical contractors, until the arrival of the Eastern and Western mails on TUESDAY, the NINTH day of MARCH next, for raising the walls of the locks, weirs, &c., and increasing the height of the banks of that part of the Welland Canal between Port Dalhousie and Thorold.

The works throughout will be let in sections.

A map showing the different places, together with plans and descriptive specifications, can be seen at this office on and after Tuesday, the 23rd February instant, where printed forms can be obtained. A like class of information relative to the works will be supplied at the Resident Engineer's Office, Thorold.

Parties tendering are requested to examine the locality and bear in mind that the season and circumstances under which the works have to be done render some of them of an exceptional nature.

Tenders will not be considered unless made strictly in accordance with printed forms and, in the case of firms, except there are attached the actual signatures, the nature of occupation, and place of residence of each member of the same; and further, a *bank deposit receipt* for the sum of *Two Thousand Dollars* or more according to the extent of the work on the section—must accompany the respective tenders, which sum shall be forfeited if the party tendering declines entering into contract for the work at the rates of prices stated in the offer submitted. The amount required in each case will be stated on the tender.

The deposit receipts thus sent in will be returned to the respective parties whose tenders are not accepted.

This Department does not, however, bind itself to accept the lowest or any tender.

By order.

A. P. BRADLEY,
Secretary.

Department of Railway & Canals,
Ottawa, 17th February, 1886. 2d45

PROFITS IN THE LONDON TIMBER TRADE.

Dealing in lumber after the English method appears to be a very profitab e business, judging by the promises of the scheme of organization of two timber corporations which have recently been formed in London. The particulars of the organization of Powis, Bryant & Powis, limited, under the companies act, were given some weeks ago. The capital stock was £200,000 ($1,000,000) divided into 200,000 shares at £1 ($5) each. One of the inducements to invest was the promise (implied, at least) that the shareholders would receive a dividend of 10 per cent each. year. This enterprise has been followed by another, namely the incorporation of William Oliver & Sons, limited, on a similar basis. The house is old one in the timber trade. The prospectus states that "the company is formed for the purpose of acquiring and still further developing the lucrative business of Wm. Oliver & Sons, mahogany, wainscot, timber merchants and importers, and dealers in every kind of wood in use, which has been carried on in London for two generations and has now a world-wide reputation." The capital stock of the proposed company is £200,000 ($1,000,000) in 200.000 shares at £1 ($5) each. Of this amount 175,000 shares are offered to the public at the premium of 10s. ($2.50) per share, the vendors taking the remaining shares in part payment of their good will. etc. The directors are Thomas Oliver, Harry Webb, Joseph Aldridge Oliver and Edward Aldridge Oliver, who will have power to add to their number. The vendors are Edward Aldridge Oliver and Thomas Oliver who transfer to the company their stock in trade as valued by them at the ordinary stocktaking purpose of the firm and he sum so ascertained will be paid by the company, with interest thereon at five per cent per annum until paid. The good will, leases, appliances, plant, etc., will be transferred for the 25,000 shares, as fully paid up shares, together with £75,000, being the proceeds of 50,000 of the shares offered for public subscription. The premiums on the remaining 125,000 shares will belong to the company.

The lucrative character of the business will be inferred from the statement that "for three years the vendors guarantee a dividend of 10 per cent. per annum on the paid up share capital of the first or present issue of $200,000, it being understood that the surplus over 10 per cent in any year is to be credited as against the guarantee of the following or preceding year. The vendors will deposit securities to be approved by the company's brokers to the value of £30,000 with the company's bankers as a running security for the due performance of their guarantee." What American corporation dare undertake to have a dividend of 10 per cent. per annum on its capital stock and put up the bonds to secure the payment! The vendors undertake not to receive during the first three years any remuneration whatever for their services until the shareholders have received 10 per cent. on the paid up share capital. This promise seems superfluous in view of the deposits of bonds to secure the payment, but the security would be devoured should there be a failure for more than one year to pay the dividend.

Northwestern manufacturers of lumber (American) are suspected of making more than 10 per cent. profit, but they are those who have purchased the timber lands and get their stock from the stump. American lumber dealers generally would be well pleased, we believe, with a guarantee of ten per cent. dividend on the capital invested. The impression we have of England is of a land where money is cheap and the people satisfied with small profits, but that must be a mistaken notion if the profits in the English timber trade afford a fair sample of the earnings of capital invested in trade over there.—*Lumberman's Gazette.*

The *Forester* says:—We learn that the timber in the townships to the east of Huntsville, which as yet has never been tapped by the lumbermen's axe, is likely to be put on the market by the Ontario Government next year. Already several lumber firms have had men ranging through the bush spying out the best limits.

THE CHEAP AND THE DEAR SELLER.

It is not the first law of economics that the cheap seller will supersede the dear seller and get all his market away? Certainly that is true in the long run, but is not true in five minutes. The difficulties in the way of the "undercutter" or underseller are very great indeed. In the first place "the trade" hate him, and the hatred of the trade is unpleasant—good assistants shunning the banned shops—or, in the strictly organized trades intolerable. Effort after effort has been made to beat the bakers, who hold very closely together, but with very little result. They will let down prices to a point, but no further, being quite aware that in all trades which take room there limits to competition. Two half-pence on two loaves are not equal to a penny on one loaf when the ovens will only hold so many loaves. Then the buyer who cares about the fall of a penny is always wanting credit, and does not like to quit the man who will give it, and who regards desertion as the unpardonable sin. Moreover, he, or rather she, believes in the customary price, and, whatever the newspapers may say, cannot get rid of the impression that somehow the underseller is giving her, in some way, inferior quality for her money—a belief diligently encouraged by the regular tradesman. And lastly, the underseller being anxious mainly for accidental custom, is neither so obliging, nor so patient, nor so careful about deliveries as his established rival. So strongly do these three causes work together, that we have heard of instances in which bakers in populous districts have bought their underselling rival's stocks, and sold them at their own prices without their customers either knowing or resenting the tax so directly levied. The force of habit, which even arrests downfalls in bread, is much stronger as to articles less needed and less accurately understood, till we arrive at cases in which, as in the milk trade, cheapness is positively suspected or disliked, as if it must of necessity be based upon some fraud. Of course, in the end, if wholesale prices are low, the undersellers win, and the new price establishes itself, in which case woe to the retailer when wholesale prices rise. They have to endure a storm of inquiries, objurgations and epithets which must take the sweetness of their previous gain quite out of them, and very often are compelled to yield and compensate themselves by unsuspected reductions in quality. As a rule, however, the demand that a customary and low price should be lower still comes with surprising slowness, and the distributors, when their wholesale market has given way, enjoy unexpected profits continously for months. The public will not, in this instance, grudge the shopkeepers their gains, for they had previously been suffering greatly from different causes—one being the difficulty of meeting the competition of the stores; but they certainly for some time past have had cause to bless the "general depression."—*Exchange.*

THE NEW WAY AND THE OLD.

How natural it is for a man who assumes a position to critisize the condition in which he finds things, and the work and arrangement of his predecessor. How many times in visiting manufacturing concerns have we had the faults, neglects and errors of "the fellow who was here before me," dilated upon by some new broom whose sharp corners and trim edges were already, we could see, beginning to wear off, and whose "head," as the politicians say, would doubtless some day "come off" with quite as many faults upon it to be dilated upon by his successor. Very few of us indeed could step down and out upon short notice and leave the affairs of our office in a state which could not be criticized with some degree of truth by our successor.

With these facts in mind an engineer who accepts a situation should find all the fault which there are about it, seek for all the points where improvement can be made, and then set quietly about having the requisite changes made. He will not gain any particular respect to himself, nor any special reputation for smartness, by parading his superior knowledge and ability, and will make the best impression even upon his employer by quietly calling his attention to the advantages to be derived from a change without finding fault with the condition in which you found it, or by respectfully insisting that an element of danger be removed without any uncomplimentary allusions to the man who preceded him. In suggesting improvements it is well to commence with small and inexpensive changes, which will pay a large percentage upon the amount expended in making them. If in such matters the employer finds the advice of his engineer to be good, his judgment sound, and that his cash balance is heavier for having followed them, he will be more ready to trust him with the handling of more important matters. He should, at the first opportunity, make a thorough inspection into the condition of his boilers in regard to their freedom from corrosion, scale and dirt, see that the passages to the water gauge are free, that the gauge cocks are clean, that the safety valve is large enough to clear the boiler of all the steam which it can possibly make, is in no danger of sticking from corrosion, and is not piped so that the water of condensation can stand upon its back. The safety valves for many boilers are figured from the grate surface alone, and this is frequently increased after the boiler has been in use, without a corresponding increase in the safety valve. Having determined the boiler to be in a safe and economical condition, or make it so if it is not, the engine should be looked over carefully for signs of wear, for errors in the setting of the valves, or for any chance of emprovement as regards economy or safety. The same attention should be paid to the piping and accessories, never having sufficent confidence in your predecessor to take it for granted that he leaves things all right, while exercising sufficent charity towards him not making his failings your chief topic of conversation.—*Boston Journal of Commerce.*

BOSTON BUSINESS.

The local railway are buying absolutely nothing, a somewhat unusual circumstance for this season. At this date they have always been about with their plans for the coming summer and fall, but the most diligent inquiry can elicit nothing yet in prospect for depot, bridge or car work. Per contra, the Baltimore & Ohio has just closed up its Boston negotations that foot its purchase of nearly four million, while the Pennsylvania and some of the western roads are gathering in about the same exaggregate, with one well known Boston road that runs west of Chicago wanting about 2,000,000 feet in one lot for new car works.

"Nothing doing" is the ready response in every lumber office to the inquiry "How's trade?' Yet at no time for several years has there been so many schedules floating about as now, and not often so many large ones. One new mill, to take over 2,000,000, is hanging around, while a host of small bills from 30,000 to 100,000 are looking for a hook to hang upon. The mills both south and north are bulls in the market, and decline to take orders except at full, and in some instances advanced, prices.

A couple of random cargoes of hemlock surprised the market the first of the week, the skipper snapped $13, his first bid, and then "blowed great guns" an hour afterwards because he was 50 cents behind high water mark. However this little Doans-street episode established a value, filled an anxious gap, and puts the market rather softly on $13 for random and $14 to $14.50 for such dule.

Builders heve idled away the week gossipping over the prospect. They find lumber, labor and hardware disposed to inflate, and some who have deserving surburban schemes in hand profess to believe that any advance over last summer's values will break up their plans. The new circuit of the Boston & Albany roads round and through the Newtons, that was to open last spring, and then in October, and now procrastinates until April, gave evidence of getting a $100,000 syndicate to build and boom this desirable locality, but the cost of the land and the lumber, they say, has already boomed them out of sight.—*Manufacturer's Gazette.*

SHILOH'S CATARRH REMEDY a positive cure for Catarrh, Diptheria and Canker Mouth. For sale by Ormond & Walsh, druggists, Peterborough.

PREVENTION OF FIRES.

There are some things quite interesting in a late circular issued by the Home Insurance Company of New York. A graphic diagram is given showing at a glance the proportion of causes to the whole number of fires that occurr in the United States for the year of 1884. From this diagram, it appears that most of the causes are incendiary, though a large portion of them are from defective flues, carelessness and other things that might be classed as preventable. Five-ninths of the fires are traceable to incendiarism, two-ninths to detective flues, one-twelvth to matches, the same to explosions of lamps and lanterns and general carelessness and one fifteenth each to lightning, spontaneous combustion and stoves and stove pipes. Many of these, it can be readily seen, could have been avoided by the exercise of ordinary prudence and foresight. Incendiarism is referred to as its "proportions could be materially reduced if each agent would be careful to ascertain the just value of property offered for insurance, and then firmly decline to insure or permit other insurance in excess of three-fourths of such value." No doubt many fires from this cause could be prevented by such a course of action but the eagerness on the part of agents receiving commissions on the amount of business done by them, greatly militates against carrying anything of this kind into practice to its full purpose. Fires caused by boilers and steam pipes are of infrequent occurrence, yet the location of the latter is of sufficient importance to speak of, in that they should not be allowed to come into contact with wood or anything liable to combustion, and should be so placed as not to serve as a convenient respectable for various odds and ends about the factory. The best plan to pursue is to suspend the pipes overhead at a proper distance from the ceiling, as they are then ont of the way, in as safe a position as possible, and capable of heating the space allottered to them as well as if placed in any other position.—*Boston Journal of Commerce.*

MALAYAN TIMBERS.

The advocates of the use of jarrah wood ought not to be too sanguine regarding the alleged pre-eminent qualities of that kind of timber, if any confidence is to be placed in the following extract from a recent issue of the Australian *Register*:—

"It would appear that the Western Australia jarrah wood is just as susceptible to the attacks of the cobra (teredos navalis) in water as it is to those of white ants on shore. The Whampoa, on her southern trip, took down a piece cut from one of the trial piles of the jetty, planted some months ago, which was thoroughly perforated by the sea worm. As the jetty piles are to be sheathed with copper, and the wood has otherwise proved to be very serviceable for piles, we do not suppose any alteration of timber will be ordered, as, as yet, the cobra has found it just as difficult to eat its way through metal in the water as the omnivorous white ants have on shore. True, it may be only a question of time and education, but until it is proved that iron and copper are no protection against the insects' encroachments it may be as well to chance it."

It is surprising that the enterprising contractors and engineers of numerous docks and jetties in Europe, as well as in countries less favored with valuable timbers, have never directed their attention to the serviceableness and proved capability of Ballow, Rassak, Billion, and Tumbusoo for such purposes. Those timbers have been entirely used in the construction of the Singapore and other East Indian piers and docks, and have given the utmost satisfaction. Ballow seems, however, to be the timber in greatest request, and large quantities of it have been exported from Singapore to India, China, Ceylon and Australia for this special purpose.

A PUGET Sound paper gives the scale of a single tree, cut at a Skagit river camp, as follows, the tree being cut into three 24-feet logs; Butt, 7,512 feet; second log, 5,732 feet, and top 5,826 feet—a total of 20,080 feet of lumber in the tree. The diameter at the small end of the logs was 78, 71, and 64 inches, respectively.

Chips.

THE ship Mercury, from Chatham, N. B., at Sydney, N. S. W., December 12, lost part of deck load of timber in a gale some days before.

THE schooner Lizzie K., St John, N. B., for Boston loaded with lath, was rapidly going to pieces February 5 on Folly island, off Cape Propoise.

SINCE August 1 last it is estimated that 1,500,000,000 feet of standing pine in Michigan has changed hands, the consideration for which approximates $5,000,000.

NOTICE of application is made in the Canadian *Gazette* by parties for incorporation as a railway bridge company, to build a bridge across the St. Lawrence at Brockville.

J. G. MCELWEE & Co., of Big Rapids, Mich. are shipping shavings from that point to Brunswick, N. J., the freight thereon being $80 per ton. It is not stated to what specific purpose the shavings are put.

AT Middle River, N. S., George Kerr & Son's "Burnside" Woollen Mills and steam sawmill, burned down in 1883, have been rebuilt four miles further down the river and fitted with cross-cut saws and shingle machines. It is in better condition than ever.

WORK at the Desoronto Cedar Mill is very brisk; shingles, posts, &c., are being turned out in great quantities. Car loads of cedar from the line of the Central Ontario railway arrive daily. Mr. G. W. Walker, formerly shipper on the east dock, is now attending to the packing and sorting room of the shingle department, while Mr. James Gorman takes charge of the first floor.—*Tribune.*

A DESPATCH from Bancroft, Hastings county, Ontario, says:— Lumbering operations are progressing favorably in this district, and a large amount of the produce of the forest, both in square timber and saw logs will be floated this spring. A quarter of a century ago it was supposed that ten years would exhaust all the merchantable timber in this part of the country, but those prophets were like the weather wise—they knew little about it.

MR. PETER MCLAREN, the well known Perth lumberman, says the Brockville *Recorder*, while in town on Saturday gave a striking instance of his liberality. He has large quantities of mill wood which makes excellent fire-wood, and is sold exclusively for that purpose. He offered to send three carloads to be distributed among the poor in the town provided the authorities paid the freight. It is needless to say the offer was accepted.

MR. ALEX. GIBSON, of Marysville, N. B., will make a special exhibit of the produce of his settlement, at the Conolian Exhibition in May, consisting of lumber, timber, cotton, cotton batting, bricks, etc. The educational exhibit from New Brunrwick will also be a large one. A trophy of wood is being prepared by the Government. It will occupy ten square feet and represent all the woods and shrubs of the province The shipbuilding interest will be represented by models of vessels and several applicable to the same. There will be a large fish and vegetable exhibit.

AUSTRALIAN HARDWOODS.

An Australian paper says:—"Probably no country in the world possesses finer or more durable hardwoods than New South Wales. Her iron bark and black-butts rank for durability second to none. Singularly enough all the principal hardwoods used in the colony belong to the great Myrtle family, which, according to Professor Baltour, contains 75 genera, and as many as 1,800 species. Some of the genera, such as the eucalypts, which constitutes at least three-fourths of the timber-producing trees, furnish the bulk of colonial hardwoods, iron-bark, black-butt, blue gum, stringy bark, swamp mahogny, tallow-wood, and yarrah all belong to the same remarkable genus, although differing in many ways, and in none more than their rate of growth, the blue-gums and black-butts being very rapid growers, while the iron-bark and box take much longer to mature. The emainder of hardwoods are principally angophoras or "apple trees," most of which are subject to gum veins; tee-trees, tristanies and syncarpias, better known as turpentine trees, but all members of the Myrtle family, and all growing in the open forest—very rarely in the bush or scrub."

U. S. TARIFF CHANGES.

WASHINGTON, Feb. 15. —Morsison's Tariff Bill will reduce the revenue about $20,000,000 a year. Of this amount probably one-half is taken off sugar, a little more than one-fourth taken off additions to the fee list, and a little less than one-fourth comes from various items scattered through the list. All wood and lumber not dressed is put on the free list with this provision, that the abolition of the duty is not to apply to any wood or lumber inported from a country that imposes an export duty on those articles. The other aditions to the free list are hemp, jute buts, sissal, and other fibre grasses, coal, salt, iron, led, copper and other ores, unmanufactured stone, chicory and other subsiltutes for coffee, corn, oats, hay, potatoes, extract of hemlock, and other barks, crude glyceryne, indigo extract, sulphate of barytes, unmanufactured crude borax, saltpetre, log-wood, and other dye woods, ochery earths, and unwrought clays. On the verious grades of sugar there is a general reduction of 20 per cent, but the reduction does not apply to any sugar on which there an export duty is levied, as is now the ase in Cuba. On the finest grades of cotton goods, the duties on which are *ad valorem*, no changes are made. The rates of duty are highest on the cheapest grades of goods, and on cotton yarns, and on the coarse cotton cloths some reductions are made. When existing duties are under 40 per cent *ad valorem*, they are not touched, but the duty on coarse cotton is reduced from 40 to 35 per cent. The duty on pig iron, is reduced from $6.72 to $5.60 per ton. The rate on steel and iron rails is reduced from about $17 to $12.50. There is a slight reduction in bar iron, and some varities of boiler and hoop iron, while others are not touched. The rate on structural iron and steels, is reduced from one and a quarter to one cent a pound. The three highest classes of crockery now pay duties of 60, 55, and 50 per cent; the new bill reduces them to 50, 45, and 40 per cent. These grades cover all ordinary crockery.

The World's Best.

It is certainly remarkable the wonderful cures effected by West's World's Wonder or Family Liniment This remedy has not an equal in the world for the speedy cure of Rheumatism, Sprains, Cuts, Bruises and all diseases requiring external application. Price 25 cents and 50 cents per bottle. Sold by J. D. Tully

AN EXTRAORDINARY OFFER.

To all Wanting Employment.

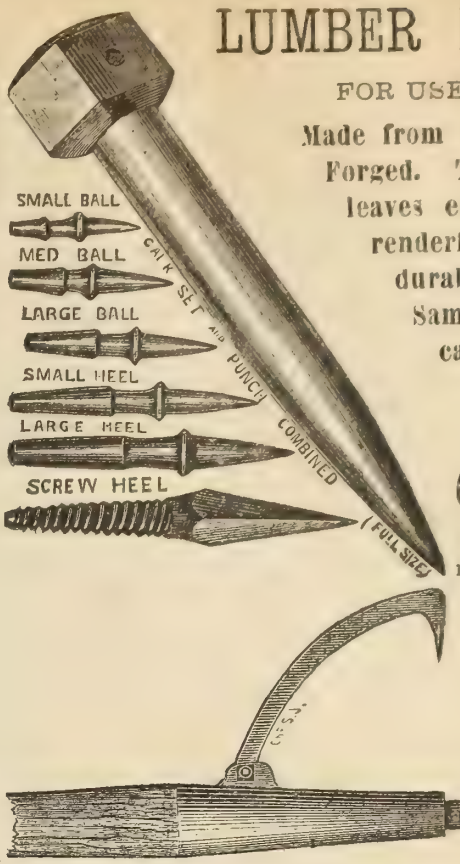
We want Live, Energetic Agents in every county in the United States and Canada, to sell a patent article of good merit, on its merits. An article having a large sale, paying over 100 per cent profit, having no competition, and on which the agent is protected in the exclusive sale by a deed given for each and every county he may secure from us. With all these advantages to our agents and the fact that it is an article that can be sold to every houseowner it might not be necessary to make an "extraordinary offer" to secure good agents at once, but we have concluded to make it to show, not only our confidence in the merits of our invention, but in its saleability by any agent that will handle it with energy. Our agents now at work are making from $150 to $600 a month clear and this fact makes it safe for us to make our offer to all who are out of employment. Any agent that will give our business a thirty days' trial and fail to clear at least $100 in this time, above all expenses, can return all goods unsold to us and we will refund the money paid for them. Any agent or general agent who would like ten or more counties and work them through sub-agents for ninety days and fail to clear at least $750 above all expenses, can return goods unsold and get their money back. No other employer of agents ever dared to make such offers, nor would we if we did not know that we have agents now making more than double the amount we guaranteed, and but two sales a day would give a profit of over $125 a month, and that one of our agents took eighteen orders in one day, Our large descriptive circulars explain our offer more fully, and these we wish to send to every one out of employment who will send us three one cent stamps for postage. Send at once and secure the agency in time for the boom, and go to work on the terms named in our extraordinary offer. We would like to have the address of all the agents, sewing machine solicitors and carpenters in the country, and ask any reader of this paper who reads this offer, to send us at once the name and address of all such they know. Address at once or you will lose the best chance ever offered to those out of employment to make money.

RENNER MANUFACTURING CO.,
116 Smithfield St., Pittsburg, Pa

LUMBER DRIVERS' CALKS

FOR USE IN STREAM DRIVING.

Made from the Best Refined Tool Steel and Forged. The method used in tempering leaves every one of the same temper rendering them stronger and more durable than any other Calks made Samples and prices free on application to the undersigned.



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Orono Cant Dog

Strongest and Lightest in the market. Made of Best Cast Steel by drop forging process. The Handles are made of best quality straight grained split and turned Rock Maple, 5 to 6 feet in length, bored specially to suit the pick. Prices on application.

MANUFACTURED BY

T. McAVITY & SONS,

L2 ST. JOHN, N.B.

A FULL LINE of all Size Single and Double Belting constantly in stock.

☞All ORDERS Filled same days as received.

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☞ Noted for BEST QUALITY GOODS at LOW PRICES! ☜

PAPER, ENVELOPES, PENS, INK and PENCILS,

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Market Reports.

TORONTO.

From Our Own Correspondent.

FEB. 22.—The retail and wholesale trade continues fair, considering the wintry weather we are now having. Prices remain firm. Offers are now making for next cut of logs, but millmen are high in their demands, evidently expecting a boom in lumber on the opening of the cutting season. In this I think they will be mistaken, it is now qulte evident that a full stock of logs will be got in, and the only hope for any boom is in the scarcity of lumber left over from last season's cut, and the only chance for materially improved prices will be on such stocks, or portions of stocks, that may be now on hand, in condition fit for immediate use. There is but little prospect of the duties on American shipments going off this season, so that with a full stock of new logs, and no extraordinary demand over past years, it is hard to see how prices can advance much beyond that now obtainable, and past experience justifies the opinion I have expressed in former letters,—that manufacturers who dispose of their stocks early in the season generally come out first best.

Considerable annoyance and loss to holders of stocks on the line of the N. & N. W. R. R. has resulted through the failue of the above road to meet the cut rates made by the G. T. R. R. Co. to points in western Ontario from off their Midland division. For some time past shippers over the latter road have shipped lumber and shingles to London and other points on a 10-cent rate, while the N. & N. W. R. R. Co. have demanded a 15-cent rate. This made it quite impossible for dealers to ship and compete with holders of stocks on the Midland line. Under the management of the late Mr. Cumberland such a state of things would not have been allowed to continue for a single day. The cut would have been met at once promptly. The result will be that stocks on the Midland in future will be at a premium, as this winter is not the first time that the same state of things has existed, and it certainly seems unaccountable why the present management of the N. & N. W. R. R. so blind as to both their own and their patrons interests, some reason, I presume, there must be, unknown to your correspondent. In the meantime holders of stocks on that line must wait patiently for a resumption of equa rates by both companies before they are able to ship.

Mill cull boards and scantling	$10 00
Shipping cull boards, promiscuous widths	12 00
" stocks	13 00
Scantling and joist, up to 16 ft	13 00
" " " 18 ft	14 00
" " " 20 ft	15 00
" " " 22 ft	16 00
" " " 24 ft	17 00
" " " 26 ft	18 00
" " " 28 ft	19 00
" " " 30 ft	20 00
" " " 32 ft	21 00
" " " 34 ft	22 50@22 50
" " " 36 ft	24 00
" " " 38 ft	27 00
" " " 40 to 44 ft	30 00
Cutting up planks to dry	20 00@25 00
" boards "	20 00
ound dressing stocks	16 00@18 00
Picks Am. inspection	30 00
Three uppers, Am. inspection	35 00@40 00

B. M.

1½-inch flooring, dressed	25 00@30 00
1½ " " rough	14 00@15 00
1½ " " dressed	23 00@25 00
1½ " " undressed	14 00
1 " " dressed	16 00@20 00
1 " " undressed	12 00@14 00
⅞ Beaded Sheeting, dressed	18 00@20 00
Clapboarding, dressed	12 50
XXX sawn shingles, ₱ M	2 75@ 2 90
Sawn Lath	2 25
Red oak	20 00@25 00
White "	25 00@30 00
Basswood, No. 1 & 2	18 00@20 00
Cherry, No. 1 & 2	50 00@60 00
White ash 1 & 2	25 00@30 00
Black ash 1 & 2	20 00@25 00

MONTREAL.

From Our Own Correspondent.

FEB. 23.—As usual at this season of the year the market is very quiet, but the prospects are encouraging, and there is a bright outlook in the building line. Enquiries are already being made by some contractors for large bills, and the retail trade also promises fairly.

Prices of all grades are very firm, with a prospect of higher figures. Basswood is weaker than last year, as there is a good deal offering. Cull deals are scarce and prices high. Prices in Ottawa are steady, but our next report will probably show an advance all around, as there is very little stock unsold, and holders are looking for higher figures.

The demand during the past year appears to have been very good, as compared with the year before, as the receipts for the local trade were nearly 89,000,000, against 76,000,000 in 1884. The following were the actual receipts by the various channels:—

Per Grand Trunk Railway	19,557,000 feet
" Canada Pacific "	10,540,000 "
" Lachine Canal	48,799,000 "
" River St. Lawrence	9,871,526 "

Prices are as follows:—

Pine, 1st quality, ₱ M	$35 00@40 00
Pine 2nd " "	25 00@30 00
Pine, shipping culls, ₱ M	14 00@16 00
Pine 4th quality deals ₱ M	10 00@12 00
Pine, mill culls, ₱ M	7 00@ 9 00
Spruce, ₱M	10 00@13 00
Hemlock, ₱ M	9 00@10 00
Ash, run of log culls out, ₱ M	20 00@25 00
Bass, " " ₱ M	18 00@20 00
Oak, ₱ M	40 00@50 00
Walnut ₱ M	60 00 100 00
Cherry, ₱ M	60 00@80 00
Butternut, ₱ M	25 00@35 00
Birch, ₱ M	20 00@25 00
Hard Maple, ₱ M	25 00@30 00
Lath, ₱ M	1 50@ 1 60
Shingles, 1st, ₱ M	2 00@ 3 00
Shingles, 2nd, ₱ M	2 50@ 0 00

CORDWOOD.

The cordwood market is very dull, prices are high, but fair:—

Long Maple, per cord	$ 6 00@6 50
Long Birch "	6 00@0 00
Long Beech "	5 00@5 50
Tamarack "	5 00 0 00

CHICAGO.

AT THE YARDS.

The *Northwestern Lumberman* of Feb. 20th says:—Interest now centres in the attitude of trade in regard to prices. Thus far the dealers have acted commendably. They have fairly adhered to the policy of firmness declared at the year's beginning. Isolated instances of cheap selling have been known, it is true, but as a general thing the disposition has been to stand firm for what was considered to be fair prices on a basis of $11 a thousand for piece stuff, $14 for No. fencing, $11.50 to $12 for No. 2 boards, $13 to $14 for common boards—unless 20 feet long when more is realized. There is trading between yards at lower prices, of course, but bills sold out of the yard to the regular distributive trade hug these quotations closely, when the stock is dry.

There is considerable inquiry for good lumber for factory work. As yet this call has not become very pronounced, but it is looking up in a manner that indicates a good future demand The extent of the near-by demand for better grades of lumber this year will depend on the extent of building. While there is still an expression of confidence in a good coming season for building operations, prospects have not yet sufficiently developed to render such a conclusion positively certain. The possibility of labor disturbance still looms like a cloud in the near future. Late strikes and lock-outs in this city indicate the temper of both employes and employers. Eight hours a day will undoubtedly be demanded on May 1st, with what result cannot be definitely forseen. It is possible that building will, in a measure, be checked by the looked-for trouble. Yet the necessary growth of the city and its suburbs will ensure a fair amount of construction during the year. Outside it is not likely that labor disturbance will greatly effect trade, though it may in the larger cities, like Kansas City, Omaha, and others in West.

The brightest outlook for the lumber trade this year is in the direction of railroads. The call for car stuff is active, and prices for strips suitable for this purpose are a dollar or more higher than for other lumber of corresponding grade. Some dealers, especially those handling largely for the trans-Missouri trade, begin to observe an increased demand from the railroads on other account than that of car building. The railroads are the lever that is to lift the trade wagon out of the slough in which it has been dragging for two years past. Nothing else is in sight equal to the emergency. The farmers cannot do it, for their ability to buy lumber and improve is curtailed by the low value of what they have to sell. After the railroad boom has acquired full headway, and given employment to the surplus labor of the country, we may expect higher prices for farm products, and a consequent increased rural demand for lumber. This cannot come for several months. Farmers will not realize the benefit of railroad construction before next fall. But the large amount of railway work in the western states during the season will promote the building up of numerous little towns, the establishment of new yards, and the use of a large amount of lumber and coarse forest products by the contractors. This demand may tide the trade over until the farmers can catch hold.

It is evident that the yard dealers feel more than usually cheerful and confident in view of the prospects. They evince a disposition to wait the natural and healthy movement of lumber, and do not manifest that feverish haste to crowd off stocks that has been witnessed in former seasons. No surer test of confidence in future values than this could be asked for.

According to the report of stock on hand February 1st, as made to the secretary of the exchange, a decrease of 4,674,482 feet was shown in the total, as compared to amount on hand at a corresponding date the year previous. Stocks decreased during January to the amount of 41,924,891 feet in spite of adverse weather conditions. It is predicted that on March 1st stocks will show that there has been a healthy decrease during Februrary. On the whole, trade this winter has been somewhat in excess of that during the winter of 1885.

Receipts of lumber and shingles for the week ending February 18th, as reported by the Lumberman's Exchange:—

	RECEIPTS. Lumber.	Shingles.
1886	5,235,000	1,300,000
1885	960,000	182,000

FROM JAN. 1, TO FEB. 18 INCLUSIVE.

	RECEIPTS. Lumber.	Shingles.
1886	26,444,000	7,988,000
1885	21,489,000	4,686,000
Increase	4,955,000	3,302,000

STOCK ON HAND FEB. 1.

	1886.	1885.
Lumber & timber	584,767,582	589,442,064
Shingles	418,339,205	333,389,025
Lath	77,926,482	57,824,292
Pickets	5,297,053	2,927,264
Cedar posts	444,462	478,484

EASTERN FREIGHT RATES.

FROM CHICAGO AND COMMON POINTS ON CAR LOAD LOTS OF HARD AND SOFT LUMBER.

IN EFFECT NOV. 1.

To New York	30c.
Boston	35c.
Philadelphia	28c.
Baltimore	28c.
Washington	28c.
Albany	28c.
Troy	28c
Buffalo and Pittsburgh	15c.
Shenectady	28c.
Wheeling	15c.
Suspension Bridge	15c.
Salamanca	15c.
Black Rock	15c.
Dunkirk	15c.
Erie	15c.
Toronto	15c.

OSWEGO, N.Y.

From Our Own Correspondent

The demand since our last has been very good, though we cannot advance our quotations. Country dealers are only purchasing to keep up assortments, most of them have run on very short stocks during the winter. Collections are fair. The Ottawa boom in prices will scarcely reach here, considering the increase in the quantity of logs being taken out.

Three uppers	$42 00@46 00
Picking	32 00@35 00
Cutting up	24 00@26 00
Fine Common	22 00@25 00
Common	14 00@18 00
Culls	11 00@14 00
Mill run lots	16 00@22 00
Sidings, selected, 1 in	30 00@35 00
" 1½ in	32 00@36 00
Mill run, 1x10, 13 to 16 ft	16 00@21 00
Selected	21 00@24 00
Shippers	14 00@16 00
Mill run, 1½x10	17 00@20 00
Selected	21 00@30 00
Shippers	14 00@16 00
Mill run, 1 & 1½ in, strips	15 00@18 00
Selected	22 00@30 00
Culls	11 00@13 00
1x6 selected for clapboards	25 00@35 00
Shingles, XXX, 18 in. pine	3 10@ 3 50
XXX Cedar	2 75@ 3 00
Lath 1½, No 1	1 80@ 1 90
No 2	1 00@ 1 25

ALBANY.

Quotations at the yards are as follows:—

Pine, clear, ₱ M	$53 00@55 00
Pine, fourths	48 00@50 00
Pine, selects	45 00@47 00
Pine, good box	22 00@33 00
Pine, common box	11 00@13 00
Pine, 10-in. plank, each	00 42@00 45
Pine, 10-in. plank, culls, each	00 23@00 25
Pine boards, 10-in	00 28@00 32
Pine, 10-in. boards, culls	00 16@00 20
Pine, 10-in. boards, 16 ft., ₱ M	28 00@32 00
Pine, 12-in. boards, 16 ft	28 00@32 00
Pine, 12-in. boards, 13 ft	28 00@00 00
Pine, 1¼ in. siding, select	40 00@43 00
Pine, 1¼-in. siding, common	15 00@18 00
Pine, 1-in. siding, select	40 00@42 00
Pine, inch siding, common	13 00@15 00
Spruce, boards, each	00 00@00 16
Spruce, plank, 1¼-in., each	00 00@00 20
Spruce, plank, 2-in., each	00 00@00 30
Spruce, wall strips, each	00 12@00 12
Hemlock, boards, each	00 00@00 14
Hemlock, joist, 4x6, each	00 00@00 32
Hemlock, joist, 2½x4, each	00 00@00 14
Hemlock, wall strips, 2x4, each	00 00@00 11
Black walnut, gook, ₱ M	100 @120 00
Black waluut, ⅞ inch	80 00@90 00
Black walnut, ¾ inch	00 00@85 00
Scaymore, 1-inch	28 00@30 00
Scaymore, ⅞-inch	21 00@23 00
White wood, 1-inch and thicker	38 00@40 00
White wood, ⅞-inch	25 00@30 00
Ash, good, ₱ M	40 00@43 00
Ash, second quality, ₱ M	25 00@30 00
Cherry, good, ₱ M	60 00@35 00
Cherry, common, ₱ M	25 00@30 00
Oak, good, ₱ M	40 00@43 00
Oak, second quality, ₱ M	20 00@25 00
Basswood, ₱ M	25 00@30 00
Hickory, ₱ M	40 00@40 00
Maple, Canada, ₱ M	28 00@30 00
Maple, American, per M	26 00@28 00
Chestnut, ₱ M	38 00@40 00
Shingles, shaved, pine, ₱ M	0 00@ 6 50
" 2nd quality	0 00@ 5 00
" extra, sawed, pine	4 30@ 4 50
" clear, "	0 00@ 3 00
" cedar, mixed	0 00@ 3 30
" cedar, XXX	0 00@ 0 00
" hemlock	2 25@ 2 37
Lath, hemlock, ₱ M	0 00@ 2 25
Lath, spruce, "	0 00@ 2 13

TYNE.

The *Timber Trades Journal* says:—The frost and snow which have held everything in their grasp for several weeks past have at last disappeared, and outdoor employments are now to some extent being resumed. For many weeks past building operations have been almost entirely suspended, and it need scearcely be pointed out, this has been a most disastrous effect upon all those engaged in the timber trade.

None of the saw mills have run more than three quarter time, and a considerable part of them not even that. Now that the weather is a little more favorable, operations will be resumed, but the look-out is not at all inviting.

So far the shipbuilding dispute is unsettled, and appearently no nearer to a solution. The iron and coal trades are also very quiet, while the building trade is appearently, if one may judge from the sign of empty houses here and there, a little overdone.

Stocks of wood goods still continue high, and in all likelihood the importation for this year, if confined to the requirements of the trade, will be but small. A few ships are being asked for, but in amount they are not large.

The importations for the past seven days have been mainly per steamers, and are not of much importance either in number or amount

GLASGOW.

The *Timber Trades Journal* of Feb. 13th says:—Our wood import list for the past week is almost a blank. There have been no arrivals at Greenock or Grangemouth, and only a few staves, &c., (about 30 loads) at Glascow; but though not entered in this week's list, there has just come to hand a cargo of spruce deals from Dorchester, N. B., the first of this year's import of spruce deals at Glasgow, and consigned to Messrs. Edmunson & Mitchels.

The change we are beginning to experience from the late severe weather will have a favorable effect on the timber trade, as the protracted wintry weather had stopped outdoor building operations, and was a hindrance to the inspection of timber in ponds.

An auction sale of timber and deals, result of which is given below, took place at Greenock on the 4th inst., when transactions were to a fair extent, over 400 logs changed hands besides deals. Birch timber of small squares (stock of which is heavy) is not in demand, and prices obtainable are low.

A public sale of mahogany and cedar, as will be seen from our advertisement columns, is announced by Messrs. Willian Connal & Co. to take place at Queen's Dock, Glasgow, on 23rd inst.

AUCTION SALE.

On 4th inst., at Greenock, Messrs. Singleton, Dunn & Co. bankers:—

Quebec waney boardwood—		Per c. ft.
40 c ft. av. per log		1s. 9d. & 1s. 8d.
Quebec yellow pine—		
35 & 40 c. ft. av. per log		1s. & 1f. 0½d.
Quebec red pine (100 logs)—		
45 c. ft. av. per log		1s. 3½d.
25 & 30 "		10d. and 10½d.
Miramichi yellow pine deals—		
9 to 20 ft.	13/19×3	9d.
9 " 20 "	12×3	9½d.
15 " 20 "	11×3	9½d.
9 " 14 "	11×3	9½d.
14 " 20 "	10×3	9½d.
9 " 13 "	10×3	9d.
12 " 20 "	9×3	9d.
9 " 11 "	9×3	8½d.
9 " 20 "	8×3	8½d.
9 " 20 "	7×3	8½d.

LIVERPOOL.

The *Timber Trades Journvl* of Feb. 13 says :—At the time of writing there have been no public sales held this week; hence the business done has been quiet and uneventful. Some life may yet be infussed into the trade, as two sales are announced, one of pitch pine,&c., by Messrs Price and Pierce, and Messrs Edward Chaloner & Co's sale of mahogany and fancy wood.

There is no great disposition shown to enter into contracts for future supplies, and it is reported that the efforts of the Swedish and Quebec goods have not met with any great measure of success.

So long as trade of this district continues to be in the unsatisfactory condition it now is, so long will there be a desire to act with commendable caution and resistance. Unfortunately there seems little prospect for any marked improvement at any rate for the immediate future, in the face of wage disputes now pending between the manufacturers and operatives in Oldham and other cotton spinning centres, and which have considerably effect the disturbing of other branches of business, so long as they exist.

The freight market here is very quiet, as may be supposed from what is said above, and we do not believe that any vessel has yet been positively fixed for Quebec and this port. The rates offered are about 20s. per load for timber, and 50s. per standard for deals.

Matters did not improve at the sale of pitch pine held by Messrs. Price & Pierce, the result showing a further decline in prices, which in a measure may be attributable to the extensive sale of this wood announced to be held next week by Messrs. James Smith & Co.

No fault could be found with quality and condition of cargo per Woodfield, and the result may be taken as a fair measure of the value of this wood as Mr. T. B. Neale, the auctioneer let no opportunity pass of bringing out the best in bringing out the best possible result. The plank per Megisiature are mostly of very short lengths and narrow widths; still they were very cheap at the prices obtained.

The following prices were realized :—

FRESH PITCH PINE TIMBER,
Ex Woodfield, from Mobile.

Feet Long.	*Inches Wide.*	*Per c. ft.* s d.
20 to 35	17×19 to 20×22	1 6½
19 " 38	17×18 " 18×18	1 4½
20 " 39	15×16 " 16×18	1 2
30 " 43	16×17	1 2½
19 " 43	10×12 " 16×17	1 1
22 " 40	16×16 " 15×17	1 2½
24 " 45	14×16 " 16×16	1 1½
17 " 42	12×13 " 15×16	1 0½
30 " 46	12×12 " 14×15	1 1½
30 " 34	12×12	1 1
23 " 51	9×10 " 11×12	1 1½
23 " 39	10 x13 " 13 x14	1 0½
Beam fillings		11d. & 0 11½d.

PITCH PINE PLANKS.

3x9 to 4x15	0 9½
4x9 " 5x12	0 10½
5x13 " 6x16	0 11

Ex Legislator.

6x9 to 6x12	0 9½
4x8 " 5x8	0 9

LONDON.

The *Timber Trades Jounal* of Feb. 13 says :—Messrs Churchill & Sim had a moderate attendance at their sale on Wednesday last; the room was tolerably full, but those who occupied the their seats with a fixed determination to bid were hardly so numerous as on the previous occasion. The day being fine the avenue leading to the room was thronged by verious members of the trade, but the riots at ths West End rather than the disposition of prices seemed to be the topic most frequently discussed.

The effect of the continued frost on the dock deliveries is again apparent; and this, together with the stagnation in building, rioters—though prehaps, good for the glaziers—has certainly imparted a less hopeful tone to the market.

Building was very dull, and Mr. Churchill had some difficulty in getting buyers to advance on their opening offers, many lots getting no further than that limitation; one fact, the broker seemed to consider it useless to linger over the lots in a general way, and it did not take very long to see whether there was a chance for getting a bidder to go on when once a pause enued.

Prices on Wednesday may be set down a very poor, and illustrative of the sensitiveness of the market to the depression, which recent events have rather agitated than otherwise.

Stowage goods, of which many of the deals now and again offered by auction consist, though bearing all the characteristics of the leading shipments and qualities, at least as far as description goes, and nevertheless not equal to the rest of the cargo, and when we see first-rate stock selling under price it will be safest to set it down to some such cause. There can be no question that 3+11 in. in prime quality are very scearse at present, and though undoubtedly feeling the effect of of the depression, yet nothing like to the same extent as more general sizes. One reason why speculation is so dead is that there is nothing to look forward to; it would not matter so much at the present if there was anything like a probability of things mending, but nobody can point to the direction that the improvement is to come from.

The disturbance here, though further checking trade now, may prehaps be the foundation of a better state of things by awakening the authorities to the necessity there is for taking some steps to stimulate the industries of the country, which have for a long time been on the decline. It is only in this direction—unless we can find a solution to the question in the promotion of emigration—that the wished for recovery in commerce can be arrived at.

The timber sold on Wednesday seemed to partake of the same inativity, and bidding was slow, yellow pine ev Terpsichore, from Quebec. This hung fire at 45s., and it was some time before the brokers got a bid at all. After lingering awhile, the hammer had to fall without any body caring to advance on the opening figures There were only about three buyers in the room that cared to offer for it, and in a kind of a see-saw fashion, first up and than down, the parcel was disposed of, the best price being, 57s. 6d., which one lot of wany realized. The time certainly does not seem proitious for shippers on the other side to be demanding higher values free on board. If they can succeed to place their f.o.w. stock at last year's quotations they will have done well Of course we are only alluding now to London Market, but we assume the provincial ports to be pretty much the same position, viz., full stock and a slack demand.

The week dock deliveries again compare favorable with last year, though not much materially on deals and battens (51 standard). On flooring the difference is highly significant of the times, no less than 158 out of an average weekly consumption of 4,000 standards representing the shortage on this one item. The comparison with the corresponding week's con consumption last year of floating timber leaves our present record short 249 loads. We hope the weather will prove to be partly the cause of this decline; but we must not attribute it all to that account, for with a week or two's return to mild weather we did not find the improvement we expected.

On Thursday Messrs. Churchill & Sim had a pretty good muster of buyers in and out throughout the wholesale. The plan seemed to be to drop in when something the intending bidder was going in for was likely to be coming under offer, hardly any body seemed to care to it the whole programme through. There were, we noticed, plenty in the room to lift prices if the demand from outside had afforded them any excuse. But when bidding became brisk, which it did at times, it was prompted almost solely by the low price that the goods were falling at. This was very noticeable when the finish parcel, ex Dewdrop, was submitted, the boards especially going remarkably low.

THE LUMBER OF 1900.

The lumbermen of the present hour is a sharp buisness man—quick to note advantages in the market alike of labor, produce, or lumber, and enterprising in opening new channels of production or sale. He can "size up" a timber berth, lumber pile, or gang of men with almost unerring judgment. He deals with the seen and tangible, and sharp perception, quick decision are qualities daily requisite. He is apt from his vocation to be rather positive of his knowledge and autocratic in his managenent of business. He is a great improvement to the happy-go-lucky jobber of half a century ago, who hunted up a grove of pine in some accessable position, found a supplier to carry on the necessary expenditure, hired a gang, and came out in the spring a little ahead or a good deal behind, as the weather and market might determine.

The lumbermen of the year 1900 will be still another style of man, and a great revolution in methods of operation will be the result. "The white pine like the Indian is doomed to extinction; neither can bear cultivation" is the dictum of a philosophic lumberman. Assuming that the present mode of lumbering is pursued twenty years longer, little pine will remain in either Michigan or Ontario, and we must look to some means of supplying our daily needs for houses, cases, etc. That this may be by pressed pulp and peat there can be but little doubt; and we trust that the change will even be to our benefit. The range of timber suited to pulping is annually extending, and the applications to the finished product to domestic use rapidly increasing. That ultimately all kind of of timber will be pulped and pressed into required forms, without any loss of material, may be regarded as certain. Instead of saws, boring, mortising machines, planers, moulders, glue pots, etc., we will see extensive ranges of hydriolic presses, steel moulds, and trimmings for the pressed goods they procure. The man that directs all will be a trained chemist, who can call all the appliances of modern science and technical skill to his aid—who can unroll the mazes of natural handiwork in vegetable life, and grasp the fibre at the stage suited to his purpose. Asbestos, talc, mica, graphite, kaolin and other mineral bodies will play a part in his operations; oxides and chlorides of the metals will be used to indurate the pulp board and render it incombustible—its hues may vie with rainbow tints, and its durability outlasts the Egyptian granite. Such we believe to be the coming lumberman and his material. There will be then little running of rapids, booming and all the romatic routine of the raftman's life. Whole sections will be devoted to the cultivation of pulp timber and fibrous grasses; and thus the gallant, adventurous raftsman will subside into the scientific farmer, and reap his laurels (and his profits) from the flowery field instead of the foaming flood.—*Toronto World.*

PROPOSED CHANGE IN THE U. S. TARIFF.

The following is a somewhat clearer statement of the charges proposed by Mr. Morrison, after July 1st, 1886, as far as they affect Canadian interest :—

FREE LIST—ADDITIONS.

Lumber, hewn and sawed, and timber used for spars and in building wharves; timber, square and sided, not specially provided for; sawed boards, plank, deals and other lumber of hemlock, whitewood, sycamore and baswood, and all other articles of sawed lumber; hubs for wheels, posts, last-blocks, waggon blocks, oar-blocks, gun-blocks, head-blocks, and all like blocks or sticks, rough hewn or sawed only; staves, or wood of all kinds, pickets and palings laths, shingles, pine clapboards, spruce clapboards, wood, manufactured, not specially enumerated or provided for (proviso—inoperative when imported from a country laying an export tax); salt in bags, sacks, barrels or any other packages; salt in bulk; hemp, Manila, and other like substitutes for hemp not specially enumerated or provided for; jute butts; jute—sunn; Sisal grass and other vegetable substance not specially provided for; iron ore, including manganiferous iron ore; also the dross residuum from burnt pyrites; sulpher ore, as pyrates or sulphuret of iron in its natural state, copper imported in the form of ores; lead ores and lead dross; chromate of ore, or chromic ore; mineral substances in a crude state and metal unrought, not specially numerated or provided for; coal, slack or culm; coal, bituminous and shale; Indian corn, or maize; oats, hay, potatoes; chickoery-root, ground or unground, burnt, prepaired; acorns and dandoline root, raw or prepared, and all other articles used or intended to be used as coffee, or as substitutes therefor, not specially numerated or provided for; bristles, grease; tallow; grindstones, unfinished; stones unmanufactured or undressed freestone, granite, sandstone and all building or monumental stone except marble, not specially enumerated or provided for; beeswax; glycerine, crude, brown or yellow, for the specific of one and twenty-five hundredths or less at a temperature of sixty degrees Fahrenheit, as purified by refining or distilling; extract of hemlock and other bark used for tanning, not otherwise enumerated or provided for; indigo, extracts of, and carmined; Lee's brysteles; baryta, sulphate of or barytes, unmanufactured borate of lime; crude borax, potash; mitrate of or salt petere, orude; logwood and other dyewood and extracts and decoctions of; coal tar, crude; ochre and ochry earths, umber and umber earths and sienna and sienna earths, when dry; all earths or clay, unwrought or unmanufactured, not specially enumerated or provided for.

The bill provides that from and after July 1, 1886, the following rates of duty shall take effect :—

WOOD.

Sawed boards plank, deals and other lumber of hemlock, whitewood sycamore and basswood and other articles of sawed lumber, when planed or finished, for each side so planed or finished, 50 cents per 1,000 feet, board measure.

LEAD, ZINC, ETC.

Lead, in pigs and bars, molten and old refuse run into blocks and bars, and old scrap lead, fit only to be remanufactured, 1½ cents per pound. Lead, in sheets, pipe or shot, 2½ cents per pound.

Zinc, spelter, or tutenegue, in blocks or pigs, and old worn out zinc, fit only to be remanufactured. 1 cent per pound; zinc, spelter, or tutenegue, in sheets, 2 cents per pound.

SUNDRIES.

Marble of all kinds, in blocks, rough or square, 50 centss per cubic foot; veined marble, sawed, dressed or otherwise, including marble slabs and marble paving tiles, $1 per cubic foot.

Stones, free stone. granite sand stone and all building or monumental stone, except marble, when hewn, dressed, or polished, 20 per centum ad valorem.

BOARD OF TRADE RETURNS.

The following are the returns issued by the Board of Trade, for the month of Dec. 1885 :

MONTH ENDED 31ST JAN., 1886.

Timber (Hewn).	*Quantity. Loads.*	*Value. £.*
Russia	807	3,820
Sweden and Norway	17,998	26,875
Germany	1,231	3,035
United States	8,282	31 481
British India	3,606	48,017
British North America	1,388	3,740
Other Countries	28,387	46,950
Total	61,699	163,918
Timber (Sawn or Split, Planed or Dressed).		
Russia	3,640	6,774
Sweden and Norway	21,787	48,401
British North America	7,310	13,982
Other Countries	1,567	6,434
Total	43,155	101,176
Staves, (all sizes)	4,665	30,584
Mahogany (tons)	2,671	23,856
Total of Hewn and Sawn	109,354	265,094

TONAWANDA.

CARGO LOTS—MICHIGAN INSPECTION.

Three uppers	$42 00@44 00
Common	18 00@24 00
Culls	10 00@13 00

THE band saw boom is rising, Messrs. Churchill, of Alpena, will have one planed in their mill this season.

BAND SAWS—JIG SAWS—SHAVING VAULTS.

The band saw mill has not yet been brought to perfection, and probably will not yet for years to come. If it were perfect we would have no further use for jig saw, and the jig saw is generally a rattling, jumping nuisance. The saw is always getting out of square ; the crank shaft is out of balance and jumping around about as it has a mind to, while if the saw is a gate saw the gate gets loose and racketty, the sawer gets demorlized and your jig-saw work falls into disrepute in the market.

The band saw is not a perfect tool, because we cannot do inside work with it. No practical method has yet been found for joining a saw so that it may be connected and disconnected at will, to enable it to be used for inside work. There is a device whereby a band saw may be unhooked and hooked together again, but it is not of much value. It breaks easily and often, and it costs considerable to repair it. Good jig saws are very scearce. They are not found in every shop, and even every other shop does not have a first class jig-saw.

A saw which has the over-head portion bolted to the floor-joise above, independent of the table —that saw is a tool that you want to sell before you are a day older. Prehaps the maker of that saw came to the shop and set it up himself. It did work nice, there was no mistake about that. It cut square, fast, and smooth, and what more can a saw do? The next morning Bob nailed up four inches thick of gingerbread work and began to saw it. The narrow parts of the scrolls were about one-eighth inch wide. The saw cut quick and smooth and Bob cut around the piece. While he was sawing Tom loaded a truck and took it upstairs on the elevator. When Bob got the pieces sawed he naturally turned them over and looked at them. The narrow part of the scroll was cut completely off. That two thousand pounds of stock on the truck had sprung the floor enough to throw Bob's jig saw one-sixteenth inch out of line. As long as that saw stayed in the shop you could count on its being ready for "inlaid work" and it never could be depended on to cut two bevels alike. The best jig saw we have yet seen is in the shop of Mr. J. W. Cooper 17th street and Washington avenue, Philapelphia. He has eight or ten of these saws. They were built expressly for his own use, and the designs were also his own. They are built on a frame similar to that of some band saws.

The frame was shaped like the letter C. The crank shaft was in the lower part of the back of the frame, and actuated a double segment rocker arm, which gave motion to two straps, one of which went to the upper end of the saw the other to the lower end. The direction of the straps was changed to perpendicular by two light pulleys, the lower one fixed to the upper pully hung in a frame. This frame rested upon a wedge. To take out the saw the wedge was withdrawn. To strane the saw the upper pulley and its carriage were raised with one hand while with the other the wedge was pushed into position. These saws worked well. They did not shake enough to displace a five-cent piece when set on edge, upon the saw cutting two inches of black walnut.

"How is your shaving vault rigged?" we asked Mr. Cooper after we had inspected his jig saws. "Well, I'll show you," said he. "There it is, you will see that it is simple, a big brick well. There is nothing about its construction that can be burned. The walls are brick. It is 25 feet up to the iron roof, and if the shavings get on fire the whole thing acts like a big fire place The shavings burn up and that's all there is about it." "Ever have a fire there?" "Oh yes. The shavings will get on fire once in a while, but it never cost the insurance folks anything yet."

Why is this not a good idea?—*Cabinetmaker.*

Bright Outlook

NEW YORK, Feb. 15 —It is stated that the outlook for the lumber trade this spring is decidedly bright. The stock of all kinds of lumber and timber on the market is smaller than it has been for some years, and in view of the good demand and brisk building outlook, there is every prospect of a bright season ahead.

EXPORT DUTY ON LUMBER.

The question of placing an increased duty on logs exported from Canada has attracted considerable attention of late and some with a view to further protect the lumbering industries of the Dominion are urging that the duty be increased. A *Free Press* reporter waited on Mr. Johnston, commissioner of customs, to-day with regard to the matter.

"I wish to ascertain if there is any duty on logs exported from Canada?" asked the reporter.

"Yes," answered Mr. Johnston, "There is an export duty of $1 per M on spruce and pine logs."

"I suppose you are aware that American firms are proposing to ship logs this season from Georgian Bay section to the Michigan mills?"

"I am not aware of that."

"How does the export duty work?" queried the reporter.

"Well I cannot say that it works satisfactorily ; it is so surrounded with difficulties to enforce the regulations. Our frontier line is so long, and the territory to be covered so extensive, that it cannot be otherwise. I see that a measure for taking off the duty on Canadian importations will come up before Congress, and I trust that it will pass, as it would be the means of equalizing things."

"The duty of collecting this export duty is found to be difficult is it?"

"Most difficult. Take for instance New Brunswick. There is only an immaginary line there and Americans come in and draw logs away and what can we do. To enforce the duty it would be necessary to place a man at every lumber camp, and this would be altogether too expensive. In fact the cost of so doing would far exceed the revenue dereved."

"What about Ontario?"

"Well take the lakes for instance. The line of demarcation is supposed to be in the centre of the lakes, you cannot make any seizures for duty while the lumber is in Canadian waters and it would be necessary to have a man on the line to enforce the regulation, which is utterly impossible. The outlets are so numerous for this kind of thing that no body can fancy the difficulty with which it is encompassed."

"What do you think would meet the case."

"I am as strong for protection to our native industries as anybody, but I think the only way the case can be made satisfactory is receiprocity in lumber. If the Americans would take off their duty on sawn lumber everything would be all right. An export duty is a two edged sword."—*Ottawa Free Press.*

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Dr. W. G. Gentry, Kansas City, Mo., says: "I have used Scott's Emulsion for years, and for consumption and anaemic patients and children with marasmus, have found it very reliable. Have frequently given it when patients could retain nothing else on the stomach."

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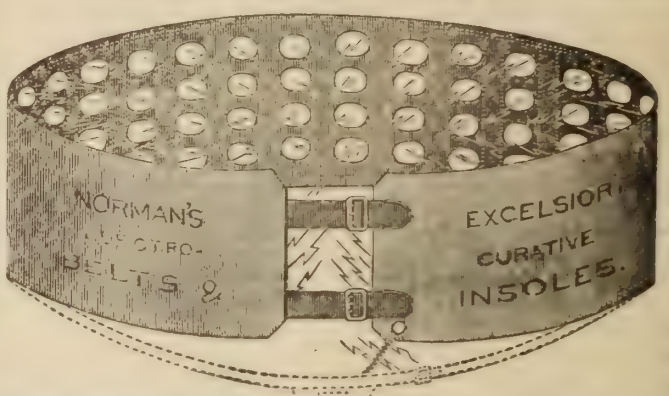

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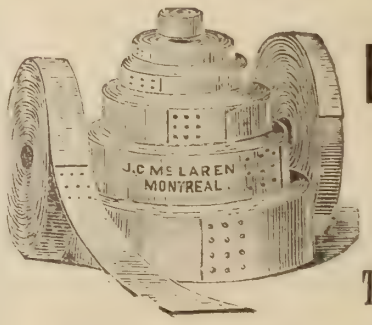

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☞TO ADVERTISERS.

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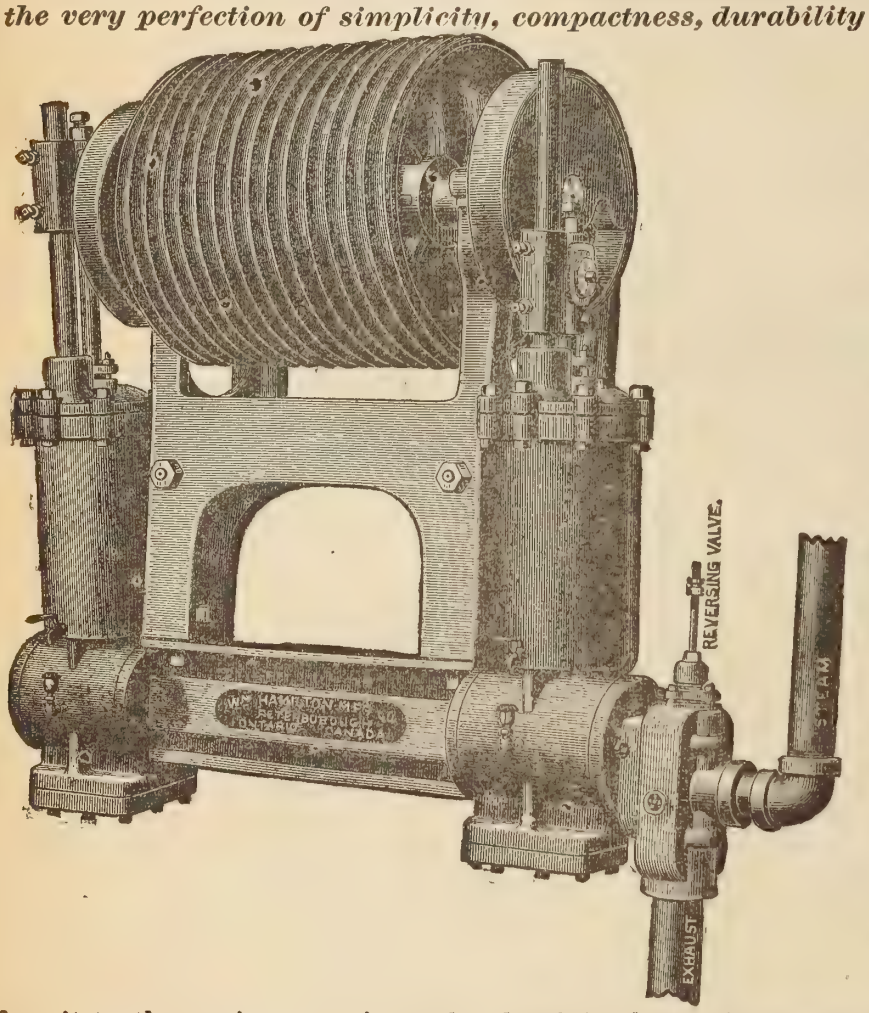

The above engraving illustrates the Twin Engine, 10x16, for Rope Feed, for Saw Mill Carriages. The spool is 27 in. diameter, 30 in. face, is grooved 2 in. pitch for 1½ in. rope. The shaft is steel, 4½ in. diameter, with disk cranks. No connecting rods, eccentrics or valve rods to get loose and out of order. The ports are in the trunions, and worked by an oscilliation of the cylinders, and are held in their place in the downward motion by a steam cushion below. The sawyer's valve is a perfect balance, and by moving this valve the engine can be reversed, stopped or started almost instantaneously if necessary, as the sawyer has perfect control of it by his lever either to go fast or slow. Should the sawyer let go of his lever either by mistake or any other cause, it is balanced so that the valve will come to the centre and cut the steam off both cylinders and stop the feed. When standing, the lever is locked or fastended, so that is is impossible for it to start off itself. The engine stands upright below the carriage, and bolted to two upright beams, placed on the mill for the purpose. When a rack is preferred in place of the rope, we put on a steel wheel 30 in. in diameter, and the engine placed high enough to work into the rack on carriage bar, or if the beams come in the way, an idler wheel can be used between engine and rack segs; or, the engine can be placed at a distance and have a shaft from it to the carriage; or it can be placed in the engine room, where it is under the control of the engineer for oiling, thence by shaft and pinion to carriage rack bars. These engines are well adapted for cutting long logs, or where the logs are mixed, the advantage of this feed will be apparent to mill men. When the carriages are used in two or more sections, the couplin and ncoup ling of each section is quick and simple.

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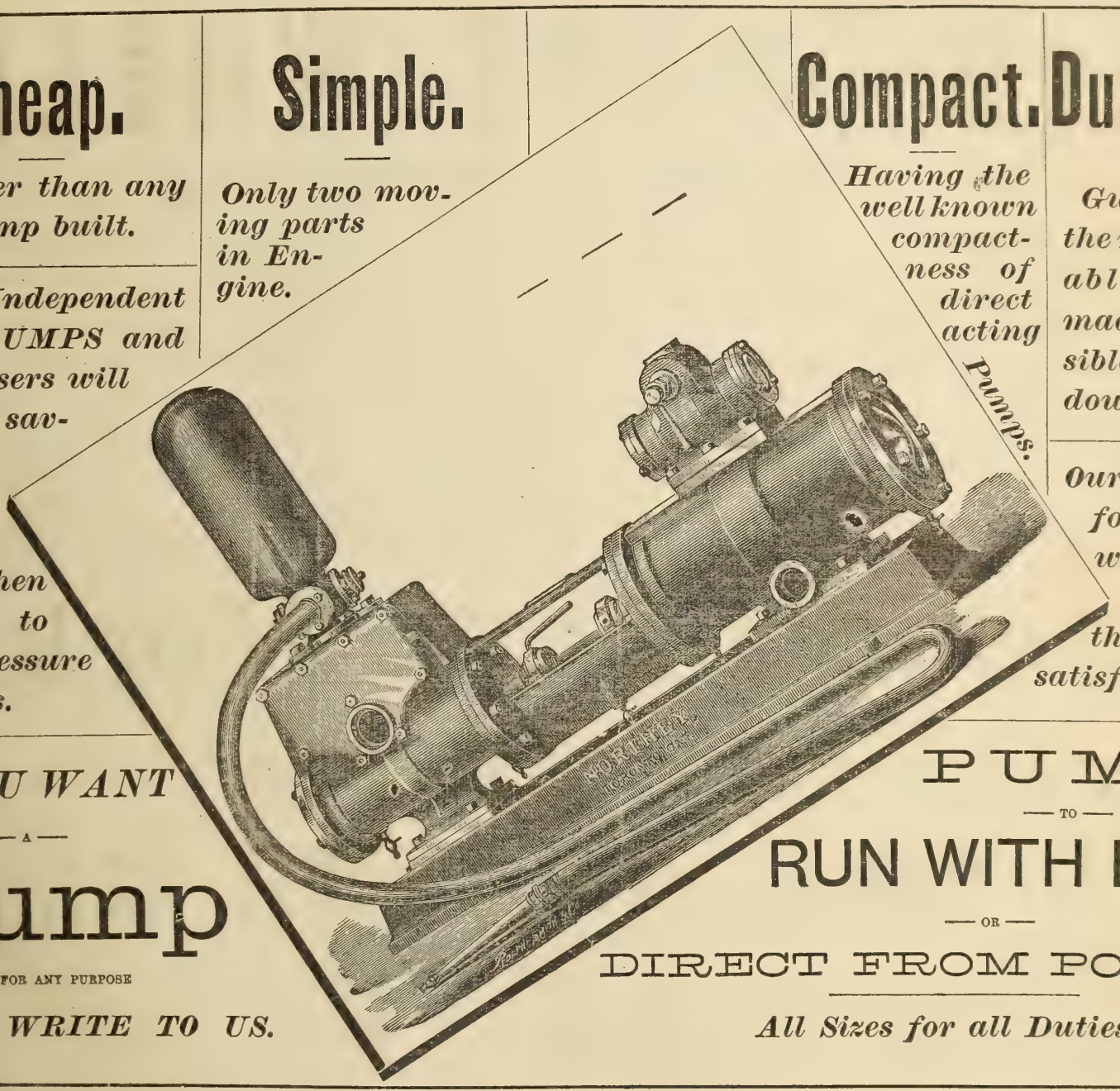

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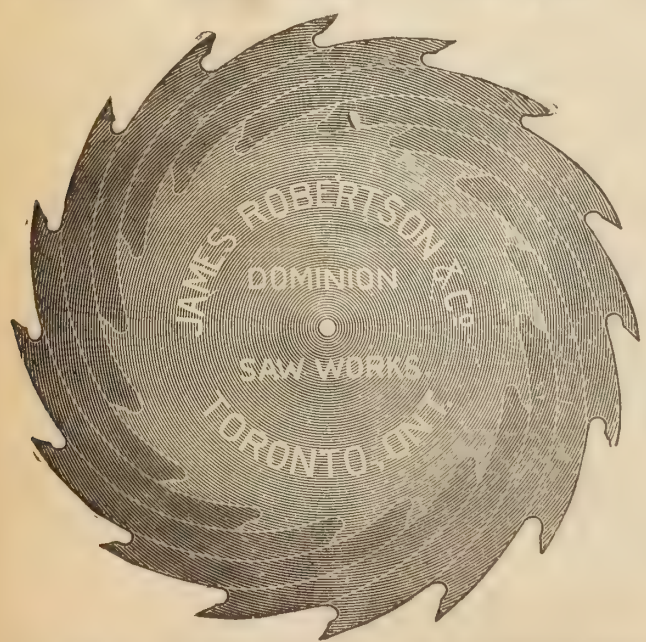

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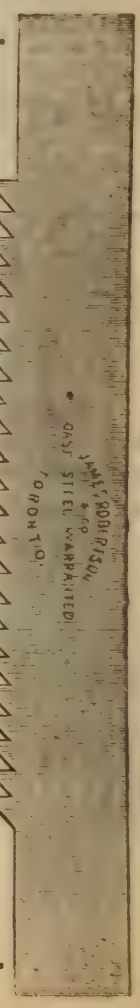

THE CANADA LUMBERMAN

AND MILLERS' MANUFACTURERS AND MINERS GAZETTE.

PUBLISHED SEMI-MONTHLY.

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VOL. 6. PETERBOROUGH, ONT., MARCH 15, 1886. NO. 6.

A TERRIBLE WARNING.

In its issue of Feb. 22nd the Ottawa *Free Press* tries to frighten those who advocate an increase of the export duty on logs by publishing the following:—

"The people who want to protect the lumber industry of Canada, by increasing, and rigidly enforcing the export duty on logs, have a warning in an incident which comes from St Lucia, in the West Indies. A correspondent says there 'is a mountain near the southwestern end of the island called Suoffriers, the remains of an old volcano whose crater is full of sulphur. Some years ago two gentlemen from Antigua bought this mountain and set up works for extracting the sulphur. The first year they sent away nearly 600 tons of purified sulphur. But the natives thought they were doing entirely too well for a couple of mere foreigners, so they put an export duty of $4 a ton on sulphur and so put an end to the business, and from that time the sulphur mine has lain idle.' A heavy export duty on logs would probably have the same lamentable effect in this country as happened in the illustration given of another export duty."

This warning does not warn. It would not be considered a calamity by many in this country if the business of exporting logs did cease entirely. It will be noticed that the foreigners who exported the sulphur from St. Lucia purified it before exporting it—they manufactured it. But the United States dealers who export logs do not manufacture them and they, through the operation of the United States import duty on lumber, are given an advantage over Canadian dealers. An export duty on sawn lumber would be analagous to the action of the natives of St. Lucia, and it would be suicidal, but an export duty on logs is different and would be beneficial to the lumber business and to the country.

LUMBER TRADE IN NEW YORK.

A reporter of the New York *Herald* has been among the dealers of the metropolis and reports the outlook for the lumber trade this spring as decidedly bright. Although the business has been generally dull throughout the winter, there have been many firms who have done a good trade, and an improvement in the business of all is now becoming noticeable. As long as the weather remains cold and inclement the masons and carpenters cannot do their work and building has to be abandoned, and for this reason a depression in business during the winter months is expected by all lumbermen. At present the stock of all kinds of lumber and timber in the markets is smaller than it has been for some years, and in view of the good demand and brisk building outlook there is every prospect of an active season ahead.

To be impressed with a sense of the extent of New York's lumber trade one has only to walk down Eleventh avenue, from Forty-second street to Fourteenth street. He will find lumber yards all along, on both sides of the way, and lofty piles of lumber meet the eye in every direction These woods are of all kinds and come from all parts of the country. From the common Maine spruce, which is properly timber and not lumber, to the finest mahogany and rosewood, all kinds of lumber are to be had at all kinds of prices.

WHAT MR. ATCHISON SAYS.

At the foot of West Twenty-first street is the establishment of the New York Lumber Auction Company (limited), and here a *Herald* reporter stopped the other afternoon to inquire about the present state of the trade. Mr. Atchison, the general manager of the company, was in his office adjoining the yard.

"The spring trade is just opening," he said, "and the prospects are very good. New York is a good lumber market, but it is not an attractive one, and this is due to its system, or rather lack of system, concerning the rules of inspection. There are no determined rules. Each dealer has his own, and the lumber, when it arrives from the south and west, may be inspected leniently and fairly, or the inspection may be rigid and 'cut-throat,' according as the dealer chooses. This renders the shipper very suspicious about sending his lumber here. It may be appraised at half the value it would elsewhere receive, and dealers often do not sell by the same rulers upon which they buy. To avoid all this we have published a list of set rules of inspection, by which we both sell and buy, and this gives the shippers and manufacturers a confidence in our market. The best lumber is brought to New York and the highest prices obtained here, but the consumers suffer.

"There is another peculiarity about the New York trade," continued Mr. Atchison, "and that is the number of lumber firms which deal only in special woods. By purchasing large quantities of one kind of wood they obtain it for a less price and are enabled to sell dearer. I tell you, some of our dealers are called cutthroats in the west, and would not escape lynching if they went there."

Mr. L. E. Jones, the secretary and treasurer of the company, entered while Mr. Atchison was talking, and ascented to what he said, adding an account of the Boston system, where there is a surveyor general and a fixed rule of inspection by which all lumber is both sold and bought. Much good lumber that comes here is sent west first to be inspected.

AMONG THE SPECIAISTS.

On the corner of Eleventh avenue and Twenty-first street the yards of Bell Brothers, who deal only in common spruce, or timber. In response to the reporter's question a member of the firm said that the prospect for the spring trade was never better. At the present time of year the wholesale price per cargo is from $15 to $18, which is a better showing than that of last year. The spruce comes mainly from Maine and the provinces, and at present the freights are high.

Three blocks above, on Eleventh avenue, is the large establishment of Eben Peck, who who deals exclusively in yellow pine wood. Mr. Peck was out when the reporter called, but one of his associates gave the necessary information. Some of the wood comes from Georgia, but the most of it from Florida. It is used for all building purposes, but principally for flooring, ceiling and wainscotting and all inside house trimmings. Its popularity has greatly increased in the last few years. In spite of its being the dull season for building and all masons' work the yellow pine is fair and prospects alluring.

With the specialists who deal in the fine, or hardwoods, such as mahogany, rosewood, and all cabinet woods, success is dependent upon different circumstances. They have little to do with the ordinary lumber interests, as they cater to an entirely different class—the furniture maker, not the builder. Their woods, besides, are many of them foreign, the mahogany coming from Mexico and the West Indies, and some of the other woods from Africa. The cherry and oak woods are in great demand now, and there is a steady call for mahogany. Mr. J. T. Williams said to the reporter that his business fluctuated with that of Wall street.

PINES AND POPLARS.

Mr. George F. Norton, of the firm of Norton & Christman, spoke of his present business and future prospects with complacency. The freights were high, something like $12 per M feet on hardwoods from the south. "One feature of the season," said Mr. Norton, "is the the large demand for whitewood which is coming more and more to take the place of pine. What is called white wood is really yellow poplar. It holds paint well and it stains better than any other wood, and hence is much used for weather boarding in fences and all exterior walls and planking. It is also largely used for coach panelling. Pine is be coming scarcer every day and the same quality of poplar is much less expensive. Desirable lumber is always saleable, and there is always a market for it in New York at a fair price. It is a rare thing to find a good firm with a yard full of dry lumber."

In Mr. Norton's office was Mr. Norcross, a southern manufacturer of lumber, who has come on here to build up a trade for his firm. Mr. Norcross has been very successful, and spoke of the excellent condition of the trade. In spite of the severest inspection he said that New York got the finest lumber and Boston the the next best. The poorest lumber is sent to Philadelphia, Baltimore and the South. "Lumber," he said, "is a staple product and prices do not vary much. I do not know of any business which can show as small a record of failures"

Mr. George M. Grant, of the firm of George M. Grant & Brother, cabinet and building lumber merchants, was next seen by the reporter. Mr. Grant deals largely in white pine from Michigan and some parts of Pennsylvania, and in all the other fine and rough woods with the exception of spruce. He said that the weather was disadvantageous at present, but that business was not bad and the spring prospect was very good. Mr. Grant's manner was not enthusiastic, but his haste testified that his business was beginning to feel the influence of spring already.

LUMBER AND LABOR.

Making his way up the mud-swamped avenue the reporter next called at the large lumber yards of Messrs. Crane & Clark. Mr. Clark was walking about the yard, and the reporter tackled him and walked with him.

"Well," said Mr. Clark, "trade with the builders, I should say, has been good this winter; but with the manufacturers, those who grow and saw lumber in preparation for the market, it has been dull. In our own case, the business of this year shows a marked increase over that of last year, and this in the general field, as we keep both hardwoods for furniture and pine, hemlock and spruce for building. And speaking of building reminds me of a very important matter. Very many more people would build if only the price of labor was fixed. The trouble is not with the lumber but with labor. Now, I read in the papers the other day that the painters and framers had agreed upon a fixed price and a fixed number of working hours. If this is so, it will prove a very good thing and indicates a very good tendency. In my opinion it is lack of confidence in the laborer that makes the men hold of from building. They fear strikes when their houses are half finished. If they could be certain of getting the labor at a price fixed beforehand and not subject to change, the building trade would receive a great impetus. It is not the highness of the price which deters them at present, but its uncertainty. As it is, the prospect for the spring is first rate."

A Halifax paper states that Messrs. I. H. Mathers & Co. have contracted with mill owners between Weymouth and Ohio for from 5,000,000 to 7,000,000 feet of spruce deals, &c, to be carried over the Western Countries Railway and shipped from Yarmouth to Great Britain.

The Beaumont Lumber Company, of Texas, recently received 1,500 logs that measured two to the 1,000 feet.

QUEBEC PUBLIC LANDS.

Mr. R. LAMIGAN has published a letter on the public lands in Quebec Province that contains much of interest to lumbermen, and we therefore give the following extract from it:—"The Government has about fifty thousand square miles of timbered lands licensed to lumberman. What does it know about these lands? Very little indeed. The purchaser of a timber berth has no title. Only the right to get his license renewed year by year till 1889. There is no inducement to husband his timber. The inducement is to cut it off, and realize his outlay, and this often to detriment of the timber market. Another reason for haste, is the fact that new townships are being surveyed, often in the heart of timbered territory, and if he does not cut his timber at once he will lose it. Strange, this selling to bogus or other settlers of the best timbered lots in his territory. These to retain their lots must clear land, and start fres. This is done in the face of the law which enacts that, "no person shall, at any time, set fire or to cause to burn, any tree, shrub, or plant growing, or standing in any forest, or at a distance of less than one mile from any forest." But you will say, "if he cuts it down he may burn it," just so. But he must not do so at any time between the 1st July and the 1st September. What does this law do to prevent forest fires? nothing, for it is never enforced.

"Every one who has thought of the preservation of our forests, claims that what are usually known as timbered lands, should be reserved forever as such. It is ruinous to bring settlers into a pine country, They cut down and burn more timber than would pay the price of their lands three times over. Fires started to clear, run and get into the forest, and as a a result, the explorer for timber often meets with miles of burned country in the vicinity of such new settlements. Legislation, as long ago as 1875, provided for the isolation and protection of timbered or forest lands, but up to the present day scarcely anything has been done to carry out the law. It is to be hoped that, in consideration of the increasing value of our timbered lands, the Department which has such matters in charge, will, before long, give the provisions of this law some practical effect.

"After all is said, it must not be forgotten that Quebec does not own a very large extent of pine bearing territory. Ascend any of the northern rivers which empty into the St. Lawrence or the Ottawa, for a distance of eighty or a hundred miles, and see where is the pine, and what is it like? As the height of land is reached the white pine grows short and shrubby, while further north you meet only with hard red pine or spruce, and at such a distance, these woods are not of any market value. It is presumed by those who have pretty fair facilities for judging that all the really valuable timbered lands of the Province are under license. It also pretty well known that large portions of these lands are completely denuded of pine. In fact, it has become so difficult of late years to bring timber and logs to driveable streams on account of the increased distances to haul, tha it tcosts the lumbermen one-half more to-day than it did twenty-five years ago. The Government has o more unlicensed, or virgin timbered lands for sale that are worth the buying, yet with these facts staring him in the face, one of those at the head of the Public Lands Department complacently exclaims, "happily for Canada we have not to create forests, only to preserve them." Holders of timber licenses to-day know that three years hence, some change will take place, both as to the renewal of licences, and the tariff on stumpage. In the uncertainty how Government will act after 1889, present occupiers of timber territory are hasting to cut all they can, with, it is to be feared, very disasterous results to the lumber market. It is very difficult to get the Government to show its hand; and with our short lived Cabinets, it is difficult to say who is in power in 1889. However, in the interim, it would not be injudicious for the present Government to give the holders of license some assurauce as to the course likely to be pursued by the C. L. D. after 1889. In fact, it would be only fair to our lumber merchants and the entire Province, that this were done without further delay. It is supposed that our mines are a source of wealth to the Province. We have gold, silver, galena, copper, asbestos, iron, phosphate, nickel, cobalt, antimony, graphite, mica, and all the materials for building, and the arts. What are all these worth to the Government? Why in 1884 and 1885 the Government received the enormous sum of five hundred dollars, and expended four thousand. This is about as good as expending ninety cents on an acre of land, and selling it to the settler for thirty cents.

"The fisheries did somewhat better, and yielded a revenue of three thousand two hundred dollars. Why not continue re-stocking our magnificent lakes and rivers, and thus multiply their value three fold? Our game, and fur bearing animals, grow scarcer year by year. Cariboo are about extinct. Red deer are seldom seen; while the bear, otter, and other fur bearing animals, are rapidly diminishing. If an efficient cordon were established around our forest reserves, and settlers kept out of these timbered territories, our game and our fur bearing animals would rapidly increase, and ultimately become a source of revenue to the Government, instead of an expense. However, these latter are but minor considerations, compared with the management of our woods and forests. This will at once become evident when we take into account that the revenue derived from these alone, amounted in 1884-5 to $660,757.13. Our neighbors south of forty-five are buying up our timbered lands and carrying off our saw logs to cut them up at their own mills. A small export duty was imposed on saw logs. Now, our neighbors tell us sawed lumber will not be admitted free into the United States from any country which imposes an export duty on the unmanufactured article. This is a bid to induce us to remove our export duty on saw logs; and strangely enough, at this very juncture, a paragraph appears in our Canadian newspapers saying it is almost impossible to collect this small export duty. Very well, remove the export duty, but impose a double tariff on stumpage, and let our Government give a rebate of one-half on all saw logs manufactured in Canada. The Canadian Government will not thus break faith with the limit holders, as regards saw logs, and some equitable arrangement could easily be come to with our square timber men. In any case, I hope our Government will not yield one inch to brother Jonathan."

SEASONING TIMBER.

The importance to the engineering the allied trade of being able to abtain a good and sufficient supply of thoroughly dry and well-seasoned timber is very great and yet is urgently wanted it can at times be hardly obtained at any price. The construction of railway and private carriages, for shipbuilding and Government military requirements, such as gun carriages, carts, ambulance and other wagons, with their wheels, and the manufacture of Mansell wood railway wheels, agricultural implements, etc., are a few out of many instances where large quantities of dry timber are wanted often at short notice. In the periodical cases of war there are large contracts, thousands of pounds in valve, often given out by the War Department for some of the above named articles to be made in the shortest possible time. As may be imagined, under these circumstances, the country is scoured in all directions by the timber buyers of the various contractors who will give almost any price that may be asked for well-seasoned planks, suitable for their purpose. Every little dealer in out-of-the-way places is visited and their small stock purchased, but, notwithstanding every effort, the stipulated time in which the work should be deliveced often expires before the material is brought together from which they are to be manufactured. The most severe inspection, too, is exercised by the arsenal officials, both of the contractors' work and after delivery at their destination, and all the woodwork showing the least signs of shrinkage, dead knots, sap, or even discoloration is at once condemned, and has to be taken out and replaced by other. The amount of waste is therefore very considerable, often being twice as much as the part really serviceable—even after the greatest care is taken to select suitable planks for which the highest prices are given.

Most of our large railway companies keep immence stocks of timber, both in logs and planks, which supply their own requirements, being kept sometimes for seven or eight years seasoning befere being used. The Midland Company for example, at Derby, have usually from seven to eight thousand logs of Moulmein Honduras mahogany, New Zealand kauripine, oak, ash, and other woods, besides immense stacks of Baltic redwood and other deals in stock, the total value being something over £100,000. The way usually adopted for seasoning timber is to cut the logs into planks at once, and stack them upright in racks in a drying shed, through which a current of air can freely pass, the sides and ends of the shed being constructed of narrow boards ranged vertically with a space of two or three inches between. The planks are kept apart from one another by pegs in the rack and are placed with the root end upward. If ranged horizontally in piles a space of about three forths of an inch is left between each board by means of pieces of stick upon which they rest. Thin boards and panels are generally kept in this way, and they are cleaned and shifted from time to time, as at stock taking periods so that they do not stop too long in one position and allow fungus to accumulate upon them. Much timber is kept in the open air for sake of room, but the ends are more apt to split than if kept under cover, owing to the alterations of wet, dry and, sunshine.

Although naturally dried timber is without doubt superior and much to be preferred, it is, from its scarcity and the time taking for seasoning—from three to seven years,—often supplemented for many purposes by quicker methods of drying, such as by stoves, kilns or steaming—many processes of which exist. In the United States most of the railway companies and carriage builders use kilns into which piles of planks placed upon trollies are wheeled upon rails running into the interior. The Pullman Palace Car Company, for instance, have a range of eight of these kilns, or "lumber dryers" on their premises under the Curran & Wolff patents, which has a storing capacity of 40,000 feet of one-inch plank, and which is capable of drying eight thousand feet every twenty-four hours.

The latest invention for drying timber, in common with many other things, is that claimed by Mr. Jennings, of Boston, Mass., a discription of which has recently appeared in one of the daily papers. By the "Cool Dry Air Process," as it is termed, the materials are placed in a chamber through which a continuous current of dry air passes. This current is previously drawn through a furnace in which it is heated to a temperature of about 600° F., which dries up all moisture contained in it, and afterwards cooled by a vigorous circulation of external air around the pipes containing it to about 90°, when it is propelled by fans through the drying chamber. In one of these chambers fixed at the saw mills of Messrs Smith and Co. Pimlico, it is stated that a quantity of birch weighing 45 cwt. 2 qrs. when put in was subjected to the process for 94 hours. It was then taken out and said to be thoroughly seasoned, its weight being reduced by the operation by 10 cwt. 2 qrs. 24 lbs. In the case of ash planks, too, out of 47 cwt. 3 qrs. of this wood, 21 cwt. 1 qr. of moisture was extracted, while 22 cwt. of mahogany gave up 5 cwt. of moisture in 96 hours. It is stated that planks of English oak two inches thick were finished in nine days that would have taken three or four years by natural drying. All the above effect were accompilshed by a current of 62,000 cubic feet per minute, the temperature of which never exceeds that of blood heat. Should the wood dried by this system be equally free from shrinking, warping, or other defects, and be found to stand the test of time as well as that of naturally-dried timber—which, however, we very much doubt, as hitherto all attempts in this direction have proved much inferior—a great future lies before it, as it will furnish a much needed supply of seasoned timber.—*Mechanical World.*

GILMOURE & Co.'s cut of logs this year is 740,000 pieces, and Rathbun's 650,000 pieces. The two cuts represent 115,000,000 feet of lumber.

THE CHAUDIERE.

It has been a well known fact for some time that the Shepard & Morse Lumber Company have been large buyers in this market for lumber to be cut during the ensuing season. The purchases of this company, as near as can be found from reliable information is about as follows:—

Lord, Hurdman & Co., 33,000,000 ft.
Grier & Co, 18,000,000 ft.
E. B. Eddy, 10,000,000 ft.
McLaren & Co., 8,000,000 ft.
Hamilton Bros., 4,000,000 ft. and about 5 to 10,000,000 ft. in different small lots, making the purchases of the S. M. L. Co. in this vicinity in the neighborhood of about 70,000,000 ft.

The Chaudiere mills output is estimated at 400,000,000 ft, made up as follows:—

J. R. Booth, 60,000,000 ft.
E. B. Eddy, 65,000,0000 ft.
Bronson & Weston, 60,000,000 ft.
Perley & Perley, 55,000,000 ft.
Grier & Co., 20,000,000 ft.
Lord, Hurdman & Co., 45,000,000 ft.
McLaren & Co,, 20,000,000 ft.
W. McClyment & Co., 15,000,000 ft.
Gilmour & Co., 55,000,000 ft.

This does not include the output of the following concerns, which rightly belong to this district, viz.:

W. C. Edwards & Co., Rockland, 50,000,000 feet.

Buckingham mills, (McLarens and Ross's) 35,000,000 ft.

Hamilton Bros,, at Hawkesbury, 50,000,000 ft.—*Ottawa Journal.*

A TERRIBLE ACCIDENT

The Perth *Courier* relates particulars of a fatal accident to John Hamilton, who was in the employ of Mr Peter McLaren, he had been driving Mr. McLaren's family round the town, and then proceeded to take the horses back to the stables at the farm. Here other workmen were engaged in cutting wood with a circular saw driven by steam, and Hamiltom requested one of them to put the horses up while he fed the saw, a work to which he was unaccustomed. He had not fed in more than two or three sticks when, probably owing to too much pressure being used, the saw burst. One piece struck Hamilton on the breast, and rent up his bowels, stomack and breast, cutting into his heart, and, of course, killing him instantly. The laborers were horror struck at the sight, and could do nothing but carry the dreadful news to their employer and the victim's family. The wife of the unfortunate man fainted away on hearing the fell tidings, and, even now has hardly recovered full consciousness. Deceased was only out from Scotland a short time, and was a steady good workman. He leaves a wife and two children.

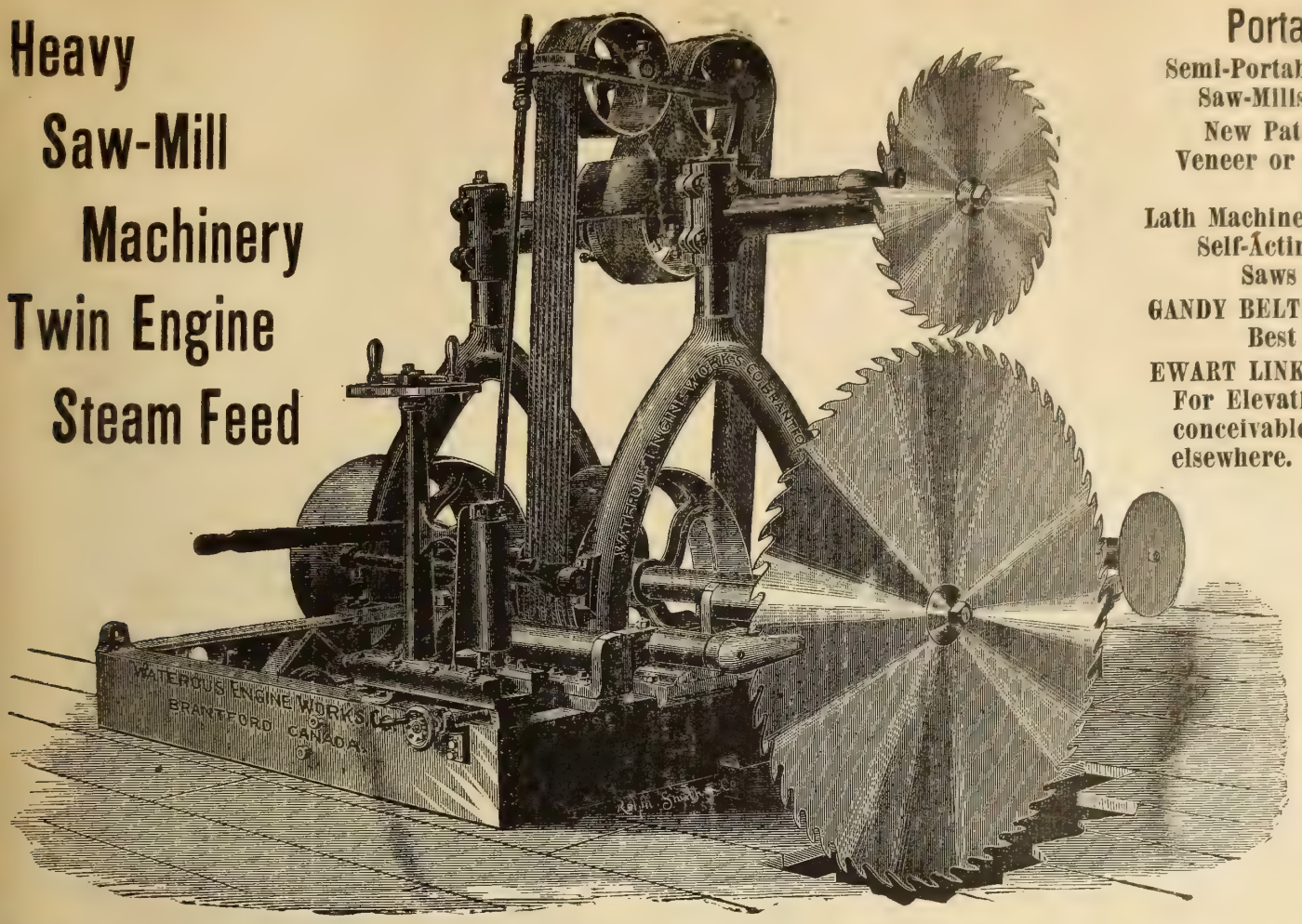
THE MUSKOKA CUT.

The cut of pine timber in Muskoka this winter, says the *Herald*, so far as we have learned, been 80.000,000 feet, as follows:—

	Feet.
Onearo Lumber Company	18,000,000
Georgian Bay Lumber Co	22,200,000
C. Mickle	10,000,000
Thompson & Baker	7,000,000
T. B. Tait (Draper Mill)	1,500,000
T. B. Tait (Gravenhurst)	1,800,000
J. Tasker	2,329,000
Jas. Dollar	2,000,000
C. King	1,200,000
Leishman & Perry	2,000,000
John Collins	1,000,000
John Whiteside	1,000,000
Muskoka Mill and Lumber Co	10,000,000

THE Deseronto *Tribune* says that there are indications that the coming summer will witness brisk times in Deseronto. A very large force is at present engaged in the shipyard on the steamers Quinte, Armenia, Nile, etc., and on Mr. Evan's new venture, the construction of railway cars, a new department added to the shipyard. The large orders for lumber necessitate the employment of many men loading cars and sorting lumber in the yard department. Although the season is just commencing the sash and door factory is working to its full capacity to fill orders, and the cedar mill has a large staff at present on its pay list.

Heavy Saw-Mill Machinery Twin Engine Steam Feed



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Aw JAMES STEVENSON.

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As the conference pool is dissolved I can sell Tickets at very much reduced rates from former prices, being Agent for the following first-class lines of steamers:—

DOMINION AND BEAVER LINES
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WHITE STAR, INMAN, NATIONAL, ANCHOR AND MONARCH LINES
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Being Agent for the G. T. R. and the above first-class Steamship Lines, I can sell tickets direct from Peterborough to any destination.

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Peterborough, May 31st, 1884 d123w21

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"By a thorough knowledge of the natural laws which govern the operations of digestion and nutrition, and by a careful application of the fine properties of well-selected Cocoa, Mr. Epps has provided our breakfast tables with a delicately flavored beverage which may save us many heavy doctors' bills. It is by the judicious use of such articles of diet that a constitution may be gradually built up until strong enough to resist every tendency to disease. Hundreds of subtle maladies are floating around us ready to attack wherever there is a weak point. We may escape many a fatal shaft by keeping ourselves well fortified with pure blood and a properly nourished frame."—*Civil Service Gazette.*

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On Line of Canadian Pacific Railway, (Ontario and Quebec Division), between present date and Mar. 1,'86

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First-class Green Hardwood, Beech and Maple.

Highest Prices paid. Apply to

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A GIFT Send 10 cents postage, and we will mail you *free* a royal, valuable, sample box of goods that will put you in the way of making *more money* at once, than anything else in America. Both sexes of all ages can live at home and work in spare time, or all the time. Capital not required. We will start you. Immense pay for sure for those who start at once. STINSON & Co., Portland, Maine.

WILL NOT RECEDE.

The current opinion in this neck-o'-woods is, that the men who are deferring their purchases of lumber for a more convenient season, or are expecting more advantageous figures later in the season, will, in the vernacular of the street, "get left." It may be put down as an almost absolute certainty that prices are not going to recede, and those who wait for such conditions in the trade, will have some dearly bought experience before the close of the season, that they are doing business with less profit than if they had purchased earlier. "The early bird catches the worm," will be a pretty safe motto for the retailer as well as the wholesaler at the distributing centre to adopt in securing stock for the season's operatious. The reasons for the faith that is in us as regards the maintenance of prices, if not an advance, are that the logging season has been a very disadvantageous one. Too much snow or an insufficiency of it have been the ruling features of operations in the woods, and the strong probability is that it will be no better until the final break-up and cessation of operations in the pineries, and the log crop is destined to be insufficient for the full mill capacity on the Saginaw river, which has been decreased to the extent of about 75,000,000 feet by the destruction of mill property by fire. Added to this fact is another, that the stock of lumber and available logs at the close of operations last season was about 200,000,000 feet short as compared with the close of the season of 1884. This will leave a comparative shortage of 275,000,000 feet or thereabouts. This immense shortage must inevitably have a perceptible effect in stiffening prices which leaves any prospect of a decline very improbable to say the least. It will be observed therefore, that there is very little danger of the purchaser getting left through hasty action in securing stock for the coming season's business, but a very strong probability that delay may result seriously disadvantageous.—*Lumberman's Gazette.*

SOMETHING KNEW IN FANCY VENEERS.

The New York correspondent of the *Cabinet-maker* says: A continuous and perfect strip of veneer from ¾ inch to 30 inches in width and 300 or more long is an accomplished fact. E. Katz is the gentleman to whom the trade is indebted for the perfection of the idea. After much trouble and expense Mr. Katz has at last hit upon the necessary machinery, which he has now in running order, and is in a position to turn out a large quantity. The advantages rightly claimed for these veneers are numerous and we will mention a few of them. The veneer being stripped in "rolls" instead of "flitches" takes up less room and is more easily handled. The time and labor ordinarily required in piecing, patching and cutting of corners, etc., is saved, it being only necessary to take a strip of any desired width and cut any length required, the saving is the point alone being considerable. The figure of these veneers is equal, if not superior, to that of other veneers, When laid on, the absence of all piecing and patching is evident in the uniformity and unmarried beauty of figuring. To the experienced the many advantages of this mode of cutting will at once be evident that we do not doubt that there will be a great and increasing demand for these veneers as they become more widely known.

WHO MADE THE FIRST BARREL?

Few inventions have had a wider or more varied usefulness than the barrel; few give such promise of perpetuity. Unique in principle, simple, yet singularly perfect in plan and structure, the barrel is little less than a stroke of genius. Who set up the first one? Who first conceived the happy thought of making a vessel tight and strong out of strips of wood bound together with hoops. And when and where did he live?

No history of inventions; none of the encyclopedias in our great libraries; no historian of human progress, so far as we know, gives any information on the subject, unless we accept the Roman author, Pliny, who mistakenly attributes the invention to the Gauls who inhabited the banks of the Po. We say mistakenly, since there is the best of good reason for believing that the barrel was in use long before the Gauls took possession of their Italian home, perhaps long before the Gauls existed as a people.

The monuments of Egypt furnish proof of the early use of hooped vessels, though no date is given for their invention. In one of the inscriptions copied by Wilkinson may be seen two slaves emptying grain from a wooden vessel made with hoops, while a scribe keeps tally, and a sweeper stands by with a broom to sweep up the scattered kernels. Close by an unfortunate is undergoing punishment by bastinado for short measure, perhaps, or, as Mr. Wilkinson suggests, for petty theft. The measure is barrel shaped, and precisely like the *kayl* of modern Egypt. It would hold, apparently, about a peck. Unfortunately, the age of this inscription is not indicated. Measures of that sort would seem to have been in common use very early in Egypt, though not for the storing of liquids, for which purpose skin and earthen vessels were employed.

At first thought, Egypt would be the last place to look for the invention of hooped vessels its arid climate making it specially unsuited for their employment. Possibly, however, that may have been the compelling cause of their invention.

Throughout the East the bamboo is largely used for making hollow vessels, a section of the stem through a node securing a solid bottom, and one between the nodes an open mouth for a natural tub or bucket. In well wooded regions nothing would be more natural than the employment of hollow tree trunks for the same purpose, or sections of tree stems hollowed out bp fire or otherwise. In drying such vessels would split and spoil, and it would require no great genius to repair them by means of withes or wooden bands, the primitive form of the hoops.

If the users of such natural barrels should migrate to a more barren reason where timber was scarcer, economy of lumber would be likely to suggest the building of barrels from pieces artificially split, in short the use of staves, by means of which the primitive cooper would be able to make several barrels out of a block that would suffice for a single dug-out.

But this is speculation merely. It is enough to know that the cooper's art, like the potter's, is one of extreme antiquity. We had no suspicion of its age until we undertook to tell who made the first one.—*Scientific American.*

FLOUR AND FEED MILL.

A reliable and durable mill for the durable purpose of making flour and grinding feed is almost indispensable on large farms and to stock men, and can very often be run very profitably in connection with a saw mill. The "Union" flour and feed mill, manufactured by the Freeport Machine Co., of Freeport, Ill., meets the requirements in every respect. We present a cut of the mill and a description taken from the company's circular:—

This mill combines a principle with which coarse and fine meal, graham flour, chop, etc., can be ground more rapidly, and with much less power than with other mills, for the reason that we use annular cast steel rings in connection with best French buhr stones. The hard steel grinding rings are placed close to the centre, and are so arranged and adjusted as to crush the grains at or near the centre of the grinder, and to do it with much less power because of this, as it will be observed that the grain is first broken by the hard steel rings, and afterwards, by continual pressure, ground fine by the buhr stones, thereby reducing the frequent necessity of dressing the buhr stones, as is the case in other mills, hence the great value to planters, farmers, millers and users of ovr combined steel and buhr stone mill, which we can positively recommend to do better work and more of it, with less power than any other mill known. The 12 inch "Union" weighs 500 pounds, and when packed for export 650 pounds (and measurement 28 cubic feet); the driving pulley is eight in diameter, 5½ inch face, for 5 inch belt; 6 to 12 horse power is required to run the 12 inch "Union." The 16 inch "Union" net weight is 850 pounds; driving pulley 9 inches in diameter, 6½ inch face for six inch belt; requires six to fifteen horse power. Our "Union" mills have adjustable feed, and should 800 to 1,200 revolutions per minute. Just the mill for those having steam, water, tread or horse power. We believe our "Union" mills are indispensable to planters, farmers, diarymen and stock raisers. We furnish mills with or without a shaking bolt, and of a size sufficient to bolt as fast as the meal is ground, which works to perfection.

The 12 inch "Union" has 12 inch best French buhrs, and will grind from twelve to thirty bushels of meal per hour; the 16-inch "Union" mill will grind from 25 to 60 bushels per hour, depending upon the speed given.

CHARCOAL MAKING.

Kilns or ovens for reducing wood to charcoal are generally made of brick, and are of two kinds, the conical and the retangular. Charcoal is sometimes produced in open air pits, covered with earth. Our average New England forests will produce from 1500 to 2000 bushels of char coal per acre, in addition to some spruce and hard-wood logs. It is estimated that after the first cutting, provided young trees are preserved thrifty woodlands will yield a crop sufficient to produce 1500 bushels to the acre every twenty or twenty-five years. Hence every acre well wooded land has a large and positive money value, even after one crop is removed. Whatever may be realized from the forests produc s of an acre to-day, we may rest assured that in twenty-five or forty years the same amount of wood or timber will fetch more that the present selling price. The yield of charcoal varies but is usually thirty-five to forty-five per cent. of volume of the wood, and from eighteen to twenty-five per cent. by the ordinary methods, when the wood has been exposed two or three months in the open air after cutting. Well-made charcoal retains the form and structure of the wood, is brittle, somewhat cracked and very sonorous. If not burned enough, it is not black nor in the fracture bright One cord of wood yields about forty bushels of charcoal. Common kilns for burning 1200 bushels at one time cost about $400 each, where bricks can be obtained at reasonable prices. About 160 bushels of charcoal required to produce one ton of pig iron from the ore. A block of land measuring from 25,000 to 30,000 acres if well cared for, will permanently supply wood sufficient to manufacture all the charcoal needed for a common-sized blast furnace, say 3000 to 4000 tons per year —[*Ex.*

THE ONE-STAVE BARREL.

From the *Journal*, of Detroit, Mich., is taken the following concerning the one stave barrel:

"On the west side of the river Rouge, about three miles beyond the western limits of Detroit, on a site embracing between fifteen and twenty acres of land, the Anchor Manufacturing Company has built and is erecting several buildings for the manufacture of barrels by a new process. Hugh Mattulath is at the institution, and associated with him as stockholders, are Alanson Sheley, A. R. and W. F. Linn, A. S. Brooks, the Chandler Brothers, Peltier & Belanger, George W. Moore, Chas. E. Qottrell and William P. Fuller. The company has a paid up capital of $500,000. The establishment is now turning out 6,000 barrels per day, and will soon be making twice that number. While the size and shape of this barrel are the same as the ordinary one, the body of the barrel consists of a single sheet of timber held by hoops. The timber used is elm, which is cheap and abundant. Canada is the main base of supplies, and timber hunters sent there have already arranged for a year's supply for this establishment. The logs will be rafted over during the season of navigation, and brought by rail in the winter time. The logs are taken from the boom or yard into the saw mill, and cut into two barrel lengths. Thence they go into a steam chest, where they remain until thoroughly steamed. In this condition the log is converted into thin sheets, or veneering, used in the body of the barrel. By a special process, a two-foot log becomes rolls of wooden sheeting in a minute's time. There remains upon the mandrel an eight inch core, which is utilized in making barrel heads. The sheets go next to a sanding machine, by which both sides are made perfectly smooth. After passing through a cutting and grooving machine, they are so cut by a goring machine as to adapt them to the shape of a barrel. Thence they go to the drying-house. The latter is a building 50x400 feet, heated by steam. From the dry house they go to the sizing saws, where they are cut the desired length, when they are ready for the cooper shop or for shipment. They are shipped in bundles and in the 'knock-down' to be put up at their point of destination. Three thousand of them can be stored and forwarded in an ordinary box car. The headings are shipped in barrels. The factory is full of the finest machinery, and not a little of it is the product of Mr. Mattul luth's ingenuity."

AN EXTRAORDINARY OFFER.

To all Wanting Employment:

We want Live, Energetic Agents in every county in the United States and Canada, to sell a patent article of good merit, on its merits. An article having a large sale, paying over 100 per cent profit, having no competition, and on which the agent is protected in the exclusive sale by a deed given for each and every county he may secure from us. With all these advantages to our agents and the fact that it is an article that can be sold to every houseowner it might not be necessary to make an "extraordinary offer" to secure good agents at once, but we have concluded to make it to show, not only our confidence in the merits of our invention, but in its saleability by any agent that will handle it with energy. Our agents now at work are making from $150 to $800 a month clear and this fact makes it safe for us to make our offer to all who are out of employment: Any agent that will give our business a thirty days' trial and fail to clear at least $100 in this time, above all expenses, can return all goods unsold to us and we will refund the money paid for them. Any agent or general agent who would like ten or more counties and work them through sub-agents for ninety days and fail to clear at least $750 above all expenses, can return goods unsold and get their money back. No other employer of agents ever dared to make such offers, nor would we if we did not know that we have agents now making more than double the amount we guaranteed, and but two sales a day would give a profit of over $ 25 a month, and that one of our agents took eighteen orders in one day. Our large descriptive circulars explain our offer more fully, and these we wish to send to every one out of employment who will send us three one cent stamps for postage. Send at once and secure the agency in time for the boom, and go to work on the terms named in our extraordinary offer. We would like to have the address of all the agents, sewing machine solicitors and carpenters in the country, and ask any reader of this paper who reads this offer, to send us at once the name and address of all such they know. Address at once or you will lose the best chance ever offered to those out of employment to make money.

RENNER MANUFACTURING CO.,
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WEST'S WORLD'S WONDER or family liniment has proved to be one of the greatest blessings of the age. It is a never failing remedy for rheumatism, cuts, sprains and bruises. Call on J. D. Tully & or a trial bottle and you will use no other

NOTICE.

SEALED TENDERS, addressed to the undersigned, and endorsed "Tender for Indian Supplies," will be received at this office up to noon on TUESDAY, 20th APRIL, 1886, for the delivery of Indian Supplies during the fiscal year ending 30th June, 1887, consisting of Flour, Bacon, Beef, Groceries, Ammunition, Twine Oxen, Cows, Bulls, Agricultural Implements, Tools, &c. duty paid, at various points in Manitoba and the North West Territories.

Forms of tender, giving full particulars relative to the supplies required, dates of delivery, &c, may be had by applying to the undersigned, or to the Indian Commissioner at Regina, or to the Indian Office, Winnipeg.

Parties may tender for each description of goods (or for any portion of each discription of goods) separately or for all the goods called for in the Schedules.

Each tender must be accompanied by an accepted Cheque in favor of the Superintendent General of Indian Affairs on a Canadian Bank for at least five per cent of the amount of the tenders for Manitoba and the North-West Territories, which will be forfeited if the party tendering declines to enter into a contract when called upon to do so, or if he fails to complete the work contracted for. If the tender be not accepted the cheque will be returned.

Tenderers must make up in the Money columns in the Schedule the total money value of the goods they offer to supply, or their tender will not be entertained.

Each tender must in addition to the signature of the tenderer be signed by two sureties acceptable to to the Department, for the proper performance of the contract.

In all cases where transportation may be only partial by rail, contractors must make proper arrangements for supplies to be forwarded at once from railway stations to their destination in the Government Warehouse at the point of delivery.

The lowest, or any tender, not necessarily accepted.

L. VANKOUGHNET,
Deputy of the Supeintendent-General of Indian Affairs.

Department of Indian Affairs.
Ottawa, 3rd March, 1886. 6d5

AUSTRALIA.

Messrs. Lord & Hughes' monthly circular, dated Melbourne, Jan. 23rd, says :—

We commence this year by issuing our regular monthly circular for the San Francisco mail, instead of the English mail as heretofore, as the information contained will be of later date for our American constituents, while it will suit our English and Baltic friends just as well; consequently, this circular will embrace all information in relation to building materials from the date of our last circular on 14th December last

Trade, since our last, has been exceedingly languid, consequent on the heavy arrivals of all descriptions of timber, and the disinclination of the trades to purchase beyond their immediate requirements, except at very low prices offered by speculators to store, waiting for a remunerative market. The season of the year has also operated prejudicially as the trade are busy with usual stock-taking, and have not wished to increase their stock until that is over.

We regret to have to advise lower prices in nearly every description of building materials—Oregon, Baltic, Canadian and American dressed and clear and Kauri pine. We can hold out no prospect of an improvement in the immediate future, as large stocks here, and known to be on the way, will prevent any advance for some time to come, except for exceptional lines that may be in demand.

Our land and property sales appear to have met with a relapse for the present, which also helps to prejudice the timber trade.

There is a fair business reported from the yards, and the trade do not report any falling falling off in business. We have to notice the retirement from business of Mr. Henry Mills, who for thirty years has been one of our most enterprising, plucky, and most respected buyers, and it is satisfactory to state that he retires with a competence.

RED DEALS.—Imports: 705 standard, 72,492 pieces from the Baltic, 5,421 pieces red pine from Canada. The arrivals have been Hama, China, Soudre, Inchgreen, Solid, Midnatssol, Magnet, Elizabeth, Bengal. Anthon, G. S. Homer, Tirade Tarabochia, from Baltic ports, and Malvina, from Montreal. The principal auction sales during the past six weeks was the cargo ex Hama, on the 12th inst., MB brand, when the following prices were realized :— 1x3, 6 1-16d ; 11x4, 6⅛d ; 9x4, 5⅞d to 5¾d ; 9x3, 5⅜d to 4½d ; 9x2, 5⅛d to 4⅞d ; 7x3, 5d to 4¾d 7x2½, 5⅛d to 4½d ; all per foot of 9x3. The cargoes ex Solid, Bengal, and Tirade Tarabochia have been placed privately.

SPRUCE DEALS.— Imports: 19,457 pieces. The arrivals have been Inchgreen, Midnatssol, and Elizabeth, from Baltic ports ; Paul Jones, from New York ; Malvina, from Montreal ; and Sovereign, from Saguenay. Sales by auction comprise parcel ex Steinvora, at 3½d to 3 1-16d ; shipments ex Palmerston, at 3½d to 2 15-16d ; and parcel ex Midnatssol, brand FWT, at 4½d to 3¾d ; and brand TWF, at 3⅛d per foot of 9x3.

OREGON TIMBER.—Imports: 7,112,267 feet super. The arrivals have been California, Gerard C. Tobey, Makah, Estella, Colusa, Sagamore, General Butler, and C. C. Funk. Sales by auction have been cargoes ex California, at £5 15s to £5, average £5 3s 2d ; ex Kitsap, £5 10s to £4 15s, average £4 19s ; ex Gerard C. Tobey, £5 5s to £4 15s, average £4 16s. The following cargnes have been sold privately :— Estella and Colusa.

LUMBER.—Imports: Clear pine, 1,100,921 feet super ; White pine shelving, 1,156,606 feet super ; T. and G. Ceiling, 113,169 feet super. The arrivals have been—Ragna, Chas. Dinnis, Glenesk, and Kamfjord from New York ; Paul Jones, from Boston ; Delphine Melaine, and Jorsalfarer, from San Francisco ; and Swift, from Adelaide. Sales by auction have been parcels ex Steinvora and Jorsalfarer. Michigan clear realized £15 5s. to £14 ; dressed clear pine, £12 12s 6d to £12 15s ; shelving £10 10s to £9 ; carpenter's clear, £11 , sugar pine, £13 7s 6d to £12 15s.

REDWOOD.— Imports; 317,297 feet super. The arrivals have been—Jorsalfarer, California, and Delphine Melaine, from San Francisco. The parcel sold at auction during the past six weeks is that ex Jolsaltarer, at £9 to £7 17s 6d.

FLOORING AND WEATHERBOARDS.—Imports: 21,220,076 feet lineal from the United Kingdom and Baltic ports ; 120,914 feet lineal from Canada. The arrivals have been—China, Soudre, Inchgreen, Thalatta, Telefon, Midnatssol, Gamli, Magnet, Elizabeth, Summerlide, Frigga, Anthon, George S Homer, and Waldimir, from Baltic ports ; Malaysia, Loch Etive, Lismore and Loch Katrine, from United Kingdom ; and Konoowarra, from Adelaide. Sales by auction comprise portions of cargoes ex Muncaster Castle, Soudre, and Midnatssol. We report prices as follows :—Red, 6x1⅛, 10s 3d ; 6x⅞, 8s 6d ; 6x¾, 7s ; 6x½, 5s 3d ; 4-out weatherboards, 5s 3d. White, 6x1⅛, 9s 6d ; 6x1⅛, 8s 6d ; 6x¾, 6s 6d to 6s 9d ; 6x½, 5s to 5s 3d

KAURI PINE —Imports : 1,288,000 feet super. Arrivals have been—Killarney, Myrtle, Buster, Parnell, Caindhu and Grassmere. Sales by auction have been flooring, ex Handa Isle and Buster, and dressed shelving and boards, ex Myrtle, and hewn logs ex Ansdell. We report sales, flooring 6x1⅛, 12s 6d ; 6x⅞, 10s to 9s 9d ; 4x1⅛, 10s to 9s 6d ; dressed shelving, 21s 6d to 19s 6d ; hewn logs, 12s to 10s.

PITCH PINE.—Imports : Nil.

CEDAR —Imports : 14,000 feet super. Arrivals have been per coasting steamers. There have been no auction sales since the date of our last report. We quote present value at 35s to 40s per log, according to size and quality.

DOORS.— Imports : 4,503. Arrivals have been Jorsalfarer and Delphine Melaine, from San Francisco; Paul Jones from Boston; Swift from Adelaide. The parcel of redwood doors ex Jorsalfarer was sold at auction on the 15th inst.

LATHS AND PICKETS.—Imports : Laths, 22,-227 bundles ; pickets, 19,008 bundles. Prices show a decline on last month's rate.

SLATES.—Imports : 1,109,396. The arrivals have been—Alliance, Borrowdale, Lake Superior, Halewood and Duncow, from United Kingdom ; Ragna Paul Jones, Charles Dennis, and Glenesk, from United States of America ; Orson, from Tasmania. In consequence of heavy arrivals, prices are easier. Several parcels have been sold privately, prices withheld. We quote American Bangor, 24x12, £11 ; 20x10, £8 Welsh Bangor, 24x12, £13 ; 20x10, £9 10s.

PLASTER.—Imports : 1,847 barrels. Stocks are heavy and prices lower. We quote 11s to 12s per cask.

CEMENT.—19,660 barrels. Arrivals are far in excess of requirements and prices lower ; we quote 12s 6d for best brands, and for inferior 11s.

GALVANIZED IRON.—Imports : 1,881 tons. Owing to heavy arrivals sales are difficult to effect, except at lower prices on last month's rates. We quote best brands at £16 ; other brands, £15.

EXPLANATION.— Red deals and spruce deals are sold at per foot of 9x3 ; T. and G flooring at per 100 feet running ; Oregon timber, Redwood, clear pine, shelving, ceiling, per 1,000 feet super ; Kauri pine and cedar logs at per 100 feet super ; laths, pickets and slates at per 1,000 pieces. Shorts are all lengths under 12 feet.

PREVENTING THE ENDS OF TIMBER FROM CHECKING IN DRYING.

Some English authorities have recently been making experiments upon the subject of drying timber without allowing the ends to check. After making a variety of tests, they report that by painting the ends of the stick with thick glue, and allowing it to harden, they succeeded in drying several kinds of lumber without having end checks make their appearance. The theory of the action was that they succeeded in forcing the glue far enough into the pores of the the timber, so that the ends were to a certain extent cemented together, and at the same time prevented from drying more rapidly than the body of the stick itself. Very little more has been made known in regard to this system, and we have been unable to get any particulars in regard to the kinds of wood employed, or the length of time they were subjected to the drying processes.

Mr. F. D. Adams, the General Master car builder of the Boston & Albany railroad, writing to us in reply to a query in regard to this system, says :—"I have never heard of glue being used on ends of timber to avoid checking. In fact, I should not think it would be of any use, as both the moisture from the timber and the rain, where lumber is stacked out doors, would in a short time destroy its strength. Possibly it might be of service, if timber was under good cover. We have been for years in the habit of covering the ends of our timber with a heavy covering of thick oil paint. This keeps the ends of the wood full, and prevents the water from getting in. Almost any kind of paint will answer the purpose."

In many of the lumber yards where foreign timber is received, it is the habit in stacking wide boards, to nail narrow pieces of laths over their ends. This prevents the too rapid drying of the end, at the same time binding the board aud preventing it from splitting. Even this, however, is not always sufficient to keep wide mahogany lumber from cracking badly.

Protection for the ends of all kinds of timber stacked so as to be exposed to the weather, is very essential, andthe rough oil paint is probably as cheap and as satisfactory as anything that has yet been thoroughly tried. In connection with this perhaps the most satisfactory investment of labor and material is found in the system adopted on the Lehigh Valley Road, by Mr. Lentz, also on a few other roads. This is to erect at the corner of each lumber pile four uproughts which carry a light roof sufficient to shed the rain and pretty thoroughly protect the pile beneath. In some cases, we have seen these roofs made like the roof of a hay rick, to be raised or lowered to suit the height of the pile beneath it. The cost of a construction of this kind is merely nominal and on some roads amounts only to the labor of putting up, the necessary timber being derived from rejected stuff which the lumber dealears do not consider worth removing—*Jour nal Railway Appliances.*

Wonderful is the instantaneous effect of West's Pain King in relieving cramps, colic and all bowel difficulties. Worth its weight in gold and costs but 25 cents. Should always be kept in every household. Sold by J. D. Tully druggist

Perhaps the most extraordinary that success has been achieved in modern science has been attained by the Dixon treatment for Catarrh Out of 2,000 patients treated during the past six months, fully ninety per cent. have been cured of this stubborn malady. This is none the less startling when it is remembered that not five per cent. of the patients presenting themselves to the regular practitioner are benefitted, while the patent medicines and other advertised cures never record a cure at all. Starting with the claim now generally believed by the most scientific men that the disease is due to the presence of living parasites in the tissues, Mr. Dixon at once adapted his cure to their extermination ; this accomplished the Catarrh is practically cured, and the permanency is unquestioned, as cures effected by him four years ago are cures still. No one else has ever attempted to cure Catarrh in this manner, and no other treatment has ever cured Catarrh. The application of the remedy is simple and can be done at home, and the present season of the year is the most favorable for a speedy and permanent cure, the majority of cases being cured at one treatment. Sufferers should correspond with Messrs. A. H. DIXON & SON, 305 King street west, Toronto, Canada, and enclose a stamp for their treatise on Catarrh.—*Montreal Star.* 1y122.

$100 REWARD

For any preparation that will equal **White Rose Cream** to remove Tan, Freckles and Pimples, Soften the Skin and Beautify the Complexion. Every bottle guaranteed to be as represented or money refunded, Price, 60c. and $1.00 per bottle. For sale by all druggists, or address the HARTLAND CHEMICAL CO., 27 Wellington Street East, Toronto. Stamps taken.

TROY, N.Y., Jan. 4, 1885.

GENTLEMEN,—I hav much pleasure in saying that I have used your White Rose Cream for my complexion some time past, and find it superior to anything I have ever used for the some purpose. It softens the skin and imparts a fresh and delicate bloom to the face and hands unattainable by the use of any other preparation. Sincerely yours, ELLA LOMANS.

To the Hart and Chemical Co. d90w1)

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RATES REASONABLE, CENTRAL LOCATION, FREE BUS TO AND FROM ALL TRAINS.
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ORDERS FOR DIMENSIONS AND ALL OTHER KINDS AND GRADES OF
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The nourishing, palatable and warmth giving qualities of Johnston's Fluid Beef has caused this invaluable preparation to before a favorite and fashionable beverage for the winter season. It is now obtainable on draught at the leading hotels and restaurants throughout the Dominion 18t7

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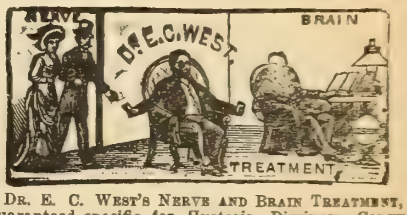

DR. E. C. WEST'S NERVE AND BRAIN TREATMENT, guaranteed specific for Hysteria, Dizziness, Convulsions, Fits, Nervous Neuralgia, Headache, Nervous Prostration caused by the use of alcohol or tobacco, Wakefulness, Mental Depression, Softening of the Brain resulting in Insanity and leading to misery-decay and death, Premature Old Age. One box will cure recent cases. Each box contains one month's treatment. One dollar a box, or six boxes for five dollars ; sent by mail prepaid on receipt of price. We guarantee six boxes to cure any case. With each order received by us for six boxes, accompanied with five dollars, we will send the purchaser our written guarantee to refund the money if the treatment does not effect a cure. Guarantees issued only by J. D. TULLY Druggist, Sole Agent for Peterborough

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THE CANADA

LUMBERMAN

DEVOTED TO THE LUMBER AND TIMBER INTERESTS OF THE DOMINION.

PUBLISHED SEMI-MONTHLY BY THE

Peterborough Review Printing and Publishing Company (Limited), Peterborough, Ont.

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Per line, for six months	50
Per line, for three months	30
Per line, for first insertion	10
Per line, for each subsequent insertion to 3 mo's.	05
Cards not occupying more than 12 lines (1 inch) per annum	8 00
Cards not occupying more than 12 lines (1 inch) for six months	5 00
Cards not occupying more than 6 lines per annum	5 00
Cards not occupying more than 6 lines, for 6 mo's	3 00

Special rates will be made for page, half page and column advertisements.

Advertisements intended for insertion in any particular issue should reach the office of publication at least four clear days before the day of publication, to insure insertion.

All communications, orders and remittances should be addressed and made payable to THE PETERBOROUGH REVIEW PRINTING AND PUBLISHING COMPANY (LIMITED), Peterborough, Ont.

Communications intended for insertion in the CANADA LUMBERMAN, must be accompanied by the name of the writer, not necessarily for publication, but as a guarantee of good faith. Communications to insure insertion (if accepted) in the following number, should be in the hands of the publishers a week before the date of the next issue.

The CANADA LUMBERMAN is filed at the Offices of MESSRS SAMUEL DEACON & CO., 154 Leadenhall Street, London, England, who also receive advertisements and subscriptions for this paper.

PETERBOROUGH, Ont, MAR. 15, 1886.

BRIDGES.

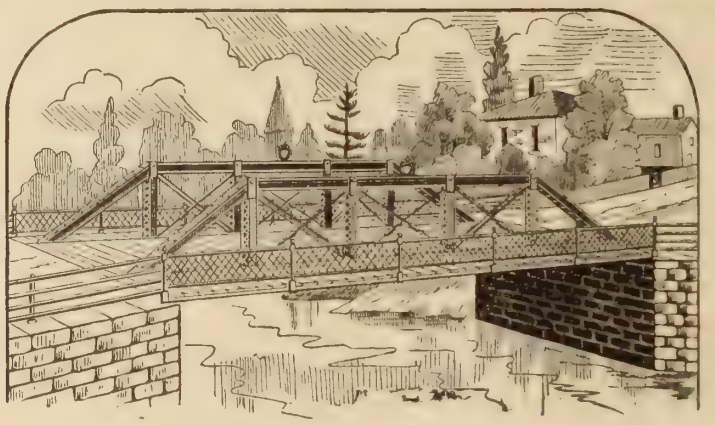
Written for the Lumberman.

Bridges are structures made to span a void, and are as old as history. From the Greeks we have accounts of bridges built by Semiramis, Darius, Xerxes, and Pyrrhus, principally made of timber and flat stones. Sometimes boats moored in the stream served as piers; such was the bridge built by Xerxes across the Hellespont. The principle of the arch was first applied to bridge building by the Romans. The Ponte de Ritto, or Senators' Bridge, erected by Caius Flavius, (127 B.C.) is supposed to be the first instance of its application to bridge building. In the course of the great engineering works of the Roman Empire, the application of the arch for bridge building became general and bridge building became an art. After the decay of the Roman Empire it made no progress for several centuries, but was again revived in the Eleventh century, but we find little was accomplished until the beginning of the Eighteenth century, when a large number of splendid bridges were erected in England and France.

One of the first applications of iron, to the building of bridges, was about the year 1775, by Mr. Pritchard, of Shrewsbury, England. This was a cast iron arch bridge, which proved a very valuable style of construction, and has since been largely used in all parts of the world. During the present century wrought iron and steel have been very extensively used for bridge building, and are fast taking the place of all other materials. Among the earliest applications of wrought iron to long span bridges, were the Britannia and Conway bridges, these were what are called tubular bridges, their cross section being in the form of a rectangular tube. The Victoria bridge, of Montreal, is another example of this type of bridge. The total amount of iron used in the two former bridges was 2,892 tons. The greatest span in the clear is 460 feet. Since that time the use of wrought iron and steel for building of bridges has been very extensive, until to-day we have a bridge at New York of 1,600 feet in one span, and another now being erected across the Forth, in Scotland, that the spans will be 1,750 feet long. The Niagara bridge is 1,200 feet, and the Cantilever bridge across the same stream is a later example of modern engineering skill.

The essential elements of a good bridge consist in so applying the materials of construction to a given design as to have all parts of the structure equally strong under the greatest loads that can ever come upon it. At the same time the material should not be strained to more than one-fourth to one-tenth of their ultimate strength, depending on the kind of materials used, and the nature of the stress the materials are subjected to. Bridges so constructed are said to have a factor of safety of 4, or 5, or 6, etc. Ordinary iron highway bridges are usually constructed with a factor of safety of four, which is ample, unless built in large towns or cities, then they should be constructed with a safety factor of five. Railroad bridges, as now built, have a factor of safety of five, and some of the members of the bridge that are subject to sudden shocks have a much higher factor of safety.

Bridges are subject to two kinds of loading besides their own weight, such as a uniform weight distributed over the whole length and width of the structure, and by concentrated loads such as heavy loads of timber, stone, machinery, threshing machines, and in the near future bridges will have to carry heavy traction



THE NEW PIGEON CREEK BRIDGE.

engines, and this should not be overlooked by city and county engineers in their future bridge designs—more especially in short span bridges, on which the shocks from heavy loads are more severe than on long span bridges—therefore, they should be designed to carry heavier loads, or the factor of safety increased. The general standard for loading a bridge is to consider it crowded with people. This would not exceed eighty pounds per square foot of bridge flooring. The following loads per square foot for different lengths of span were recommended by a committee of bridge experts in the U. S. A. to be adopted for the building of highway bridges:

60 feet spans and under 100 lbs. per square foot.
60 " to 100 ft. span.. 90 " " "
for cities and large towns.
" " " .. 80 lbs. per square ft.
for county roadway.
100 " to 150 ft. " .. 80 lbs. per square ft.
for cities and large towns.
" " " .. 65 lbs. per square ft.
for county roadway
150 " to 200 ft. " .. 70 lbs. per square ft.
for cities and large towns.
" " " .. 60 lbs. per square ft.
for county roadway.

The proper strength of floors for all spans may be arrived at by taking into consideration the greatest loads that are likely to be concentrated on one pair of wheels for each roadway. For Cities and large towns we can consider this not to exceed five tons, and in county roadway bridges three tons. This may appear extreme, but the writer thinks the error, if any, is on the side of safety. The floor beams of all bridges should be constructed for the above mentioned loads. The longitudinal stringers or joists should receive the same attention and should be of sufficient strength to carry half the above mentioned loads on one wheel concentrated in the middle of its length.

In the construction of iron bridges great care should be taken in the selection of the materials used for that purpose, as the whole structure may fail through some defect in one of the members, and as thousands of people intrust their lives on such structures daily, it is a point of vital importance, and cannot receive to much attention, not only by the engineer of the works where the bridge is manufactured, but by every workman engaged on the work, who should immediately report any defects he may discover no matter how trifling.

Iron is a material, the qualities of which are as variable as the different ores from which it is produced; it may be good, or very bad, or a mean between the two, and to a person who is not familiar with the material, and its mode of manufacture, all would appear alike. Iron is a material the most sensitive to treatment of any metal known in art. The least and often the smallest variation in the quantity or quality of the fuel, ore, or working, will result in several grades of iron at the same cast, but each grade suitable for some purpose. The writer has frequently seen four and five grades of iron produced at the same cast, although the same quality and quantity of ore and fuel had been used during the melting. The pig iron is commercially graded, and called Nos. 1, 2 3 and 4. Nos. 1 and 2 are always selected for foundry use, and are sometimes called grey irons, whilst the higher numbers are used for the purpose of manufacturing wrought iron, and are sometimes called white iron or forge iron. Foundry pig iron may be recognized, when broken, by the fracture presenting an open, crystaline texture with a grey color. Forge pig iron is hard, fine-grained, and generally has a white appearance, and sometimes a mottled one.

The operation of producing wrought iron from the pig iron, as now practised, is by extracting the carbon, and other impurities, by means of the flame and heat in a reverberatory furnace. The process is called puddling and is thus conducted: The sole, or centre part of the furnace, is filled with broken pig iron, rich slag, or iron scale, the doors are fastened up tight, the fire is then kept up until the whole mass of iron, slag, etc., are melted by the flame passing over the metal, (no fuel is allowed to be in the chamber with the metal). When the metal begins to melt the puddler begins to stir the same with iron bars made for that purpose, (a small hole about six inches square being left in the bottom of the door to admit of these bars being readily taken in and out). After it has all become melted the whole mass is rapidly stirred up. After a time the mass will boil and the carbon in the iron, in the form of carbonic oxid, comes to the surface, and comes in contact with the flame from coal in the fire chamber, and burns off with a blue flame. The stirring of the mass is kept up until all, or nearly all, the carbon is burnt out and the metal becomes pasty. The temperature of the furnace is now lowered by a damper in the stack, and the particles of the pasty iron gathered together and made into balls, about five or six balls at each charge, after the balls have been sufficiently worked they are taken to a heavy hammer or squeezer and there hammered or squeezed until a large quantity of the slag and other impurities remaining in the iron are forced out, it is then taken, whilst hot, to a set of rolls and rolled into bars about four inches wide and one inch thick. After remaining till cold it is cut u into short pieces, the several pieces are piled one on top of the other until they make a pile of sufficient dimensions to make a bar of iron of such merchantable size as may be required. The pile is then reheated and brought to a welding heat, about 13,400 degrees F. and again rolled into bars,—this is the ordinary merchant bar iron.

Upon this first process of puddling the quality of the iron almost entirely depends, that is supposing the pig iron has been made from good ores, (good iron cannot be made from poor ores, but bad iron can, and is made from the best of stock.) If the iron is not properly worked it will not have that toughness that good wrought iron should have. Again, if the charge is left to long in the furnace, the iron will be injured from over-heating, bars or plates made from either iron would be of bad quality, but both irons would not have the same granular appearance when broken.

The chemical operation performed during the puddling process is called decarburizing, and if it was possible to perfectly accomplish it, and the pig iron contained no impurities, the result would be pure metalic iron. This has never been accomplished so far, therefore the different grades and qualities of iron to be found in all parts of the world.

But with all the difficulties met with in the manufacture of iron, metallurgists have been able to produce a good and reliable quality of wrought iron by a judicious mixture of the various brands of pig iron, and by testing the puddled bars and selecting such as are fit for the quality of bars or plates required. Therefore, if an inquirer knows what quality of iron he wants, he should have little difficulty in procuring it if he deals with a reliable manufacturer. At the same time it is necessary that iron should be tested, and one of the best and simplest forms is what is termed the cold-bend test. It consists in bending the bar under examination, over an anvil by repeated blows from a hammer until the sides approach each other within a distance equal to the thickness of the iron. Iron that will stand this test without fracture is of the very best quality, possessing ductility, toughness and elasticity, and highly suited for bridge building. Some high grade irons will stand a severer test than this, by the sides being closed down upon each other, but these are exceptional cases and not the rule. Under no circumstance will iron stand to be bent over the sharp edge of a vise without fracture. The test piece should be bent over something that will allow the inner fibres to upsett at the time the outer fibres are extending. Thousands of tests have been made which all go to show that for bridge purposes a bar one inch square should be able to withstand a pulling strain of 50,000 to 54,000 pounds before breaking, and that it should stretch at least 1½ inches to the foot before rupture.

Timber for bridges should be sound, free from shakes, heart-cracks, loose and black knots. Well seasoned timber will wear much longer than unseasoned, but bridge plank is seldom kept in stock, therefore it must almost always be procured fresh cut from the mills. Sapwood will not wear good, and will decay faster than heartwood, but it is practically impossible to get all heartwood. Wane edge should be laid downwards, and if more than one wane edge in a plank it should not be used.

The timber for stringers, or joists should be selected with more care than plank. The kinds of timber most in use are oak, white and yellow pine; for plank sometimes hemlock, beech, birch and tamarack.

The principal kinds of iron bridges now in general use are the girder bridges, for short spans up to 30 to 40 feet, sometimes longer. Next comes the bowstring, the arch, supension, truss bridges, and lately the cantilever bridge has been brought forward very prominently. This last mentioned type will be more extensively used in the future than in the past for long spans; although the principle has long been understood by engineers it is only of late years that such gigantic structures have been built where the principle could be applied with economy.

The truss bridge is the most in use, and

bridges have been built on this principle, in spans ranging from 30 feet to upwards of 500 feet long. There are several types of trusses, such as the King post truss, the Queen post truss, the triangular or Warren truss, the double triangular truss, the trapizoidal or "whipple" truss, the Fink truss, the Bollman truss, &c. The two former types are only used in the shortest spans. The trapizoidal or whipple truss is most in use and some magnificient structures have been built up to 525 feet spans. The illustration given is of the whipple type and is called a low truss bridge. The length of span is 68 feet, width of roadway 18 feet, with a sidewalk on each side four feet wide. The bridge is designed to carry a rolling load of 100 pounds per square foot of the roadway, and 80 pounds per square foot of sidewalk, besides the weight of the superstructure itself. No member in tension to be strained to more than 10,000 pounds per square inch, and compression members 8,000 or less, depending on the ratio of length to diameter of the member. The sidewalk railing is made of wrought iron lattice work bolted to cast iron posts, said posts being bolted to the iron cross beams, the flooring is entirely of pine, roadway plank three inches thick, sidewalk plank two inches thick, the whole superstructure is erected on a cut stone substructure and crosses Pigeon Creek, in the town of Omemee, Victoria County, Ontario. In long span bridges, from 90 feet and upwards, the trusses are of sufficient height to be braced laterally on the top, these are called high truss bridges. Sometimes the roadway is carried on the top of the trusses, and this is called a deck bridge.

Before building a bridge all corporations should consult a competent engineer, who would be able to select the most economical and best type to suit the location, and also to examine the designs and plans presented, to ascertain if they are designed on correct and recognized principles, *and to ignore any plan that is not, or cannot be analyzed as to the kind and amount of strain the members of the bridge would be subject to when loaded.* It is almost criminal to build a bridge, or any structure, on plans that no one can tell approximately anything about, when there are plans that are thoroughly understood and the strains can be correctly calculated.

There is another point to consider and one of the most vital importance, namely, the details, or connections, of the different members of the bridge, if these are weak the whole structure will be measured by their strength. On these points the knowledge of the practical engineer is of great value, it enables him to select the best design, and prevent incompetent and unscrupulous parties from palming their death traps on the public, besides saving large sums of public money.

W. H. LAW,
Central Iron Bridge Works, Peterborough.

THE DUTY.

To the Editor of the Canada Lumberman.

MR. EDITOR,—Mr. Joly's letter in your number of the 15th, with your remarks in answer to the *Free Press*, give valuable information on our lumber interest. I have often wrote and wondered the reason why the export duty on our cedar, spruce, and pine logs are not exacted on the river St. John, N. B., when one steam mill on the American side manufactures about 50,000,000 of cedar shingles, besides the spruce and pine for clapboards, furnished yearly from our forests free of export duty.

It seems astonishing that we have been, for the whole of the Nineteenth century, living alongside of a smart shrewd people who have thrown off the old John Bull bigotry over one hundred years ago, and we yet inherit it to such an extent we must butt our brains out against obstacles to progress before we can see them.

If we had a few more Mr. Jolys, with an independent press, who takes the interest of our country at heart, the Government might condescend to open their eyes and look after our local interests and protect them. And unless we encourage and protect all the feeders, to keep up our revenue, our progress must be retarded; and lumber is one of our natural and most valuable feeders. Costing us nothing is the reason why it is so neglected, and the day is not far of when our future generations will curse the neglect and those causing it.

I see that the Morrison tariff, if it passes in the United States, throws a sprat at Canada to catch a salmon. It reads to admit all wood and lumber, *not dressed*, on the free list, from a country where no export duty is charged; consequently all our shingles and clapboards, when a planer has been used on them, would be subject to duty, and nowadays all our shingles are edged with a planer, and nearly all our clapboards are planed at the mill where they are manufactured. So it stands our Government in hand to not let go with their right hand before they get a good hold with their left, for they will learn there is no friendship in trade with Uncle Sam.

And about our New Brunswick stumpage few of your readers know nearly all our lumber lands are locked up by monopolists who charge $1.50 per M feet stumpage, and what little lumber we have left, if not preserved more strictly, the reckless slaughter now carried on by Americans, and our own lumbermen, we will soon have none to growl over.

Respectfully yours,
P. O. BYRAM.

Madawaska, February, 1886.

ENTERING the townships of Melbourne we are impressed with the rapid growth of wood. In places that were cleared, since our personal recollection, and cultivated for years, thers now appears a strong and healthy growth of maple and other varieties of wood. Some of the trees are nearly large enough for sugar trees. If the country were left for fifty years, the landscape would be converted into an unbroken forest again. If people would only husband the wood growing patches that remain, keeping the cattle and fire out of them, there will never be a scarcity of wood in these townships. —*St. John, Quebec, News.*

WE learn from the Brandon, Man., *Sun* that Mr. Jas. Kennedy, son of Mr. D. Kennedy, of Campbellford, Ont., is manager of the Brandon saw mills, which the proprietor, Mr. Christie, lately purchased. 800,000 feet of logs are now in the Fort Ellice booms, and will be sent down as soon as the ice breaks in the river, and arrive there ten days after. It is the intention this season to cut one and a half million feet of lumber. Forty men will be placed in the woods above Fort Pelly this week. This will be pleasing news, the *Sun* says, to the people of Brandon.

THE Pembroke *Observer* of February 26th says:—"The timber shipping traffic for the season of 1886 has opened under the most favorable auspices and a busy season is predicted. Mr. Klock, the well known lumber merchant, of Aylmer, has started a force of men to load cars with lumber cut this season on the Veuve river. The timber will be launched on the ice Papineauville, where it will be rafted up as soon as navigation opens in the spring and driven to Quebec for the early market.

MR. FLOOD, the agent for Messrs. R. R. Dobell & Co,, is at present taking out square birch in the vicinity of Lac Sept Isles, near St. Raymond. Already 12,000 feet have been sent down by the Quebec and Lake St. John railway, and have been piled on the Louise embankment. Eight thousand feet more have to be delivered. The average of this birch was 16 inches and 11 feet in length.

ALLEN OLMSTEAD has been appointed forester for the Adirondack region, N. H., by the state forestry commission. He is an old hunter and a thorough woodsman. His duty will be to see to the preservation of the forests under his jurisdiction from wanton destruction and spoilation.

WHILE engaged in surveying lumber at Malone for the Rathbun Company, Mr. Thomas Pidgen slipped off a lumber pile and fell against a log sustaining very severe internal injuries which have entailed much suffering. He was taken to his home in Deseronto.

DURING 1885 car loads of lumber and box shooks were forwarded from Potsdam, N. Y., to the number of 1,463; car loads of butter tubs, 165; bark, 29.

A MAN was hit in the right eye by the bursting of a log bind, in a shanty at Mattawa, and taken to Ottawa last week. He has has sustained fearful injuries about the face, and it is feared that the eye is totally destroyed.

THE Cobourg *Sentinel-Star* says that the hickory wood in the buggy which John Boyd, of Baltimore, has sent to the Colonial Exhibition, London, England, was taken from a tree planted by the late Hon. Asa A. Burnham, over 50 years ago.

A SYNDICATE of Quebec gentlemen, including J. E. Ross, E. Beaudet, H. J. Beemer, Andrews, O. Turgeon and others, are about to erect a large saw and shingle mill and furniture factory at River Pierre, on the line of Lake St. John railway, province of Quebec.

GEORGE GALL

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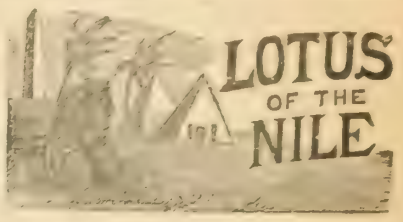

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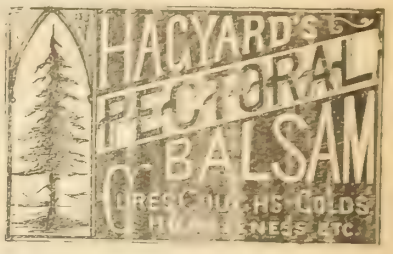

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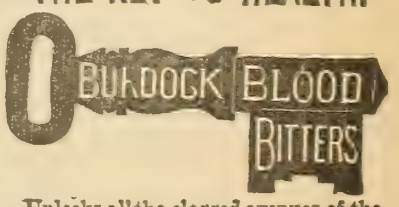

Unlocks all the clogged avenues of the Bowels, Kidneys and Liver, carrying off gradually without weakening the system, all the impurities and foul humors of the secretions; at the same time Correcting Acidity of the Stomach, curing Biliousness, Dyspepsia, Headaches, Dizziness, Heartburn, Constipation, Dryness of the Skin, Dropsy, Dimness of Vision, Jaundice, Salt Rheum, Erysipelas, Scrofula, Fluttering of the Heart, Nervousness, and General Debility; all these and many other similar Complaints yield to the happy influence of BURDOCK BLOOD BITTERS.

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JIM AS AN ENGINEER.

Jim's a good-natured happy-go-iucky; he's served his time in the machine shop, knows all about blacksmithing, and as for a stationary engine, why bless your soul, he's designed more than you ever saw. His uncle was a big stockholder in the company, and Jim was sent up to make himself generally useful, and show the country bumpkins a thing or two.

When he came all the places were full, so Jim swept up the shop and did some helping. To be sure, he left some chips under the laths and the bench was not very clean; but you know, Jim was an engineer and machinist, and not a roustabout.

At last business picked up and Jim was set to work running the engine nights. Then he was in his glory. First he thought the globe valve on the feed-pipe ought to be shut. Of course he forgot to open it when he started the pump. Well now you just ought to have seen that packing come out, and the water squirt over the engine and machinery. Jim caught a good mouthful and then left, and never stopped till he was out-doors. It rather scared him, but in a night or two he was ready to try another dodge.

The pump didn't leak, but Jim thought it needed packing, or anyhow that gland must be screwed up, and up it went; and the first thing he knew the plunger stopped, stuck tighter than a drum. Well, the engine went on serenely, and the set screw that was to have held the crank cut a nice little groove around the shaft.

Now that valve and motion is all of a kilter, and needs resetting. So one night while the men were at lunch, off comes the steam-chest cover, and the valve *is* reset. Engine starts a little lame, but Jim knows she will soon get over that. But pretty soon there is a rattle, the engine limps worse and worse, and then with a final rattle she stops. Investigation showed a nut off the valve stem. It had dropped into a steam port, been blown out into the exhaust and up the smoke stack, till it struck the elbow, when it dropped back upon the vertical boiler, where it was found next day.

Then Jim thought that perhaps it was not the valve after all. The pound must be in the eccentric straps, and I'll just tighten them up Well, now, almost before he could put that monkey-wrench down on the bench there was a loud snap, and a broken eccentric rod went whirling around with the shaft. This time the eccentric and strap were both cut and the rod broken. Jim smokes away and says the engine is no good. Manager thinks about the same of Jim's engineering qualifications, and gives him a job where he won't have quite so good a chance to raise Cain, but Jim was still alive, and didn't fail to let us know it.—*Power.*

CARE OF EMERY WHEELS.

It is common custom when an emery wheel is removed from its spindle to abuse it. Some hang it up on a nail, with one side exposed to the air of the room and the other side against a damp brick or wooden wall. Others lay it about on an uneven bench, and others, again, take the trouble to put it under the bench, one edge against the damp ground and the top side leaning against the back of the shop. When they want to use it again they find it all out of balance, perhaps warped out of flat and with its corners chipped or damaged. Then they write the maker that the wheel doesn't run true, and they want another one for it, without charge, or they will, notwithstanding its damaged condition, mount it on the machine and go to work with it; when it bursts and mains the user, emery wheels will be called dangerous tools.

To much care cannot be taken of an emery wheel by the man who uses it. Emery is, as before stated, a silicate of alumina and iron, emery contains water enough to make it have an affinity for water, and to a certain extent oxidize or rust, and therefore swell in size. If, then, a solid, but porous wheel is subjected to dampness, or to unequal action of air and dampness, it may become injured. It certainly is injured by having the corners chipped off by lying about under a bench with old junk, and it should get more sensible treatment.

A good plan for keeping all emery wheels would be to lay them in a box or drawer, in dry sand or sawdust, keeping them with as much care as one would with an edged tool or razor. Too much care would do no harm.

If, upon receiving an emery wheel from the maker, the user would tap it lightly with a hammer, he will find it has a note or sound Now, if when he uses the wheel after an interval of repose, he would again tap it lightly with his hammer in the same way, he will notice readily any change of sound, or ring. If the wheel, on being tapped, sounds dead, or if it is cracked, he will readily notice the change in sound. This change is the only intelligence any solid wheel possesses; the man who uses it must govern himself accordingly. —*Mechanical Engineer.*

CARE FOR CIRCULAR SAWS.

The care we take of a circular saws makes it possible to do either the poorest or the best work. We may have the very best table, the finest gauges, and the best saw the market affords, but unless they are well taken care of it is utterly impossible to do a nice piece of work with them; while on the other hand, if we keep them in fine condition, even with indifferent tables and appliances, they will show their care by the superior work done. Even under imperfect conditions aside from the saw, if we keep it sharp it will cut easy, and if set perfectly true, with the teeth of an even length, it will cut smooth, though it stick up through a rough board instead of a table made of alternate strips of walnut and ash, shallacked to perfection and polished until you can see your face in it. There is a combination of things that makes a saw run well, as much as there is a combination of letters to make a word, or of figures and signs to make a problem in arithmetic; and unless the combination is perfect we fail to make good work.

Let us see what the combination is then if we agree to the conditions specified: 1st, a true plate; 2nd, an even set; 3rd, the teeth all of an even length, so that each tooth shall do its share of cutting; 4th, the teeth filed to a uniform level both front and back, so as to give all the points the same shape; 5th, and last, though not by any means least, to give all the teeth the same size and shape without regard to the level. The reasons why we should have a true plate are obvious to the most casual observer. The stiffness of the plate depends on its being true, for just as soon as it is the least sprung, it has lost its backbone, and it will be dished first on this side and then on that, and we cannot trust it for anything, even the very plainest kind of sawing.

There is a wide difference of opinion about a sawyer straightening his own saws; while one may be able to do it there a thousand who cannot do it well. This is a part of caring for saws that if one cannot do it well he had very much better not try to do it; and yet every sawyer should be able to tell when a saw is sprung, and have it taken to a professional in that business and have it made right, for it is very much cheaper to have it right in the first place than have some one try to learn how to hammer a saw and almost ruin it and then be obliged to have to take it to some one in the business. This is a poor way to save money, and if any one is just starting and with a small working capital, he has little time to spare to teach his workmen how to hammer saws. But you want to know just when a saw needs straightening, and have it well done, and you want to know enough about a saw to know when it is well done. This is one part of caring for saws, and whether one can straighten a saw himself, or can tell when it ought, to be hammered, he in either case is properly caring for it. It is needless, perhaps, for me to say it, but it is nevertheless a patent fact, that not one in ten sawyers in the country properly understands this part of the business or has the right kind of tools to do either the one or the other.

We would now come to the second part, a true, even set. A saw perfectly round and each tooth as long as the others might perhaps come in first, but as I have taken up setting we will go on with it and take the length of teeth in its turn.

There are a very few persons in this world that can set a saw by their eye and never use a gauge, but those persons are almost as scarce as hen's teeth, and the best way to use a good gauge and have each tooth come just to it, and not almost to it and another a little too much out, for these two littles make a "mickle" and will surely tell on the stuff being sawed.

On ordinary coarse work, like ripping up plank for studding, or for any stuff to be planed and jointed in a machine, I would certainly use an upset, as this keeps the outside points of the teeth full and sharp, which is a very necessary point in making a saw run well. As soon as the outside points become rounded, no saw ean be trusted to do good work even in the coarser kinds of sawing, but they do very much better even then if they are properly set by having every tooth set just alike. I know this point of setting is held in high esteem by many who call themselves good sawyers, but I hold that it is one of the positively essential points to make a saw run both easy and well.

Now we come to the third count, keeping a saw round, and every tooth exactly the length of all the rest. How many shops and mills throughout the country can we go into where saws are used and not hear that confoundedly annoying sound, gig-gig-gig of saws that are running out of round. This comes from two causes, one of which is the hole in the saw is a little to large, and the saw is put on regardless of this fact, and if a saw be ever so round, if put on the arbor this way, it is impossible to cut both sides alike, for it becomes an eccentric just as soon as put on and, pitiful to relate, always remains so. Very many, it is true, have a mark and always put it on in the same place with the marked side up, but this only half remedies the fault, for it will crowd one way or the other and is never exactly round. There is only one way to remedy this fault, and that is, by some means make the saw fit the arbor nicely. The other course is the common one. Saws are run week in and week out and are never trued, and a saw should be faced or trued up once a day if it is doing anything at all. Keep a nice piece of common grindstone and hold it up to the saw till it just touches, and then pass it carefully across the face of the saw till every tooth is hit. Now take off and file up nicely till the points come up to a fine edge without turning a burr if possible Don't file and file till a burr is turned up like the fingers of a Hindoo devotee, because if you do the saw is out of shape again and needs truing up as much as it did before you touched it. A little care and the light falling on the point of the tooth so you can see what you are about, will give you a habit of filling just enough and no more.—*Cabinetmaking and Upholstery.*

CEDAR.

It occurs to us that if red cedar was properly introduced in this market, and its merits once thoroughly known to the consumer, it would become a very important factor in the lumber interest of the city. It is a matter worthy of comment that red cedar fence posts and red cedar dimension is in less demand in this market than in any other of the country; and this, too, in the very face of the fact, of all timber that grows, there is none possessing such lasting, such imperishable properties, if you please, as red cedar for fence posts. We recognize the fact that it cannot be secured in this market, so as to be sold to the consumer at anything like the prices for which white cedar is offered, but we see no economy in paying 15 cents for a white cedar post that will last but five yeers when for 30 cents a red cedar one can be had that will last a generation of years We were not a little surprised to know that some time since a couple of Tennessee gentlemen shipped a carload of red cedar posts to this city, and came in person to dispose of them and, if possible, lay a foundation for the future trade, but their experiment resulted in a deplorable failure, not only to receive a consideration for them that justified them in bringing them to this market, but in making any arrangement for future trade.

We cannot understand why it is that a wood possessing such valuable merits, not only for posts, but for the building of clothes closets in dwellings, is so little in demand. Where cedar is used in interior work vermin and moth will be unknown; and it is susceptible of beautiful finish that adds to its value as a wood for house building purposes.—*Lumber Trade Journal.*

TIGHT BELTS.

A large quantity of belts is required to transmit a little power. The sooner we investigate and believe the above fact, the better it will be for our shafting, machinery and coal-heap. We may look at the fact as we please, it will bear it, and find that a slow running belt to carry a given power must be very wide. If running at high speed, we must have the same number of square inches of belt passed over the pulley, but the belt need not be as wide to do it.

When a belt slips, the most natural action on the part of the attendant is to throw a handful of powdered rosin between belt and pulley. The next move, when resin fails, is to tighten the belt. Often we find belts strained up until they are tight enough for fiddle strings, until hangers are pulled out of line, boxes cut and shafting sprung.

A certain machine company drive their works by long loose belts which claim attention from their very looseness. These belts are 10″ to 12″ wide, about 16 feet from pulley to pulley, and are slack enough to permit the upper or slack side of the belt to "bag" down 12' or 18', a plone passing through the two shafts being about 45° from the perpendicular.

If this machine company had followed the example of many power users, they would have used belts 5″ or 6″ wide, strained them very tight, and have been continually troubled by the belts breaking and wearing out. The belts above described, ran upon large pulleys (from 24 to 48) having a speed of 250 or 300 revolutions per minute.

Probably these belts would have done one-half more work than was put upon them but from the fact of being loaded light, they did their work with very little wear and tear. They needed very little looking after, save to keep them oiled and cleaned.

At the Novelties Exhibition at Philadelphia, a centrifugal pump was shown raising a very large quantity of water, and being run with a 1½″ belt. Here, high belt-speed was used as a factor, but the little belt was strained very tight. It will soon give out and need constant patching.

When putting up a machine to run by a high-speed belt, don't make the mistake of cutting down the width of the belt too much. Let it go wide enough to transmit the required power without being too tight.

A certain builder of gauge lathes built a lathe to make button-hook handles. The handles were about ⅜″ or ½″ in diameter, and 1½″ long. When the belt was at its highest speed it ran over 4,000 lineal feet per minute, yet the belt was made four inches wide. Just think of it; a round sewing machine belt would almost have done the work, yet here was a four inch belt. The builder of that lathe says he would do the same thing again, for the belt service was complete, there was no slip of belt, no excessive friction, and the lathe spindle always ran true and cool.

When we see a man putting on a 14″ belt with clamps, and using a 24″ monkey-wrench wherewith to screw up the clamp bolts; then we can say to ourselves that this man is doing a poor job.—*American Machinist.*

A TELEGRAM from Washington in regard to the Morrison bill says:—The imports of articles of timber and lumber named in the bill as affected by the proviso as to export duty are imported from Canada, which country as far as learned imposes no export duty on the articles named, therefore the proviso has little or no effect." If pine and spruce are not included in the proposed free list, as Mr. Little believes, then this statement is correct; and it would appear to confirm the impression that Mr. Morrison does not propose to place pine and spruce lumber on the free list. If, however, he wishes the provisions of the bill regarding lumber to be of benefit to anybody those kinds of lumber should be included.

Chips.

It is said that Pack, Woods & Co., Americans, own 600,000,000 feet of timber in Canada.

W. W. Sutherland, Saginaw, handled 4,000,000 feet of hardwood lumber last year.

The Mississippi Valley *Lumberman* does not think there are more than 48,000,000 feet of old logs in sight in the booms or along the Mississippi river.

The latest from the Menominee district in Wisconsin is that the estimated cut of 400,000,000 feet would be realized, over 200,000,000 already being banked.

The steam saw mill owned by Mr. O. Dufresne, situated about four miles from South Durham, Que, was totally consumed by fire on Feb. 19th; fully insured.

A Lumber firm in Ottawa estimates that it will cost $4,000 to make alterations, if the bill providing for the increase in width of tires of heavily laden wagon, passes the Ontario Legislature this session.

Mr. T. H. DeCew has leased the Hanlan mills from the Essex Centre Manufacturing Company, and will go at once into the extensive manufacture of staves.

The N. & A. Barnard Lumber Company have sold to E. R. Phinney, of East Saginaw, 3,800 acres of pine land in town 17-2 west, Gladwin county; consideration $24,000 cash.

Windsor is resolved to have an electric railway, from Ouillette avenue to Walkerville. Capital of the company, $30,000, length of road 1½ mile, rolling stock one motor and one ordinary car.

It is reported that never before were there so many small operators at work in the logging district of the Menominee as this winter. It is probable that the same is true in all the leading districts.

Mr. Schwarts, of the Royal Swedish and Norwegian Consulate, at Quebec, has favored us with a pamphlet on lumber shipments prepared by a gentleman residing at Helsingfors, Finland.

The Victoria, British Columbia, *Colonist* says:—The George E. Star took away the immense plank sent from the Province to the Colonial Exhibition. It is nine feet in width and twenty feet long.

Mr. C. Young, of Young's Point, Ont., has had a new cast and track from Wm. Hamilton's foundry, Peterborough, put in his saw mill, and new saws put in his saw and shingle mill. He closed his mills on January 1st, but was compelled to start work again.

Silas H. Raymond, of Grand Rapids, Mich., has invented and applied for a patent on a machine which he claims will set up a common stave barrel, both ends at once, using four tress hoops, in less than one minute. He says the machine is very simple, needs no power, and can be operated by one boy.

The Muskegon *News* says:—News from the woods is, that notwithstanding no snow in December, to much in January, and soft weather thus far in February, the log cut will be nearly the amount expected, namely 400,000,000 feet. This showing is made possible through the activity of a large number of small operators who have pushed their work with more than usual energy.

NORTH WESTERN ONTARIO.

The *Banner* says a party of young men consisting of T. Brooks, S. Brooks, F. Hogue, whilst cutting shingle bolts near Riley Lake a few days ago, discovered a bear's den inhabited by an old she bear and her two cubs; the boys had no fire arms and were proceeding to demolish the two cubs when old mother bear rushed to the rescue and attempted to give them an affectionate hug, but a few well directed blows with the axes soon put an end to her armorous intentions and settled her prospects for any closer alliance. The whole trio was captured and carried home in triumph.

THE FOSSIL WOOD OF THE WEST.

An interesting paper has been communicated to one of the California scientific societies on the fossil wood which is found in different localities throughout the state.

This silicified wood is stated to be a variety of quartz; the wood fiber is gradually replaced by quartz, leaving the form of the wood intact, so much so that the sections cut and placed under a microscpe show the characteristic grain of the wood, by which the genera may often be determined, and sometimes the species. In what is known as the petrified forest in Colorado, there are stumps of trees several feet in height and some 12 or 15 in diameter, and one stump seemed to be fossilized while in a charred state, and from it fossil charcoal was obtained. Many of the specimens of wood are encrusted with layers of crystalized chalcedony of an opalescent tint, so beautiful that sections have been mounted and worn as jewelry. In Wyoming there have been found sections of trees 20 inches in diameter and several feet in length, like hollow tubes, with the interior surface entirely studded with pure quartz crystals, presenting a most beautiful appearance.—*Scientific American.*

AUSTRALIAN WATTLE FOR TANNING.

The American Consul at Sydney has forwarded to the United States Government a lengthy report on the leading industries of New South Wales, in the course of which, describing the the leather trade of that colony, he says the great bulk of the material used for tanning leather in Australia is obtained from the wattle or mimosa bark, the produce of various species of the acacia. This bark yields a higher percentage of tannin than any other vegetable material in the world, with the single exception of the celebrated taneka bark of New Zealand, a product peculiar to that colony. An interesting feature connected with the mimosa bark is that its percentage of tannin increases after a year or two when the bark is kept in a dry place. The bark is usually gathered in the spring, which begins in New South Wales in the month of September—the colony being south of the Equator, the seasons are of course reversed. The bark is so highly prized for tanning that considerable quantities are exported to England, the annual exports being about 9,000 or 10,000 tons. Occasionally the exports have reached as high as 20,000 tons per annum. The demand for it has been so great that at one time it was thought the trees would disappear altogether. The New South Wales Government, however, has taken very active measures to promote the growth of these trees, and has caused vast numbers of them to be planted all over the colony, and especially on railway reserves. Strong efforts are also being made to encourage planting these trees by private enterprise. There are many varieties of the wattle, some of which have beautiful wavy and graceful feathery foliage. Wattle barks are usually found in commerce in four forms. 1st, in narrow strips about three feet long, pulled off the tree. 2nd, in small pieces 1 in. in length, and about the same in breadth. 3rd, ground bark having the appearance of retted fibre. 4th, powdered bark, forming a very fine powder. The wattle bark forms a hard and heavy tannage when used strong, but when weakened it produces soft and pliable leather. Extracts are now made from the wattle, and they are extensively used by the English tanners.

Horseman, Attenton!

When your horse is galled or cut, or has an ugly sore, bathe twice daily, and apply McGregor & Parke's Carbolic Cerate. It is undoubtedly the finest healing and cleansing for it. Be sure you get McGregor & Parke's. Sold for 25c. per box at John McKee's Drug Store.

LUMBER DRIVERS' CALKS

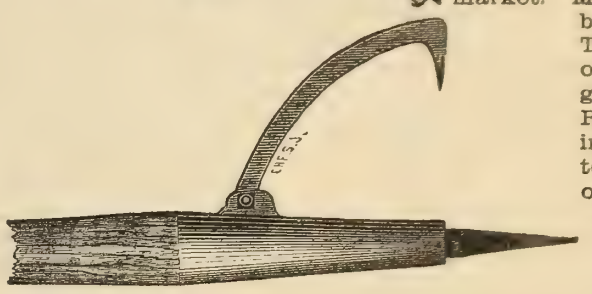
FOR USE IN STREAM DRIVING.

Made from the Best Refined Tool Steel and Forged. The method used in tempering leaves every one of the same temper rendering them stronger and more durable than any other Calks made Samples and prices free on application to the undersigned.

THE

Orono Cant Dog

Strongest and Lightest in the market. Made of Best Cast Steel by drop forging process. The Handles are made of best quality straight grained split and turned Rock Maple, 5 to 6 feet in length, bored specially to suit the pick. Prices on application.



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T. McAVITY & SONS,

ST. JOHN, N.B.

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A FULL LINE of all Size Single and Double Belting constantly in stock.

☞All ORDERS Filled same days as received.

TORONTO

WARE ROOMS

86 King Street East

Factory and Warerooms:—2518, 2520 and 2522, Notre Dame Street.

MONTREAL, QUE.

GET YOUR STATIONERY SUPPLIES AT

THE "REVIEW" STATIONERY STORE

MARKET BLOCK, GEORGE STREET.

☞ Noted for BEST QUALITY GOODS at LOW PRICES! ☜

PAPER, ENVELOPES, PENS, INK and PENCILS,

And every house and office requisite always kept in stock, and sold retail in

BOTH SMALL OR LARGE QUANTITIES.

☞A LIBERAL DISCOUNT will be allowed to Bankers, Lumbermen, Manufacturers, Clergymen, School Teachers, Township Officers and others buying their Stationery in large quantities, and also to cash buyers. ☞Estimates given and contracts made for yearly supplies at lowest rates.

Market Reports.

TORONTO.

From Our Own Correspondent.

MARCH 9.—Building operations have now commenced to open out and the yards may expect a good trade shortly, as all differences with the carpenters, plasters and bricklayers, will be amaciably arranged before work is fairly started, so that the difficulties encountered last spring by master workmen will this season be avoided.

A large quantity of lumber is now entering our city, but nearly all of inferior grades, and the same may be said of the larger portion now piled in the railroad yards. Good lumber fit for immediate factory use meets with ready sale at fair prices, and it may with a certainty be predicted that before the first day of June next there will be a great out cry for dry lumber and the cry will be in vain, no dry stuff fit for dressing purposes will be held in stock by that time. The large stock now just sold at Gravenhurst will find its way by rail to Boston, and any dry lots to be had will soon be bought up for shipment to the other side, so that our manufacturers will wake up and find, to their astonishment, that there is not enough dry lumber left for their requirements until the new cut is in a fit state for use.

The present season's cut will be a large one without a doubt, so that no famine need be feared. The difficulty to be anticipated is getting in a fit state for use by the time it will be needed, as it has been found that lumber placed in dry kilns, while perfectly green does not come out in good shape for use.

The demand for shingles and lath is not brisk, but will mend as soon as the season fairly opens, and now that the G. T. R. R. Co. and the N. & N. W. Co. have brought their rates to the same figures, western shipments from the latter road will commence once more. Had this taken place sooner a large portion of the shingles now in stock would have been shipped out some time since, however, better late than never.

Prices at the yards have not as yet advanced on bill stuff in proportion to the advance demanded on car lots, so that it may be fairly assumed that retail dealers are selling at a less profit than formerly. Competition is intensely keen in all the branches, manufactured as well as in the unmanufactured state.

Mill cull boards and scantling	$10 00
Shipping cull boards, promiscuous widths	12 00
" stocks	13 00
Scantling and joist, up to 16 ft	13 00
" " " 18 ft	14 00
" " " 20 ft	15 00
" " " 22 ft	16 00
" " " 24 ft	17 00
" " " 26 ft	18 00
" " " 28 ft	19 00
" " " 30 ft	20 00
" " " 32 ft	21 00
" " " 34 ft	22 50@22 50
" " " 36 ft	24 00
" " " 38 ft	27 00
" " " 40 to 44 ft	30 00
Cutting up planks to dry	20 00@25 00
" boards "	20 00
ound dressing stocks	16 00@18 00
Picks Am. inspection	30 00
Three uppers, Am. inspection	35 00@40 00
B. M.	
1½-inch flooring, dressed	25 00@30 00
1½ " " rough	14 00@15 00
1½ " " dressed	23 00@25 00
1¼ " " undressed	14 00
1 " " dressed	16 00@20 00
1 " " undressed	12 00@14 00
⅜ Beaded Sheeting, dressed	18 00@20 00
Clapboarding, dressed	12 50
XXX sawn shingles, ₱ M	2 75@ 2 90
Sawn Lath	2 25
Red oak	20 00@25 00
White "	25 00@30 00
Basswood, No, 1 & 2	18 00@20 00
Cherry, No. 1 & 2	50 00@60 00
White ash 1 & 2	25 00@30 00
Black ash 1 & 2	20 00@25 00

CHICAGO.

AT THE YARDS.

The *Northwestern Lumberman* of March 6th says:—The increase of movement, so plainly seen last week, has almost swelled to a full spring trade since then. Though there has been a slight snow storm this week, and a moderately low temperature part of the time, there have been several sunny days, so that weather conditions, on the whole, have been favorable to shipment. Long trains are now to be seen on the yard tracks, and great activity is manifest. One going about the district now-a-days is led to mentally inquire if is really a fact, as some assert, that the Chicago white pine trade is losing ground from year to year. If such is the truth, appearances are deceiving. It is seldom that the volume of tradé expands to its present proportions so early in March. It may be that the Chicago trade is making its last rallying effort before yielding to the grim messenger. But it is more than likely that it will make several dying efforts hereafter which shall be such displays of tenacious life as will be very disappointing to outside rivals.

A healthy feature of the present revival of trade is that it has come naturally, and without any extra endeavor on the part of the dealers. Travelling salesmen were sent out late, and many houses have not yet put men on the road. It is true that some solicitation by mail was employed, but there was little done in the way of offering concessions in price. Several houses are now letting their customers weight or go elsewhere rather than cut prices. The determination all along the line of yards is to stand firm for values, even if the country trade does not readily respond. In view of this attitude the rapid rise of demand, and the large volume of shipment now witnessed, is an encouraging feature of spring business. It is an indication of the truth of what has, since last fall, been pointed out by the *Lumberman*, namely, that stocks in the country were low, and that when trade did start up in the spring it would manifest unusual strength. No doubt the knowledge that prices certainly cannot go lower, while in some instances they are already higher than last fall, with a tendency to advance, is inducing large handlers in the interior to put in stocks early.

The weather in Kansas, Missouri, southern Nebraska and further southwest, is now sufficiently warm to permit of the use of lumber in housebuilding, and the promiseof great activity in this line is bright. The certainty of a large amount of railroad construction this season in Kansas and Nebraska makes it plain that there will be much improvement in these states, and a large consumption of lumber. For this reason dealers are putting in stocks for the expected demand.

Yet the trade now prevailing is by no means dependent on the trans-Missouri and southwestern requirement. Orders are coming in from all directions. The eastern trade is fairly good. Lumber is being shipped to new points. As was said last week the reach of the Chicago trade is lengthening, as a result of the extension of railway systems centreing here. Larger orders are being placed in eastern and southern cities, as a result of their thrift and growth. It looks as if another period of prosperity would swell the volume of trade at this point to proportions never before witnessed.

It was previously stated that prices of piece stuff averaged about a $11 a thousand, excepting for long joists, which sold for higher and special prices. It is safe to say now that $11 50 is the ruling price on 2x4, 4x4, and short 2x12. Stuff 2x6 and 2x10 of ordinary lengths sells for $10.50 to $11. Long joists sell for higher prices than any named, 2x12 or 14 and 3x12 or 14 range upward almost indefinitely, according to length and difficulty of securing the lumber. Pieces 4x4-20 and 2x4-20 are scarce and in demand, in common with all other 20-foot lumber. No. 2 boards are wanted in excess of dry stock in pile. Assortments of nearly all kinds of lumber that is dry enough to ship are becoming seriously broken, so that if there is no check in shipments during the month there will be a lively hunting around for specialties before the first of April.

Holders of thick lumber report a good inquiry for it, and firmness of prices. Two-inch stuff is the scarcer, and consequently most urgently wanted. There is considerable inquiry from the factories, and it is expected that thicks and clears will be in good demand throughout the season.

The grade called variously shop common, shop stock, cut-ups, and C select, is growing in favor. Some dealers want it added to the list. It is made by picking out from selects, common or culls, inch or thick pieces that are mostly clear, but are marred by slight shakes, rotten spots or knots. Such lumber can be cut up to advantage in shop or factory work with but little waste. It is a grade made much at Ohio points and in the East. An interesting disquistion is made on it in the article appearing in the *Lumberman* on "Dry Uppers." It is probable that it is more successfully made in the yards of this city than anywhere else, because it is only done to make a profitable use of lumber that would do no good to ordinary grades and does not injure them when selected out. The shop common grade sells here at about $20 a thousand Lumber from Wisconsin that is mainly wide and clear, is said to contain a considerable portion of stuff that can be best devoted to the shop common grade. This is on account of the fact that north Wisconsin pine has large knots in it, but wide apart, with clear intervening wood. Wolf river pine has this characteristic, the peculiarity being no serious matter in the factory work at Oshkosh.

The local building requirement is increasing as the season advances. Building permits are daily issued in augmenting numbers. There is no reason to suppose that there will not be as many medium and small buildings erected in the city and suburbs this season as there was last year, and such structures are those that consume lumber. There are also several factory buildings going up, and many business blocks.

Receipts of lumber and shingles for the week ending March 4th, as reported by the Lumberman's Exchange:—

RECEIPTS.

	Lumber.	*Shingles.*
1886	5,808,000	734,000
1885	4,540,000	1,403,000

FROM JAN. 1, TO FEB. 25 INCLUSIVE.

RECEIPTS.

	Lumber.	*Shingles.*
1886	37,514,000	9,981,000
1885	28,284,000	7,282,000
Increase	9,230,000	2,699,000

STOCK ON HAND MARCH. 4.

	1886.	1885.
Lumber & timber	584,767,582	589,442,064
Shingles	418,839,205	333,889,025
Lath	77,926,482	57,824,292
Pickets	5,297,053	2,927,264
Cedar posts	444,462	478,484

EASTERN FREIGHT RATES.

FROM CHICAGO AND COMMON POINTS ON CAR LOAD LOTS OF HARD AND SOFT LUMBER.

IN EFFECT NOV. 1.

To New York	30c.
Boston	35c.
Philadelphia	28c.
Baltimore	28c.
Washington	28c.
Albany	28c.
Troy	28c
Buffalo and Pittsburgh	15c.
Shenectady	28c.
Wheeling	15c.
Suspension Bridge	15c.
Salamanca	15c.
Black Rock	15c.
Dunkirk	15c.
Erie	15c.
Toronto	15c.

OTTAWA.

From Our Own Correspondent.

FEB. 25.—Since the opening of the Canada Pacific railway to Winnipeg and the Northwest quite a trade in lumber has sprung up, the Chaudiere mills here supplying all orders. The Canadian Pacific Railway Company, in order to encourage this, have settled upon a very reasonable tariff of carrying charges in the matter of lumber, which will undoubtedly be a benefit to both the lumber manufacturer of this portion of Canada and settlers and others in the Northwest, who may require lumber for building or other purposes. Not only has the opening of the road created a new market for the product of the Chaudiere mills, but it has been an incentive to other enterprises, as now many saw mills are spoken of being erected along the line, and close to the timber belt so that prices for lumber may be less and the carrying distance much shortened between the point of supply and demand. This, as it may be expected, has had a cheering effect upon those in the trade, and the future in this direction holds out many bright promises. The great Northwest land must be settled and settlers must have buildings, and where is there a more natural place to look for a supply of material for such purposes than the older provinces, with a great transcontinental line of railway connecting them with an iron band. The Northwest has the land for settlement and the Provinces of Ontario and Quebec the means of making such settlement one of comfort, as far as the necessary supply of lumber is concerned. Men in the trade here say there is no question but in a few years a great and growing trade in lumber with the Northwest will grow up, thus making a fresh marketing field for the enterprise of those engaged in the business. It is easy to contemplate with a certainty that such will grow up as the Northwest territories become more settled. That land must have lumber for building, and the readiest and handiest place to get it will undoubtedly be the Ottawa Valley.

Rumours of sales are reportad every day, the chief buyers being Americans. There is no question but that prices of first-class lumber the coming season will be much in advance of that of last year The indications now point to that as a foregone conclusion.

The export duty on logs, an export duty that will equalize things, is a subject much debated among limit holders and mill owners here. They say that they expect that the Federal Government will give them protection in this matter, and that they will agitate for it until some scheme is inaugurated whereby the lumber industry of this great centre is protected.

MARCH 10.—As the season of spring advances the prospects in the trade grow brighter and brighter. As an indication of what may be expected in the matter sales, it may be told that Messrs. Shepherd, Moose & Co., of Burlington, Vt., have invested to the extent of one hundred and seventy million feet, bought at good figures from a number of lumber manufacturers in this vicinity. In conversation with Mr. John Bromley, the popular manager of the extensive lumber business of W. R. Thistle & Co., he said that he had sold some one hundred thousand feet of samples to an Oswego firm a short time ago, and at good figures. And this was the first purchase this firm had ever made in the Ottawa Valley, and they intimated to him their wish of taking all the lumber which the large mill would cut for the season.

At Hull and the Chaudiere, early as the season is, shipments are going forward briskly, and the C. P. R. have been pressed for cars within the past few days, to take away all the shipppers desire to send. In a letter from E. B. Eddy, reecently received from Europe, where that gentleman is at present travelling, he says the indications point to a good demand from that quarter, and that lumber dealers in Canada need have no fear, but that their stocks of sawn lumber will meet with a rapid sale and a good price.

In the Upper Ottawa region everything is going on rapidly and well, and already there is a demand for men for the spring drives at fairly good wages. In conversation with Mr. Alex. Gordon, of the firm of Booth & Gordon, he stated that lumbermen on the Kippewa and Lake Temiscaminque are pushing things forward at a good rate, and anticipate a good supply of water for the spring drive. Logs, he says, that were stuck on the Kippewa and Gordon Creek last year, will be got out this year. Mr. Gordon is down here to wait upon the Postmaster General to urge the establishment of a post office at the firms depot on the Blanc France River.

LONDON.

The *Timber Trades Journal* of Feb. 27th says:—Messrs. Churchill & Sim, as we fully anticipated, had an excellent room to their sale on Wednesday last; not only were the seats fully occupied, but the tone of the bidding was better; things hung a bit at times, but on the whole better prices were obtained than when Mr. Churchill last held the hammer.

The £15 10s. to £15 15s., which the Archangel deals, ex Sea Gull, fetched could not be complained of; it is true that the shipment was Russianoff's, but even so, we think they were well placed. At any rate, no White Sea Deals this year have touched those figures.

The planks, ex Clematis, we think went rather poorly, being very nice goods and perfectly dry, and at £16 was undoubtedly cheap to the buyer. The deals by this ship at £4 10s. and £4 15s. might also have gone another 10s. higher, and yet been a bargain to the purchaser. Why this shipment was not more favored by the room we cannot quite understand.

The pine parcels were all well treated, and the broads ex Earl King at £30 a standard, was about the best sold lot that we have had to record for a long time; it was not as if they were all wide stuff, many of them being narrows, but the unusual width of 30 in. helped the bidding greatly. The 10 to 15 ft., 8 to 27 in broad, were proportionately well done by at £27 5s., as were the 2nds at £22; in fact, the whole parcel was evidently wanted by those who sustained the bidding. Michigan pine is not—now at least—so well esteemed as Quebec. This special shipment had nothing specially attractive about it, nevertheless it compared favorably with the reshipped Quebec goods subsequently submitted, for which the outside price for 10/16 ft. 3x14 to 16 in. was £24.

The influences operating to give these topping values to bright pine will, as our remarks indicate, be rather strengthened than otherwise, the increasing demand for the wood in the United States and the Dominion itself having a strong tendency in that direction.

LIVERPOOL.

The *Timber Trades Journal* of Feb. 27th says:—There has been a slightly better tone in business during the past week, although the continued severity of the weather retards building operations most materially, and it is to be hoped that this improvement, however slight it may be, is an indication of a return to that improvement in business which has been long expected and so often deferred. We hear that considerable sales of spruce deals have been made for future delivery, not only for this port, but round the coast, though prices are reported to show no advance upon those made during the past season.

Something also has been done in Quebec goods, but not, it is understood, to the extent of previous years. In the meantime, freights are quoted low, owing to the comparatively few orders for tonnage in the market. A large and influential deputation from Manchester waited upon the President ot the Board of Trade on Tuesday last to endeavor to enlist his support to the Bill promotrd by the Manchester Ship Canal Company, authorizing them to pay interest out of capital during the construction of the works. Mr. Mundella replied in a non-committal speech, but the result of the interview is looked upon by those interested as being favorable for the object in view, and sanguine opinions are now being held by many ardent supporters of the scheme that they will succeed in their endeavors, and, these being obtained, one the greatest difficulties they have had to contend with in raising the necessary capital will vanish. Should they succeed in getting the works started, it would be of considerable importance to the timber trade of Liverpool, as not only must a vast quantity of timber be required in the construction of wharves, piers, &c., but, when eventually successful, it will relieve the pressure from the trade here, which is often seriously cramped and hindered from the want of sufficient space in which to carry on a large and cumbrous business.

Rapids progress is now being made with the buildings of the Liverpool International Exhibitions of Travel, Commesce, &c., to be held here during the summer months, and from what we can here it is likely to be a success.

Extensive as are the buildings, the applications for space have been, according to the public statements of the secretaries, five times as greater than the capacity of the floor space will allow. We understand, there will be an interesting exhibition of various kinds of timber imported into this city.

GLASGOW.

The *Timber Trades Journal* of Feb. 27th says:—As will be seen from report of the sale of Quebec timber at Greenock, and cedar at Glasgow, transactions by auction within the past week have been pretty heavy. Arrivals to note since last writing have been unimportant.

In the Glasgow Town Council, last week, there was some conversation with reference to the erection of artizans' or laborers' dwelling-houses upon the vacant ground belonging to the City Improvement Trustees, and it was decided that in the meantime the matter be allowed to remain in abeyance, in consequence of the opinion got from Dr. Marwick, town clerk, to the effect that, although the trustees might agree to erect laborers' and artizans' dwellings as proposed, the parliamentary powers of the trustees did not warrant the contracting of new obligations for such a purpose.

At the annual meeting of the Glasgow Shipowners' Association a few days ago, Mr. Alex. Allen, in moving the adoption of the report, advised against the additions to tonnage being made especially in sailing ships, "until the tonnage afloat is more in proportion to the carrying needs of the world than it is at present."

It has just been brought out in connection with the depression in the shipbuilding trade that, owing to the number of vessels lost, an actual decrease is taking place in the registered tonnage of the country. Tonnage of steamers added last month amounted to 13,708; those removed,14,460; and sailing vessels respectively 8,545 and 17,080, although in the latter case 4,200 tons sold to foreigners have to be taken into account.

These facts point to an improvement in freights.

AUCTION SALES.

On 18th inst., at Greenock, Messrs. Edmiston & Mitchells, brokers:—

			Per c. ft. s.	d.		
Quebec waney boardwood—						
40 logs	44 c. ft. avg.		1	6		
20 "	48 "		1	10½		
20 "	71 "		2	1½		
20 "	31 "		1	6½		
63 "	42/44 "		1	0		
103 "	36/42 "		1	0	to 1	8½
11 "	62 "		1	4½		
Quebec square boardwood—						
20 logs	38 c. ft. avg		1	7		
Quebec yellow pine joinerwood—						
62 logs	35 c. ft. avg		1	3¼		
Quebec yellow pine (B quality)—						
20 logs	55 c. ft. avg		1	2½		
Quebec yellow pine joisting—						
80 logs	50 c. ft. avg		1	1		
20 "	50 "		1	0		
Quebec yellow pine—						
20 logs	36 c. ft. avg		1	2		
14 "	50 "		1	1		
Quebec red pine—						
60 logs	35 c. ft. avg		1	0¼		
5 "	40 "		1	4		
Quebec birch—						
20 logs	18 "		1	5½		
Quebec oak—						
11 logs	60 "		1	11½		
Quebec elm—						
1 log	38 "		1	10		
Quebec maple—						
1 log	59 "		1	6		
Sawn pitch pine—						
20 logs	40 "		1	1½		
Quebec 3rd yellow pine deals—						
14 & 15 ft.	7/11×3		1	0		
13 "	7/11×3		0	10¾		
12 "	6/11×3		0	10¾		
9 to 11 "	4/11×3		0	9¾		

On 23rd inst. at Queen's dock, Glasgow, Messrs. Wm. Connal & Co. sold a cargo of Mexican (Minatitlan) mahogany and cedar.

The following priees were obtained for the wood, which was all cleared out, viz., 510 logs mahogany, at 2¾d. to 11¼d. (2 lots at 2½d.), averaging 4 5-32d. Liverpool sale measure; 52 logs cedar, at 2¾d to 4¾d., averaging 3 5-16d.; 2 lots mahogony log ends at 3½d. and 2½d, one lot cedar log ends at 2½d.

There was a numerous company, and demand was good, especially for the larger squares. The cargo consisted chiefly of small logs.

After the above, Messrs. Edmiston & Mitchells offered by auction several parcels of walnut, ash, and birch. Sales were as under:—

Quebec black walnut—	Per c. ft.
22 logs 24½ in. avg. sq.	3s. 9d. to 6s. 1d.
(averaging 5s. 1¼d. per c. ft. string)	
Quebec waney ash—	
49 logs 15½ in. avg. sq.	1s. 5¾d. to 1s. 9d.
Quebec birch—	
18⅜ in. av6. sq.	1s. 8d.

TYNE.

The *Timber Trades Journal* of Feb. 27th says:—The arrivals of the past seven days are a little larger and more varied, but do not amount to much. The regular steamers from Gothenburg and Christiania, have brought their usual complements of pit-props, mining timber, and some manufactured wood. One cargo of Norwegian battens from Krageroe has come forward, and several smaller lots of pit-props will also be found in the list.

The weather remains very wintry, and entirely prevents any outdoor work going forward. Falls of snow have been very heavy, with more or less frost, while in the country districts many roads have scarcely been opened since about Christmas. An immense number of masons, plasterers, laborers, and others dependent upon the building trade, are thus thrown out of employment, and the distress on all sides is most severe.

A little more hopeful tone may be reported as to the prospects of a settlement in the shipbuilding trade, but it does not yet amount to a settlement. Both sides having now slightly modified their demands, it is earnestly to be desired that, at the ensuing meeting, now arranged for, the unfortunate strike will be brought to a conclusion.

It need scarcely be said that the demand for wood goods has not all improved. Work is as slack as it has been at any time for several years, and on all sides the lookout is of the gloomiest description.

ALBANY.

Quotations at the yards are as follows:—

Pine, clear, ₱ M	$53 00@55 00
Pine, fourths	48 00@50 00
Pine, selects	45 00@47 00
Pine, good box	22 00@53 00
Pine, common box	11 00@13 00
Pine, 10-in. plank, each	00 42@00 45
Pine, 10-in. plank, culls, each	00 23@00 25
Pine boards, 10-in	00 28@00 32
Pine, 10-in. boards, culls	00 16@00 20
Pine, 10-in. boards, 16 ft., ₱ M	28 00@32 00
Pine, 12-in. boards, 16 ft	28 00@32 00
Pine, 12-in. boards, 13 ft	28 00@00 00
Pine, 1½ in. siding, select	40 00@43 00
Pine, 1½-in. siding, common	15 00@18 00
Pine, 1-in. siding, select	40 00@42 00
Pine, inch siding, common	13 00@15 00
Spruce, boards, each	00 00@00 16
Spruce, plank, 1½-in., each	00 00@00 20
Spruce, plank, 2-in., each	00 00@00 30
Spruce, wall strips, each	00 12@00 12
Hemlock, boards, each	00 00@00 14
Hemlock, joist, 4x6, each	00 00@00 32
Hemlock, joist, 2½x4, each	00 00@00 14
Hemlock, wall strips, 2x4, each	00 00@00 11
Black walnut, gook, ₱ M	100 @120 00
Black waluut, ⅝ inch	80 00@90 00
Black walnut, ¾ inch	00 00@85 00
Scaymore, 1-inch	28 00@30 00
Scaymore, ⅝-inch	21 00@23 00
White wood, 1-inch and thicker	38 00@40 00
White wood, ⅝-inch	28 00@30 00
Ash, good, ₱ M	40 00@43 00
Ash, second quality, ₱ M	25 00@30 00
Cherry, good, ₱ M	60 00@85 00
Cherry, common, ₱ M	25 00@30 00
Oak, good, ₱ M	40 00@43 00
Oak, second quality, ₱ M	20 00@25 00
Basswood, ₱ M	25 00@30 00
Hickory, ₱ M	40 00@40 00
Maple, Canada, ₱ M	28 00@30 00
Maple, American, per M	26 00@28 00
Chestnut, ₱ M	38 00@40 00
Shingles, shaved, pine, ₱ M	0 00@ 6 50
" 2nd quality	0 00@ 5 00
" extra, sawed, pine	4 30@ 4 50
" clear, "	0 00@ 3 00
" cedar, mixed	0 00@ 3 30
" cedar, XXX	0 00@ 0 00
" hemlock	2 25@ 2 37
Lath,hemlock, ₱ M	0 00@ 2 25
Lath,spruce, "	0 00@ 2 13

MONTREAL.

From Our Own Correspondent.

MARCH 10.—Business in Montreal is moderately active, and distinct improvement can be noted during the past fortnight. The city trade is fairly good and quite a number of substantial country orders are coming in, which keeps up some activity at the yards in making the shipments.

Prices remain firm and payments are satisfactory.

The following are the quotations at the yards:—

Pine, 1st quality, ₱ M	$35 00@40 00
Pine 2nd " "	25 00@30 00
Pine, shipping culls, ₱ M	14 00@16 00
Pine 4th quality deals ₱ M	10 00@12 00
Pine, mill culls, ₱ M	7 00@ 9 00
Spruce, ₱M	10 00@13 00
Hemlock, ₱ M	9 00@10 00
Ash, run of log culls out, ₱ M	20 00@25 00
Bass, " ₱ M	18 00@20 00
Oak, ₱ M	40 00@50 00
Walnut ₱ M	60 00 100 00
Cherry, ₱ M	80 00 100 00
Butternut, ₱ M	35 00@40 00
Birch, ₱ M	20 00@25 00
Hard Maple, ₱ M	25 00@30 00
Lath, ₱ M	1 60@ 0 00
Shingles, 1st, ₱ M	2 00@ 3 00
Shingles, 2nd, ₱ M	2 50@ 0 00

CORDWOOD.

The cordwood market remains dull and neglected and prices are unchanged:—

Long Maple, per cord	$ 6 00@6 50
Long Birch "	6 00@0 00
Long Beech "	5 00@5 50
Tamarack "	5 00 0 00

OSWEGO, N.Y.

From Our Own Correspondent

Three uppers	[illegible]
Picking	[illegible]
Cutting up	24 00@28 00
Fine Common	[illegible]
Common	[illegible]
Culls	11 00@14 00
Mill run lots	16 00@22 00
Siddings, selected, 1 in	30 00@35 00
" 1¼	32 00@36 00
Mill run, 1x10, 13 to 16 ft	16 00@21 00
Selected	[illegible]
Shippers	[illegible]
Mill run 1¼x10	17 00@20 00
selected	21 00@30 00
[illegible]	14 00@16 00
[illegible]	15 00@18 00
[illegible]	22 00@30 00
[illegible]	11 00@13 00
[illegible]	25 00@35 00
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	1 00@1 25

TONAWANDA.

CARGO LOTS—MICHIGAN INSPECTION.

Three uppers	[illegible]
Common	[illegible]
Culls	[illegible]

WOOD-WORKING PATENTS.

The following list of patents relating to the wood-working interests, granted by the United States Patent Office, February 23rd, 1886, is specially reported by Franklyn H. Hough, solicitor of American and Foreign patents, 925 F. Street, N. W., Washington, D. C.

336,782—Edger, gang—E. H. Barnes, Brooklyn, N. Y.

336,813—Lathe for turning irregular forms—O Kromer, Sandusky, Ohio.

336,674—Plane—J. A. Traut, New Britain, Conn.

336,697—Saw—G. N. Clemson, Middleton, N. Y.

336,730—Saw—J. J. Parker, Aitkin, Minn.

336,661—Saw hanging—T. W. Peck, Milwaukee, Wis.

336,671—Saw mill head blocks, nose guard for—C. Esplin, Minneapolis, Minn.

336,693—Sawing machine, band—J. J. Bowen, San Francisco, Cal.

PATENTS ISSUED MARCH 2.

336,933—Saw setting and gumming tool—D. McDonough, Eagle River, Wis.

337,083—Saw tooth—W. B. Risdon, Trenton, N. J.

337,103—Saw tooth—C. J. Wilson, Knoxville, Tenn.

THE PROSPECTS FOR THE TRADE

As the lumber industry is of vast importance to the inhabitants of the Ottawa Valley, we have by inquiry in well-informed quarters procured the following information.

Some days ago we published a list of sales, showing that the trade, so far as the manufacturers were concerned, was in a healthy condition, but as a general impression prevailed that these sales were more of a speculative, than of a genuine nature, we decided to investigate the matter for ourselves, with the following result: The American market, although not booming at present, is what a shrewd man would say in a most healthy state, as their stocks are low, and the dealers are confident of a good year's trade; and as the iron trade in the States is much healthier than it has been for some time, it is reasonable to forecast that they are about right. The English market is in much the same position, their stocks are also light, and although trade with them is now rather quiet, yet they too are looking for a good active year, and judging from the manner in which old and experienced dealers are buying up everything in the shape of deals, at sellers' prices it is only reasonable to expect a good trade from that quarter. The news from the South American is far from encouraging, and nothing like what it was at this time last year. The shipments there last year were greatly in excess of the requirements, and with the present unsettled state of the country, and the dread of cholera next season, the outlook in that quarter is, to say the least, very unsatisfactory. In any event neither our lumber kings, nor any of the parties in this section can be affected by a falling off of the trade in any of the above markets, as all of the cut of 1886 in the Ottawa Valley, is sold and in second hands, and at better prices than were ever procured in the previous history of the trade.—*Ottawa Journal.*

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DAVID H. HENDERSON, *President;* NORMAN HENDERSON, *Vice-President;* CHAS. H. WALTERS, *Sec-Treas.*

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J. Z. ROGERS,
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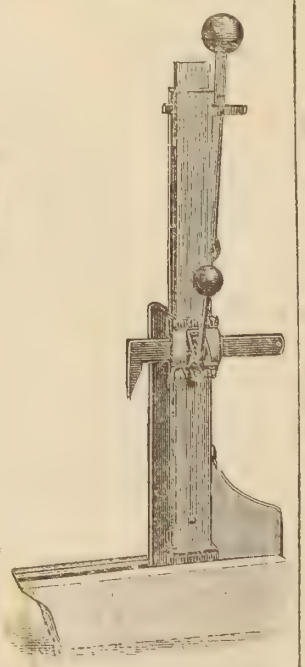
The Sawyer's Favorite

For Holding Logs upon a Saw Mill Carriage while being Sawn into Lumber.

These Milldogs I guarantee to give satisfaction in every case. They will hold a frozen log as well as a soft one, for cutting Scantling, Square Timber, &c. Those Dogs cannot be excelled, I sell them all on their own merits, give ten or fifteen days trial, and then, if not satisfactory, return them to my order, as I have no agents on the road this year, I will sell them at a reduced price. Send for Circular and price list.



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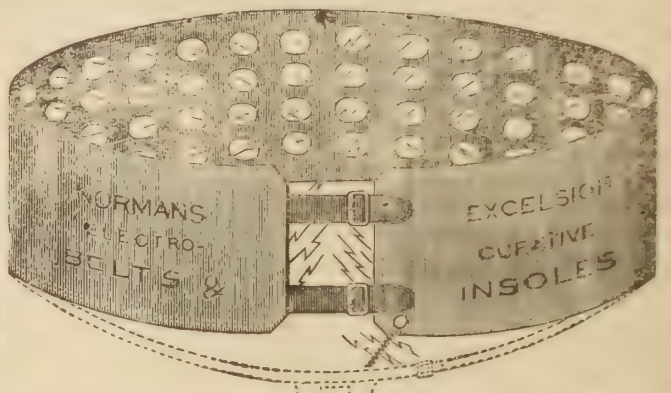

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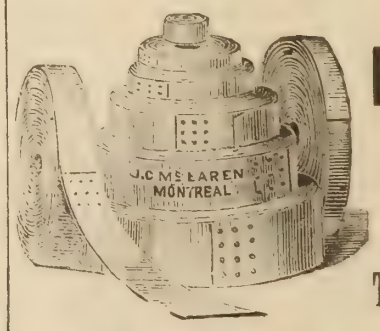

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4. Its columns are filled with interesting reading matter, valuable alike to the land owner, manufacturer or dealer.
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It has a circulation among saw mill owners, manufacturers, lumber and timber dealers and all classes connected with the timber business.

Examine the field, count the cost, and you will at once decide that the CANADA LUMBERMAN is the

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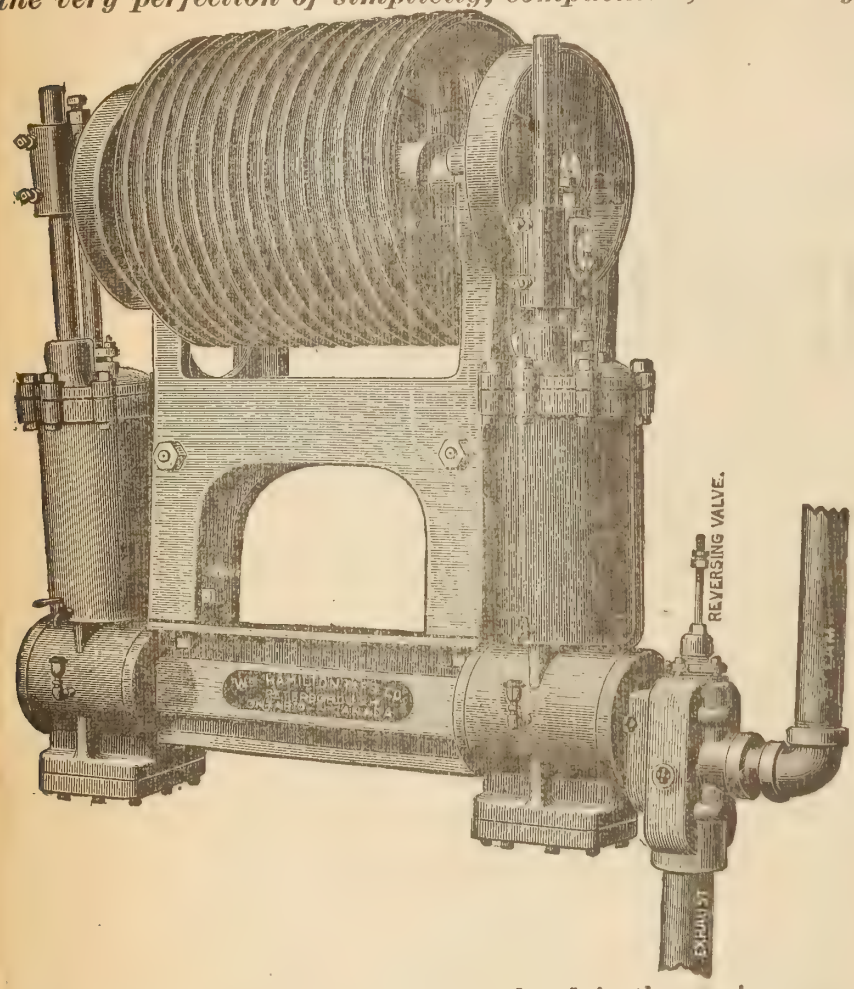
for placing your goods or wares before the saw-mill men and lumber and timber dealers of the Dominion.

CUNNINGHAM'S
PATENT OSCILLATING TWIN ENGINE
FOR STEAM FEED IN CIRCULAR MILLS WITH RACK OR ROPE.

This Engine has practically but two moving parts, aside from cranks and shafts. The whole array of eccentrics, valves, valve rods, connecting rods, cross heads, slides, levers, rock shafts, bell cranks, etc., is done away with, and the very perfection of simplicity, compactness, durability and cheapness attained.



The above engraving illustrates the Twin Engine, 10x16, for Rope Feed, for Saw Mill Carriages. The spool is 27 in. diameter, 30 in. face, is grooved 2 in. pitch for 1½ in. rope. The shaft is steel, 4½ in. diameter, with disk cranks. No connecting rods, eccentrics or valve rods to get loose and out of order. The ports are in the trunions, and worked by an oscilliation of the cylinders, and are held in their place in the downward motion by a steam cushion below. The sawyer's valve is a perfect balance, and by moving this valve the engine can be reversed, stopped or started almost instantaneously if necessary, as the sawyer has perfect control of it by his lever either to go fast or slow. Should the sawyer let go of his lever either by mistake or any other cause, it is balanced so that the valve will come to the centre and cut the steam off both cylinders and stop the feed. When standing, the lever is locked or fastended, so that is is impossible for it to start off itself. The engine stands upright below the carriage, and bolted to two upright beams, placed on the mill for the purpose. When a rack is preferred in place of the rope, we put on a steel wheel 30 in. in diameter, and the engine placed high enough to work into the rack on carriage bar, or if the beams come in the way, an idler wheel can be used between engine and rack segs; or, the engine can be placed at a distance and have a shaft from it to the carriage; or it can be placed in the engine room, where it is under the control of the engineer for oiling, thence by shaft and pinion to carriage rack bars. These engines are well adapted for cutting long logs, or where the logs are mixed, the advantage of this feed will be apparent to mill men. When the carriages are used in two or more sections, the couplin and uncoup- ling of each section is quick and simple.

There were two of these feeds working this summer and giving the best of satisfaction, one with rope feed at James Playfair & Co's Mill, Sturgeon Bay, near Waubaushene, and one at the new mill furnished by us to Francis Carswell & Co., at Calabogie Lake, on the Kingston and Pembroke R. R. This mill is working with the Rack and Pinion feed, and drops from fifteen to seventeen stock boards per minute. We have also sent one to the Rathbun Company, Deseronto, to put in to feed their heavy Circular Mills. They will also commend themselves for various other cases, especially for running Elevators, hoisting Engines, and wherever a simple and easily reversible motion is required.

We would also call attention to our Improved Hand Saw-Mill for cutting logs

☞ *We guarantee this to be the best Mill of its kind got up, and would ask any one wanting a good Band Saw-Mill to communicate with us. We would also call the attention of Mill Men to our new IRON GANGS, CIRCULAR MILLS and MILL MACHINERY. For further information, prices, &c., address the Manufacturers,*

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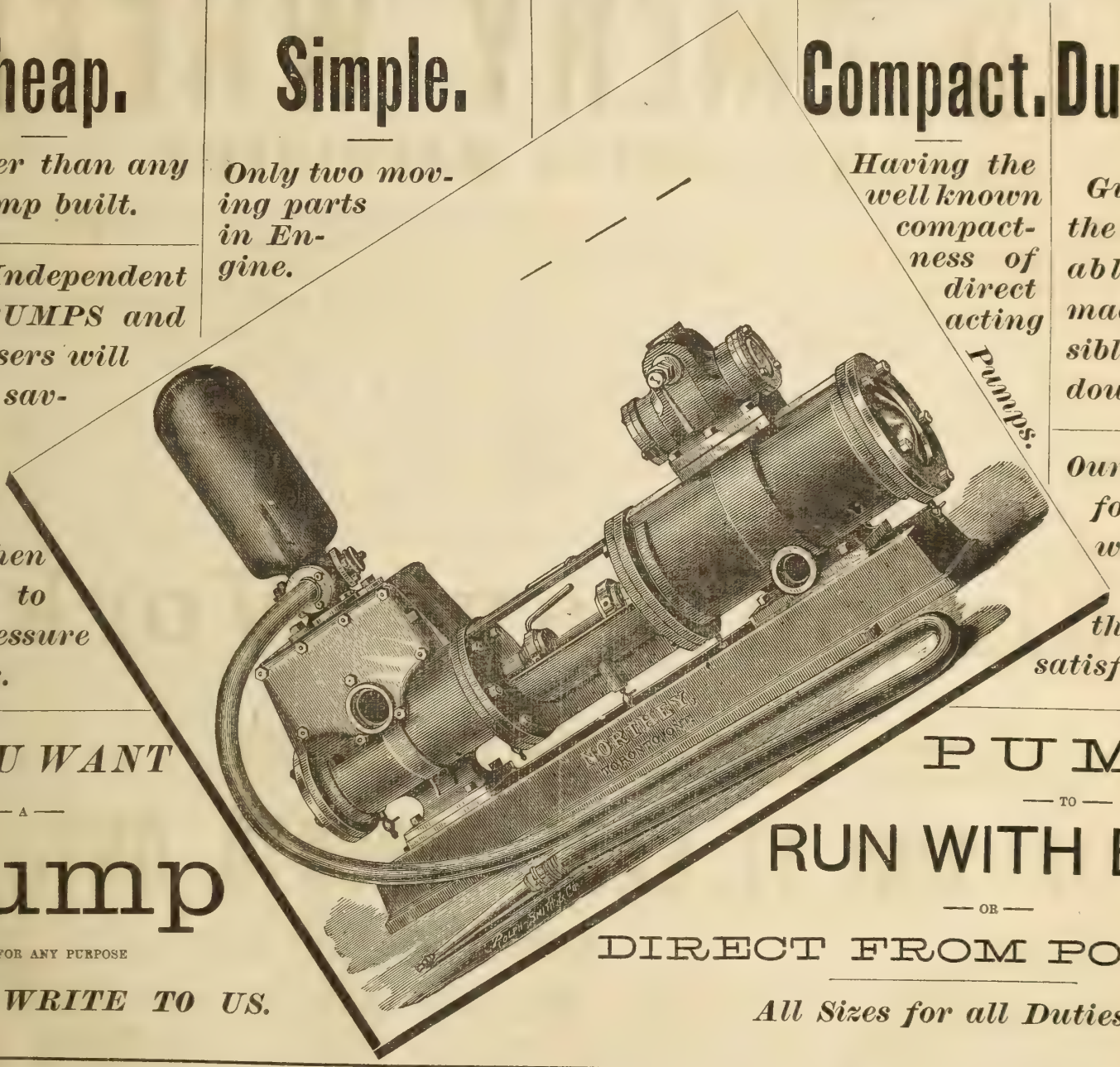

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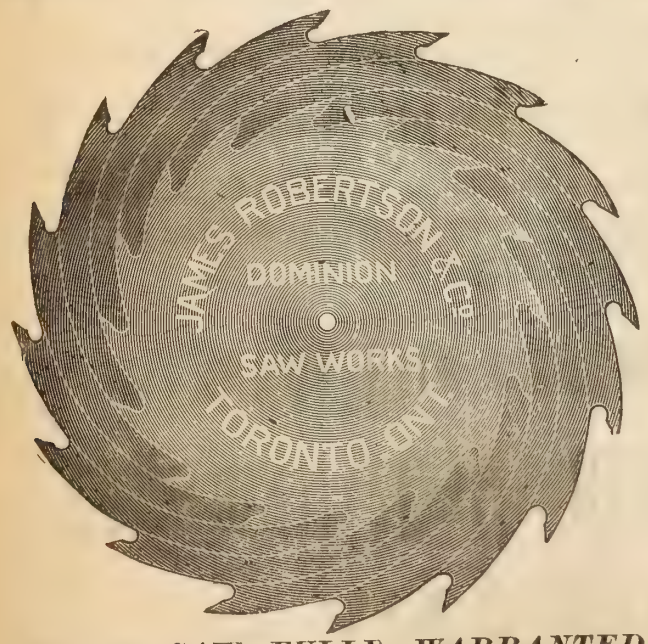

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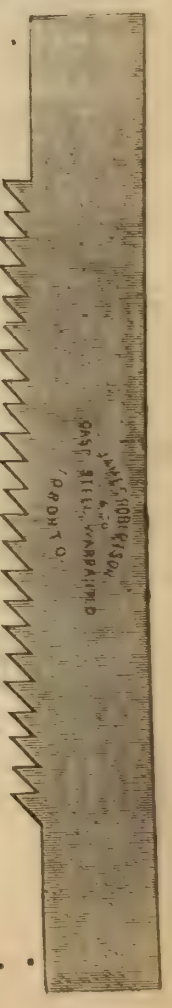

THE CANADA LUMBERMAN

AND MILLERS' MANUFACTURERS AND MINERS GAZETTE

PUBLISHED SEMI-MONTHLY.

The only Newspaper devoted to the Lumber and Timber Industries published in Canada

SUBSCRIPTION $2.00 PER ANNUM

VOL. 6. PETERBOROUGH, ONT., APRIL 1, 1886. NO. 7.

NEW BRUNSWICK'S WOOD TROPHY.

The St. John, New Brunswick, *Telegraph* says:—If one may judge by the numerous acclamations of surprise and pleasure from the visitors at Messrs. Howe's ware rooms on Saturday as the wood trophy was nearing completion, it is undoubtedly a success both artistically, and from a more practical commercial point. It will no doubt form the chief feature in the New Brunswick display at the exhibition. Much uncertainty was felt as to the effect of this undertaking, but it is gratifying to note that it has surpassed the most sanguine expectations. A more pleasing combination of nature and art could not be well devised, considering the limited grant and the shortness of the time allowed for completion. It has also been an object in this case to economize space and the largest display has been made in the smallest space possible, endeavoring to combine every natural condition of the wood as well as every artificial application.

The main portion of the trophy embraces all the larger or commercial woods, which are sufficiently abundant to form an important item for trade. These are divided into three sections. The left wing comprises the evegreen or coniferous specimens, including hemlock, red and white pine, black and white spruce, hackmatack, cedar and fir. The central section is made up of the dense woods, such as black and white birch, rock and scarlet maples and beech. The right wing consists of black and white ash, red and grey oak, elm, butternut, basswood and poplar. At the base of each of these fifteen large panels there is a log of the same wood, 20 inches in diameter and three feet one inch in height, while the sides of the panels are formed with saplings or young trees of the same woods, resting upon turned bases and surmounted with carved capitals representing the foliage and fruit or flower of these trees. These again are surmounted by a scroll saw and carved bracket, all of the same wood.

Between the large panels and the logs an inclined case or frame, made of ash, has been placed, and contains thirty small panels showing the smaller woods, and, also, several of the larger kinds, which are not sufficiently abundant for commercial purposes or of sufficient importance for the large panels. All of those embraced in these panels are, however, useful in the arts and for ornamental trees. Many of them are comparatively unknown, and their beauty and utility unappreciated. Some, valuable for economic purposes, are used for tool handles, bobbin stocks and novelty work, and are susceptible of a very high degree of polish. These panels consist of sumach, aspen, poplar, ground or pasture ash, choke cherry, wild red cherry, wild black cherry, witch hazel, red hornbeam and hop hornbeam, thorn-plum, water beech, small or white moosewood and black moosewood, striped maple, white or silver maple, mountain maple or whitewood, black alder, swamp alder, yellow birch burl, gray birch and matted birch, billbury, May cherry, rowan tree or mountain ash, swamp rowan tree, dogwood, slippery elm, white willow, balm of gilead or balsam poplar, wild crab apple and princess pine. Each of the panels is framed with strips showing the back, and the corners are transverse sections showing the end grain. The aim of the whole design is to show the woods in all forms, which will interest practically wood workers; therefore the combination in the large panels shows the slash of the grain, as well as an end section showing the density of the grain. These last named sections or quarters show at the base of the panels, also convey a better idea of the size of the growth of these trees being taken from more fully developed trees.

The cornice which surmounts these panels forms a very pleasing feature in the structure, and is composed chiefly of bark and specimens of each wood in mouldings. Above the central section is placed a poplar board with ebonized letters bearing the words "Woods of New Brunswick." The whole of the top will be surmounted by stuffed specimens of the best game of our forests, which is now being prepared by Mr. J H. Carnell A fine moose head will ornament the centre, with a cariboo head on the right and a red deer head on the left. Foxes, coons, beaver, porcupine, partridges, etc., are to be added. All of the panels, as well as much of the surrounding woodwork, have been highly polished, showing the capabilities of the woods in their different applications in the arts and manufactures.

An important point in the close grained woods, and those free from resinous tendencies, is their adaptability for staining, and, to illustrate this, oblique bars have been stained across the tops, showing the effects of satin wood, cherry, mahogany, walnut, rosewood and ebony.

The foliage, flowers and fruit have been beautifully painted on both large and small panels, by Mr. John C. Miles, A. R. C. A., and the work does him infinite credit, although laboring under numerous disadvantages as to hurried work and obtaining appropriate specimens to work from. This forms the most attractive feature, from an artistic point of view, and will be a very valuable addition in other ways. So near do the pictures approach nature that many have expressed doubts as to their being painted, and thought them the original foliage.

Messrs. Geo. F. Matthew and Geo. U. Hay, of the Natural History Society, of New Brunswick, rendered valuable assistance in the botanical arrangements, etc, while the society kindly loaned the floral specimens. Mr. Jas. E. Wetmore also loaned his large private collection and otherwise assisted with valuable information. Several of the logs for the base were obtained by Mr. Gabriel Merrit, of Moss Glenn, Kings county, showing that some fine timber still exists in the vicinity of this city. Mr. Thos. Crothers, of Upper Gagetown, Queens county, secured the handsome specimens of oak, elm and many of the smaller woods. Mr. Alex. Henderson, furniture manufacturer, of Woodstock, Carleton Co., also obtained some good samples.

Mr. George Draper, an experienced woodsman, of Southampton, York County, contributed many of the small woods. The carved capitals on the upper portion of the columns, or young trees, are the work of Edwin F. Erazer, John Rogerson, Lawrence Barry and Silas Hoyt.

The original idea as well as the design and construction, is due to the establishment of Messrs J. & J. D. Howe, furniture manufacturers of this city. It may not be out of place to mention that the grant, which was made jointly by the Dominion and Local Governments, was only sufficient to cover the cost of collecting material and other expenses incurred. Therefore the work may be considered a donation from Messrs. Howe, who have spared no pains or expense to insure the best results, and have utilized to best talent in every department. The firm express themselves as most gratified at the hearty spirit shown by all interested in endeavoring to make it worthy of the Province. Too much credit cannot be given to Hon. Mr. Blair and the Local Government for the spirited way in which they undertook this work, even before assistance was secured from the Dominion Government.

THE AGE OF FOREST TREES.

Royal Forester Gericke, of Breslau, in a recent treatise on forestry, gives expression to the opinion that the age of a thousand years attributed to German forest trees is fabalous, that it is impossible to prove a higher age than 700 to 800 years for even the so-called historical trees, and that no German tree can reach that age in a sound condition. Trees of so great an age are always hollow and only continue to grow as ruins. In connection with the question of the limit of endurance of our trees, it is evident that it will vary not only with the variety of the wood, but also with the climate and soil. Forester Gericke, through his own investigations as well as through communications received from German, Russian and Austrian schools of forestry on the age of the oldest woods to be found in their collections, arrives at the following conclusions. The highest age which a sound tree can reach is not reached by leaf-bearing trees, but by needle bearing trees. After the highest point is reached, the needle bearing trees decay rapidly, while the leaf-bearing trees continue to vegetate a long time after passing their limit of existence in a sound state. The highest age of trees obtained by actually counting the yearly rings is from 500 to 570 years, and the firs in the Bohemian forests and the pines in Finland and Sweden actually reach that age. The next highest age seems to be reached by the white fir in the Bohemian forests, which shows 429 years. The larch in Bavaria reaches 274 years. Of the leaf-bearing trees the oak appears to endure the longest, and the red oak of Aschaffenburg, the oldest healthy example, counts 410 years. The oldest long-stalked or white oak was only 315 to 320 years old when evidences of internal decay became visible. Notwithstanding this difference in endurance the white oak is much stronger than the red oak. The old red beeches were 226 to 245 years old. The maximum ages of other trees are as follows:—Ash, 170 years, elm 130, birch 160 to 200, red alder 145, common maple 224. The most frequent among the historical trees, the linden, is the most seldom found in the collections. Perhaps this fact may be taken to mean that it is very seldom possible to find a very old and sound linden. The most celebrated of the historical lindens is that in Neustadt, Wurtemberg, the branches of which were so long ago as 1448 propped up by 67 pillars.—*Exchange.*

THE MORRISON TARIFF BILL.

WASHINGTON, March 18.—The Ways and Means Committee resumed consideration of the Morrison Tariff Bill to-day. Mr. Maybury of Detroit offered a substitute clause, changing the phraseology of the provision in the Bill subjecting the wooden articles placed on the free list to an import duty when the country from which they are imported levies an export duty, and his substitute was adopted. It reads:—"Provided that if any export duty is levied upon the above mentioned articles or any of them by any country whence imported, all said articles imported from said countries shall be subject to duty as now provided by law." It was stated that the provision was intended to cause a relaxation of the export duty now levied upon Canadian logs sent into the United States.

A Timber Reserve.

The Quebec Provincial Cabinet have, it is understood, decided to reserve an extensive tract of country to the north of the Province for future timber supply. Forest rangers are to be appointed to watch and guard this domain. Hon. Mr. Joly has been the active agent in securing this from the Government.

ON March 18th Rounds' saw and planing mills, Welland, were burned. O. H. Round's loss is about $4,000; Ed. Round's loss is about $3,000. No insurance.

Chips.

THERE are fourteen steamers on the Lake of the Woods, Man., mostly employed in towing logs for the saw mills.

FROM six to 12 car loads of square timber are daily shipped from the upper Michigan peninsula for Quebec. Each car load contains about 500 cubic feet of timber.

THE kindling wood interest of Williamsport, Pa., is of some importance. One factory runs night and day to keep up with its orders, employing 30 to 40 hands in packing.

IT is estimated by a local authority that there is 1,649,140,000 feet of stand ing pine in Alcona county, Mich., 225,000,000 feet of maple, 140,000,000 feet of hemlock, and 74,000,000 feet of red oak.

A LUMBER section of the Toronto Board of Trade has been organized, with the following executive: J. Donogh (dep. chairman), S. C. Kanady (chairman), W. Kerr, A. K. McIntosh, W. Leak.

MR. FRANK BELL, lately manager of Messrs. Ullyott & Co.'s business at Minden, Ont., was tendered an oyster supper prior to his departure from that village to locate in Fenelon Falls.

THE Rathbun Company has purchased the entire stock of lumber of Boyd, Caldwell & Son, at Wilbur station, on the K. & P. The stock consists of half a million feet of pine, hemlock, ash and other woods.

THREE miles north of Corrunna, Mich., A. B. Steadman cut an elm tree that made 12½ cords of wood. In a branch, 50 feet from the root, a large bone was found embedded, which was supposed to have been that of an extinct species of animal.

WM. DUNLAP, a whisky seller and grocery keeper at Cloquet, Minn., in 1870, exchanged a $14 grocery bill for the larger share of the island in St. Louis river, at that place. He afterward bought the remainder of the island. He has already sold enough real estate on the island to realize $30,000.

IT is reported that the extensive lumber lands in Nicolet county, belonging to the estate of Mr. W. G. Ross, consisting of 30,000 acres in fee simple, were disposed of by the Union Bank a few days ago to a syndicate, composed of Messrs Mitchell, Phee & Church for $95,000 cash.

The Langstaff-Orm Manufacturing Company Paducah, Ky., has in operation a circular saw which is claimed to be the largest in the world in regular use. It is 88 inches in diametes, is given a feed of 15 inches or more each revolution and is said to be able to cut 8,000 feet of lumber in an hour.

IT is stated that the Michigan railroad managers have made arrangements with Secrectary Manning by which loaded platform cars can be sent through Canada on the route to the East, which has been contrary to the customs regulations hitherto. The new rule is hailed with satisfaction by the eastern Michigan lumber shippers.

A LOAD of logs was lately drawn by a span of horses belonging to Messrs. Lord & Hurdman, at Wm. Sourley's shany, on the Magnissippi river, near Deux Rivieres, containing 32 standards and 23 parts and is supposed to be largest load of logs ever hauled by one team on the Upper Ottawa. The load was measured by John O'Connor, culler.

THE Chicago *Times* says:—The Chicago, St. Paul, Minneapolis & Omaha Railway Company recently sold to R. D. Pike, of Bayfield, Wis., for $690,000. Several wealthy pine-owners have been figuring for the tract. It is said that the sale will nsure the building of another mill on the west side of Chequamegon Bay.

MR. MOSES ROBINSON, with an average of 18 men at Pickerel lake during the past five months, has got out and drawn upon the ice 2,250,000 feet of logs, and wants to know who can beat it.—*Burk's Falls Arrow.*

IT is reported that Hall & Buell, of New York, have bought the Patton pine lands on Waiskai river, Chippewa county, upper Michigan. This tract is said to comprise a large proportion of the pine lands that remain unstripped in the vicinity of Sault Ste. Marie.

TWO English exchanges, the *Timber Trades Journal* and *Timber*, arrived at the office of the CANADA LUMBERMAN soaked in the briny water of the Atlantic. They had evidently been on the Oregon, which was mysteriously sunk in the ocean, but the papers were brought to the surface and forwarded to their destination, little the worse for their bath.

COMPARED with Ontario, says the Hamilton *Spectator*, Connecticut land is poor. But a few years ago Connecticut owners of land that were unfit for farming, planted trees upon their farms, and now these places are worth $100 an acre for their timber. There are a good many places in Ontario where timber would be the most profitable crop that could be grown.

WONDERFUL activity is noticeable among the hardwood manufacturing establishments in Maine, New Hampshire and Vermont. The multiplicity of uses to which fine forests of oak, maple, white birch, beech and ash are adapted seems only recently recognized. Dealers in improved wood working machinery are finding some of their best customers among the New England lumber manufacturers.

WOOD intended for paper pulp is shaved so finely by an ingenious machine devised for the purpose that it takes 750 thicknesses to make an inch. The fineness of the cutting can be appreciated when it is understood that 200 thicknesses of ordinary paper make an inch. The cutting knives of the machine are kept sharpened while in operation by a unique arrangement of whetstones which are constantly at work upon them.

MESSRS. Sewell & McElvaney have a hundred men and a proportionate number of horses at work near the Allagash waters, and they will continue to the middle of April. They have already cut about four millions of pine and two millions spruce. The pine is of the finest quality and largest size, some logs measuring six feet across the butt. The spruce is also very good, free from flaws and extremely large. A spruce tree three feet in diameter is now a rarity here, but up in that district not at all uncommon.—*Fredericton Capital.*

GEORGIAN BAY OPERATIONS.

A letter from Midland, Ont., to the *Northwestern Lumberman* says:—As our logging season is about closed I am able to give you an estimate of the result of our winter's operations which will be found very near to the facts. On the Georgian Bay we will manufacture about 203,000,000 feet of lumber, if the logs all come out; at Gravenhurst and vicinity about 74,000,000, with about 1,500,000 cubic feet of square and waney timber for the English market, and about 16,500,000 feet of logs for export to the United States. The cut of white pine will be as follows:—

	Feet.
N. Dyment, Thessalon	3,000,000
Williams & Murray, Mississauga	2,250,000
Various mills on Manateulin island	15,000,000
Cook Bros., Serpent river	16,000,000
Spanish River Lumber Co., Spanish river	10,000,000
Collins Inlet Lumber Co., Collins Inlet	6,000,000
Ontario Lumber Co., French river	10,000,000
McLean Brothers, French river	2,500,000
Emery Brothers, French river; for export in log	15,000,000
McArthur Brothers, French river; long logs.	2,500,000
Burton Brothers, Byng inlet	10,000,000
Georgian Bay Lumber Company, Byng inlet.	7,000,000
Ontario Lumber Co., Byng inlet; to be cut at Midland	1,000,000
Parry Sound Lumber Co., Parry sound	10,000,000
Conger Lumber Co., Parry sound	9,000,000
Midland & North Shore Lumber Co	8,500,000
Muskoka Mill & Lumber Co., Muskosh	12,000,000
Georgian Bay Lumber Co., Severn	14,000,000
" " " Waubaushene	26,000,000
E. Whiffen, Fesserton	2,000,000
J. Playfair, Sturgeon Bay	3,250,000
Tanner, Sturgeon Bay	750,000
R. Power & Co., Victoria Harbor	10,000,000
Cain & Peters, Midland	500,000
Chew Bros. Midland	750,000
G. Carswell, Midland	1,000,000
Ontario Lumber Co., Midland	1,500,000
C. Beck & Co., Penetanguishene	6,000,000
D. Davidson, "	1,750,000
C. McGibbon, "	1,250,000
Georgian Bay Lumber Co., Collingwood	5,000,000
Christie, Kerr & Co., "	6,000,000
Other small mills, Georgian Bay	3,000,000
GRAVENHURST AND VICINITY, MUSKOKA WATERS.	
McBurney & Co	4,000,000
Ontario Lumber Co	5,500,000
Hull	2,250,000
Isaac Cockburn	5,000,000
C. Meikle	11,000,000
Thompson & Baker	5,750,000
Tait	1,000,000
Jas. Dollar	2,000,000
J. Collins	1,000,000
Small mills on Muskoka Lake, shipping from Gravenhurst	5,000,000
Brown & Shires, Bracebridge	3,000,000
McArthur Bros., Sandridge	4,000,000
McLean "	1,000,000
Leishman & Perry, Bracebridge	2,000,000
Parker, Stephenson	1,000,000
Tait & Heath and others. Huntsville	4,500,000
W. Christie, Severn Bridge	5,000,000
Longford Lumber Co., Longford	14,000,000
R. & J. Strickland, Bradford	7,000,000

All the above are on the Georgian Bay, Muskoka, Black river and Severn waters All from Bracebridge to Sandridge are on the line of the Ontario and Pacific Junction railroad, just completed. In additi n the square and waney timber product is as follows:—

	Cubic Feet.
Cook & Bros., Mississauga, Serpent and Spanish rivers	250,000
Benton Bros., Grumbling point	200,000
Ontario Lumber Co., French and Muskoka rivers	200,000
McArthur Bros., French and Muskoka rivers	230,000
F. B. Maxwell, Muskoka	145,000
Isaac Cockburn, "	100,000
Strickland, Black river	190,000
Georgian Bay Lumber Co., Muskoka	210,000

We have had a good winter; everything is haulad and most of the camps are broken up. Some few are cutting and hauling, but there is very little inclination to get more than they started in for last fall, and the whole cut is likely to come out of the creeks, as they are all easily driven. The Ontario & Pacific Junction railway has just been completed, and will open for traffic about June 1st. It runs from Gravenhurst to Lake Nipissing, and connects the Southern with the Canada Pacific road. You will see that some of this year's cut is being manufactured on that line. There are several mills in operation on it now. In addition to the above there will be a large quantity of shingles made. Things are looking better here, and there is very little dry lumber in stock at the mills—not more than half the quantity there was last year at this time—and the cut of new logs does not exceed that of last year very much, and there are very few old logs left over.

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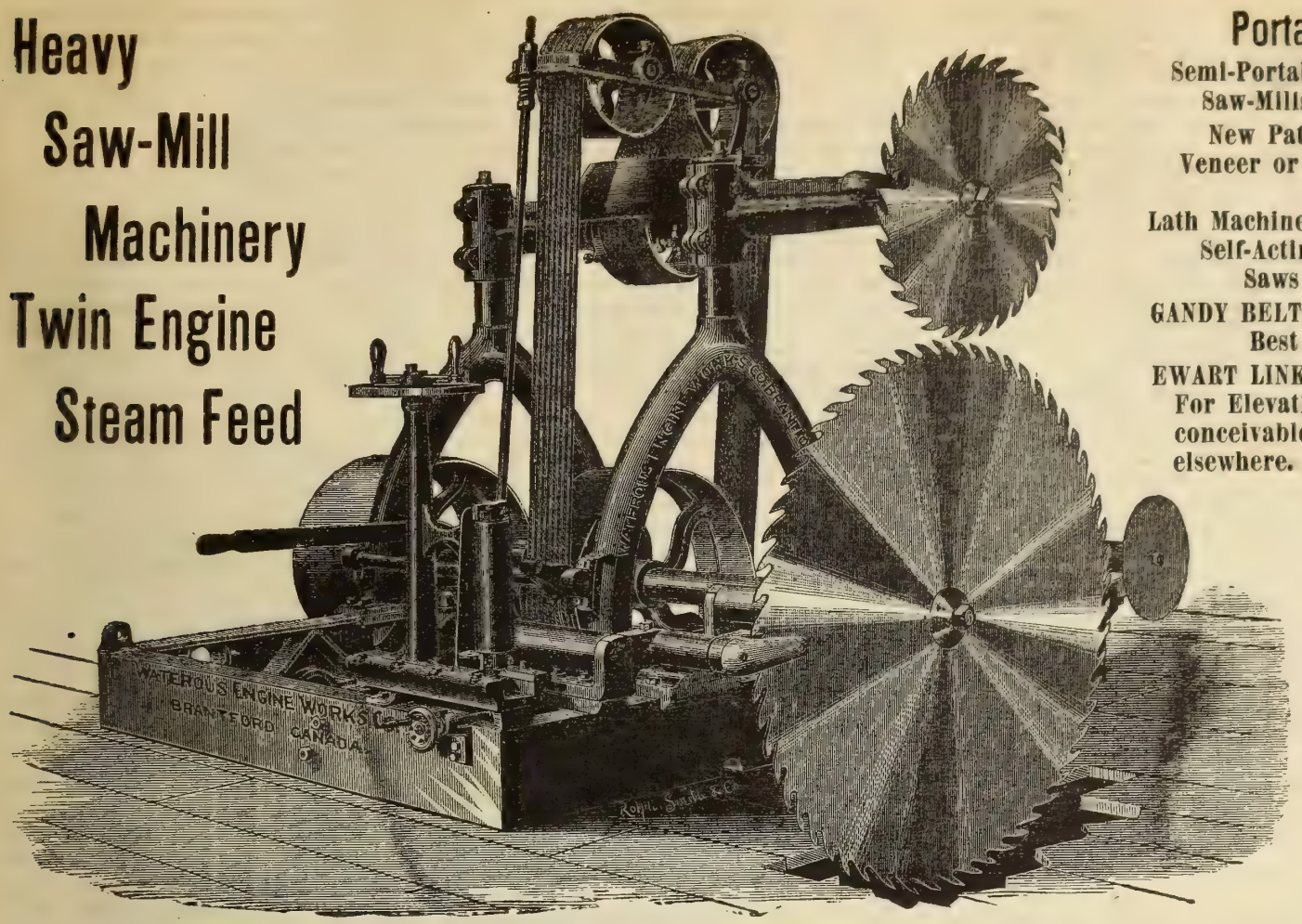

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FRICTION OF BELTS.

The friction of belts upon pulleys depends upon the extent to which they are tightened, the extent of circumference with which they are in contact, and their breadth. It is commonly believed that the greater diameter of pulley the more surely does the belt cause it to revolve without slipping. Theoretically, however, and we believe practically, says a writer in the *Circle of the Science*, it will be found that, with equal degrees of tightness, equal breadth of belt and equal circumference as to perfection of contact, the friction of a belt on the circumference of a pulley is the same, whatever be its diameter. The only circumference that can effect the constancy of the result, is that belts, not being perfctly flexible, lie more closely to surfaces curved to a large radius than to those of a smaller radius. When a certain amount of power has to be communicated through a belt, the speed at which the belt moves has to be taken into account, because, power being pressure multiplied by velocity, the greater the velocity with which the power is transmitted the less the pressure that has to be communicated at that speed. In this sense, then, it appears that the larger the pulley the less the slip of the belt, because the greater the circumference of the pulley, revolving at a given angular velocity, the greater is the absolute velocity through space, and, therefore, the less the pressure required to communicate a given power. It is found, practically, that a leather belt eight inches wide, embracing half the circumference of a smoothly turned iron pulley, and travelling at the rate of 100 feet per minute, can communicate one horse power. When less than half the circumference of the pulley is embraced the strap must be proportionately wider; and when more than half the circumference is embraced its width might be less. The law according to which the friction of belt increases with an increased arc of contact is of a peculiar character, but may be readily understood by comparing the friction on arcs of different lengths. If a pulley (of any diameter whatever) were prevented from revolving, and a belt passing over part of its circumference were stretched by a certain weight at each end, additions might be made to the weight at one end until the belt began to slip over the pulley. The ratio which the weight so increased might bear to the weight at the other end would measure the amount of friction. For example, in experiments made to test a theortical investigation on the subject, a belt passing over a pulley in contact with 60° of its circumference was stretched by a weight of 10 pounds at each end; one of the weights was increased until it amounted to 16 pounds, when the belt began to slip. The ratio of 16 to 10, or 16 divided by 10, equals 1.6, was then the measure of the friction. When 20 pounds at each end were used to stretch the belt, the one weight was increased to 32 pounds, giving the ratio of 32 divided by 20 equals 1.6, the same as before; and likewise, when five pound were used for stretching, the weight at one end was increased to 8 pounds, giving still the same ratio, 8 divided by 5 equals 1.6.

So far, then, the friction was precisely proportional to the stretching weight, as might have been expected from the ordinarily received doctrine on the subject of friction. On extending the arc of contact to 120°, the ratio was found to be 2.56, or 1.6-2. And, again, on embracing 180°, the ratio was found to be 4.1, or very nearly 1.6-2, the theoretical iuvestigation brought out this result independently, and the following law may, therefore, be taken as established: If for any given arc of contact the one weight bears to the other at the point of slipping a certain ratio for double the arc, the ratio will be squared; for triple the arc, it will be cubed; for four times the arc, it will be raised to the fourth power, and so on. In all cases, however, much depends on the tightness of the belt, the limits to the force with which it is strained being, first, the tensil strength of the belt itself; and, secondly, the amount of pressure that it may be convenient to throw upon the shaft and its bearings. New belts become extended by use, and it is, therefore, frequently necessary to shorten them. Before use they should be strained for some time by weights suspended from them, so as to leave less room for extension while in use. Wherever belts are employed they should be of the greatest breadth and travel at the greatest speed consistent with convenience, as it is most important to have the requisite strength in the form best suited to flexure, and the least possible strain on the shafts and bearings. When ropes or chains are employed, as in cranes, capstans, windlasses or the like, for raising heavy weights or resisting great stains, the requisite amount of friction is obtained by coiling them more than once around the barrel of the apparatus. It is found that one complete coil of rope produces a friction equivalent to nine times the tension on the rope, the barrel being fixed. Two complete coils of the rope produce a friction equivalent to nine multiplied by nine times the tension, and so on. The diameter of the barrel does not effect the result. Having regard to these facts, we may readily understand the force which a knot on a cord or rope resists the slip of the coils of which it consists, for the several parts of the coil act as small barrels, around which the other parts are coiled; and the yielding nature of the material of which the barrels are composed permits the coil to become impressed into their substance on the application of force, and prevents them from slipping more effectually than if they were coiled on a hard and resisting barrel.

THE MATTER OF PRICES.

The statistics show indisputably that prices of all kinds have been steadily sinking for the past four or five years. This decline has been so gradual and so general that it has not attracted as much attention as its importance has warranted and the people are beginning to see in a definite way that the process has method in it, and that the conditions which govern it are of a logical and irresistable character. It is difficult to believe that the general average of prices in this country at the present time is actually 20 per cent less than it was in 1860, and that accordingly the cost of living is one-fifth smaller than the rate which prevailed just before the war; and yet the figures prove such to be the fact beyond question. There it not a single article of ordinary food or clothing which commands as high a price as it did a quarter of a century ago, when we thought things were as cheap as they could possibly be grown or manufactured, and the tendency appears to be towards a still further reduction rather than in the opposite direction.

The situation is due to causes of a permanent kind—to the increased use of machinery, the development of new areas of farm lands, the regular growth and application of capital, and the multiplied facilities of transportation, and of easy and rapid commercial exchange. Our whole system of trade and industry has been revolutionized. We do business according to modes and calculations that were not present, or even dreamed of, twenty-five years ago. The old rules that were once deemed infallible have been trivialized and exploded, and the man who got his education in any pursuit before the war has to requalify himself for successful dealings with the circumstances which now exist. We cannot estimate values any more by certain universal standards. A bushel of wheat is no longer worth a given sum, below which it cannot fall in any event. There is no fixed limit that can be safely counted as to the coming price of pork or beef, regardless of all possible fluctuations. The only certainty in the case is that it is mainly a question of chance, with a probability of lower instead of higher rates than those previously obtained.

We are not differently situated in this respect from the people of other countries. The decline in prices has been general throughout the civilized world. It is an area of cheapness everywhere. The same causes which have steadily lowered the margins in the United States has operated to produce similar results in all other quarters of the globe. We have not constructed all the railroads or employed all the new and improved machinery, or opened up all the increasing areas of cultivation and production. The people of all the other leading nations have been using like energy and enterprise in those directions. We formerly enjoyed a monoply in several brances of trade—as cotton, grain, meat, etc.—but we do not hold it any longer. The markets that we once practically controlled are now filled with competing products, and our right to establish selling rates is disputed at every turn There are new sources of supply being reached and utilized all the time, with an appreciable effect upon the issue of values wherever there is such a thing as commerce; and we may as well open our eyes to the significant truth that a good many advantages which we have heretofore been blessed with have gone never to re turn.

Our position is still a surprising one in some regards and must always continue to be so; but it is evident we have reached a spirit and encountered a measure of competition that must deprive us of the power to dictate terms and regulate prices to suit ourselves. Like all other nations we are subject to those familiar laws and principles which are the basis of every true system of commerce. The rule of supply and demand extends to all sorts of products and all forms of traffic, and there is no way to subvert or avoid it. We cannot sell our surplus grain and stock and minerals at any higher rate than those at which some other country stands ready to furnish them; and when the world gets as much as it needs of a particular product it will not buy any more at any price. These are simple propositions but very forcible ones, and they have just now a peculiarly distinct and very practical bearing upon our affairs. It is folly to ignore or disparage the fact that we are face to face with influences that must shape our commercial relations and adjust our profits in spite of all resistances on our part, and with doctrines that are as old as civilization itself.—*St. Louis Globe-Democrat.*

COMPARATIVE COST OF FRAME AND BRICK BUILDINGS.

A very interesting article is found in the *National Builder*, giving the comparative cost of frame and brick buildings:

The first idea that naturally suggests itself, after the general plan of arrangements has been perfected, is what material shall mainly enter into the construction of a building, brick, stone, or wood? In nearly every portion of the Eastern, Middle and Western States these three building materials can readily be had, and the cost of production does not vary much in any locality. Assuming, therefore, that the first cost is the same in the above localities, we may easily arrive at the ultimate cost of production. For the purposes of this article we may assume the cost of good, common brick during the summer to be eight dollars per thousand; cost of labor and mortar to lay the same in the wall, $4 per thousand, wall measure. The cost of good quarry stone assumed at $10 per cord; cost of labor and mortar to lay the same in the wall, $8 per cord of 100 feet. The cost of framing lumber, $12 per thousand feet; labor and nails to put the same up $6 per thousand. With these prices as a basis, it is a matter of computation only to arrive at the proportionate cost of each material after it has been worked into the walls. As an example, suppose we have ten feet square of plain wall to build, what will be the comparative cost? Ten feet square equals 100 superficial feet. If to be built of brick, 12 inches thick, estimating 22½ brick to the superficial foot, it would take 2,250 brick; cost in wall, per thousand, $12, equals $27. To lay a good rubble stone wall it should be 18 inches thick; therefore 10 feet square, or 100 superficial feet, of stone wall 18 inches thick, at $18 per cord of 100 feet, would cost $27. In estimating a frame or studded wall, there should be included, 1st, the studding, say 2x8—12-inch centres; 2nd, the outside sheathing of 1-inch surfaced boards; 3rd, the siding of clear pine. For this example we have placed the cost of rough lumber at $18 per thousand feet up. We will assume the cost of the inch surfaced boards for sheathing to be $25 per thousand including labor, nails and waste. Ten feet square, or 100 superficial feet, 2x8 studding at $18 per 1,000, equals $2.43. The same surface covered with surfaced boards at $25 per 1,000, costs $2.50. One hundred and twenty-five superficial feet of siding, at $40 per 1,000 would cost $5, allowing one-quarter for lap and waste. Then we find the total cost of the frame wall to be $9.93. Add to this the cost of painting same, one square at $3, we find the cost to be $12.93. Comparatively, therefore we find the cost of 100 superficial feet of wall, built of the three leading building materials of the country, as follows:—

Common brick, $27.
Rubble stone, $27.
Frame, $12 93.

The cost of window and door frames, cornices, etc, may be estimated about the same in either building. In brick and stone buildings we find the additional cost of cut stone window and door sills, water table, etc, but the cost of these adjuncts does not enter into the first cost of the walls, and should rather be estimated on separately, or considered as additional items of cost that may be dispensed with if necessary.

TREE PLANTING.

E. P. Roe, in *Harper's Magazine* for March, 1886, has the following article in regard to transplanting trees:

"As a rule, I have not much sympathy with the effort to set out large trees in hope of obtaining shade more quickly. The trees have to be trimmed up and cut back so greatly that their symmetry is often destroyed. They are also apt to be checked in their growth so seriously by such removal that a slendor sapling, planted at the same time, overtakes and passes them. I prefer a young tree, straight stemmed and healty, and typical of its species or variety. Still, when large trees can be removed in winter with a great ball of frosen earth that insures the preservation of the fibrous roots, much time can be saved It should ever be remembered that prompt rapid growth of the transplanted tree depends on two things—plenty of small fibrous roots, and a fertile soil to receive them. It usually happens that the purchaser employs a local citizen to aid in putting his ground in order. In every rural neighborhood there are smart men; smart is the proper adjective, for they are neither sagacious or trustworthy, and there is ever a dismal hiatus between their promises and performances. Such men lie in wait for new comers, to take advantage of their inexperience and necessary absence. They will assure their confiding employers that they are beyond learning anything new in the planting of trees—which is true, in a sinister sense. They will leave roots exposed to the sun and wind; in brief pay no more attention to them than a baby-farmer would bestow on an infants appetite, and then, when convenient, thrust them into a hole scarcely large enough for a post. They expect to receive their money long before the dishonest character of their work can be discovered. The number of trees which this class of men have dwarfed or killed outright would make a forest. The result of a well meaning yet ignorant man's work might be equally unsatisfactory. Therefore the purchaser of the acre should know how the tree should be planted and see to it himself, or he should by careful inquiry select a man for the task who could bring testimonials from those to whom he had rendered like services in the past.

"The hole destined to receive a shade or fruit tree should be at least three feet in diameter and two feet deep It then should be partially filled with good surface soil, upon which the tree should stand, so that its roots could extend naturally, according to their original growth. Good fine loam should be sifted or sprinkled through and over them, and they should not be permitted to come in contact with decaying matter or coarse, unfermented manure. The tree should be set as deeply in the soil as it stood when first taken up. As the earth is thrown gently through and over the roots it should be packed lightly against them with the foot, and water, should the season be rather dry and warm, poured in from time to time to settle the fine soil about them. The surface should be leveled at last with a slight dip towards the tree, so that spring and summer rains may be retained directly about the roots. Then a mulch of coarse manure is helpful, for it keeps the surface moist, and its richness will reach the roots gradually in a diluted form. A mulch of straw, leaves, or of coarse hay, is better than none at all. After being planted three stout stakes should be inserted firmly in the ground at the three points of a triangle, the

tree being its centre. Then by a rope of straw or some soft material the tree should be braced firmly between the protecting stakes, and thus it is being kept from being whipped around by the wind. Should periods of drought ensue during the growing season it would be well to rake the mulch one side, and saturate the ground around the young tree with an abundance of water, and the mulch afterwards spread as before. Such watering is often essential, and it should be thorough."

EXPANSION OF LUMBER BY MOISTURE.

The supreme difficulty encountered by all manufacturers of wooden wares, materials, buildings and articles of every kind results from the shrinking and swelling—or, to put it more elegantly, the contraction and expansion—of wood when exposed to alternations of dry and moist situations. It may be asserted as a fact that no process of seasoning and no condition of dryness will render any wood unchangeable under varying conditions or moisture and dryness. The nearest approach probably that can be made to it is the oven-baked process for the closest grained of the hardwoods, such as ebony, ligumvitæ, boxwood, mahogany, etc., used by the instrument makers. Still, a general precaution, born of long experience, is observed by those who own them. In this connection there is a question that has never been settled in the public mind, and that is, does dry or seasoned lumber "stretch," or expand lengthwise when exposed to dampness, and "draw up" or contract in length after drying? Most people labor under the belief that lumber or timber is not effected endwise, or with the grain, by moisture and dryness, but such is not the fact. The expansion and contraction in the direction of the grain is not nearly so much as in a transverse direction, but is quite perceptible, and is common in a greater or lesser degree to all woods. A gate in the centre of a line of plank fencing that has an inch or more space between the posts will often be found difficult to open in wet weather. A long line of fencing put up with green lumber will often pull apart in one or more places in seasoning, more especially if the line of fencing crosses a knoll or sharp elevation. But the strangest phenomenon connected with the expansion and contraction of lumber is the withdrawal of a nail driven up to the head into two different pieces of wood. For instance, where white oak fencing plank are nailed to cedar posts, the nails will in time be drawn entirely out and fall to the ground. Unpainted poplar siding nailed to green oak studs will not loosen the nails. The acid in the oak rusts the nail so as to fix it immediately but will rot the poplar around the nail until the plank can be pulled off over the heads of the nails. No process of drying lumber will entirely prevent the expansion and contraction of lumber in any direction, but that which has been thoroughly air-dried and exposed for a long time to varying conditions of moisture and dryness will possess the minimum defect in this regard. —*Exchange.*

THE OAK.

The oak has not inaptly been called, says *Popular Science News*, the "king of the forest." The size and age to which it attains are noteworthy. Humboldt mentions an oak, near Berlin, which measured nearly ninety feet in circumference near the base. A tree in the same neighborhood was blown down in 1857 which measured 66 feet in circumference. Their ages have been estimated at from 1,000 to 2,000 years. Gilpin, in his "Forest Scenery," mentions a few old oaks. Of the most venerable of these monarchs is one in Norfolk, reputed to be the "Old Oak," during the reign of William the Conqueror, said to be 1,500 years old, a plate attached to the tree bearing the inscription: "This oak in circumference at the extremity of the roots is 70 feet; in the middle, 40 feet." This was in 1820. The "King's Oak," in Windsor forest, is represented as having been a favorite tree of William the Conqueror, and the largest in the forest, and is being reputed as being upwards of 1,000 years old, measuring, some twenty years ago, 26 feet in circumference at three feet from the ground. An oak in Dummington park ran up fifty feet before a limb appeared, the base squaring five feet. An oak in Holt forest, in Hampshire, measured, in 1859, thirty-four feet in circumference seven feet from the ground. An oak felled in Norbury, as stated by Dr. Platt, was of the enormous size of forty-five feet in circumference; so that when it was lying upon the ground, two men mounted upon horses, on opposite sides, were concealed from the view of each other. He also mentions an oak in Keicot, beneath whose branches it was estimated that 4,274 men could have stood. The largest sum ever realized from the sale of one tree was that of the Geronas oak, a few miles from Newport, Monmouthshire, felled in 1810. According to the *Gentleman's Magazine* for 1817, it was sold standing for 100 guineas, under the belief that it was unsound, and was resold for £405, and subsquently was sold again for £675, and was found to contain 2,426 cubic feet of timber. Its bark was estimated to weigh six tons The Wadsworth oak in Genessee, N. Y., near the river Genessee, was a giant of the forest. It grew in one of the most fertile valleys of the Middle States. Its trunk measured thirty-six feet in circumference, and the tree was a marvel to all who saw it. In Flushing, L. I., formerly grew a rare specimen of the oak. It measured a little short of thirty feet in circumference

The oak is acknowledged to be the most picturesque of trees. As a shade tree it cannot be excelled. Of the oak family there have been numerated by botanists more than one hundred and thirty species. Michaux the elder described twenty and Michaux the younger twenty-six species of North America; and Nuttall thirty-two. Emerson found twelve species growing in considerable numbers in Massachusetts. De-Condolle in his "Prodromus" described 281 species of the oak. The first to be named for planting is the white oak. This tree needs but little description as it is well known. Emerson said of the white oak that it is beautiful in every stage of growth, and is therefore a most desirable ornamental tree, and concludes with these words:—"Let every one who has an opportunity to do so plant a white oak." He measured one of the species in Bolton that was nineteen feet in circumference just above the surface of the ground, and one in Greenfield that was 17½ feet in circumference. The soil suited to their growth is a strong tenacious loam. There is ample room in the oak family to suit the most fastidious taste.

WOOD AS A BEVERAGE.

A sign in a Third avenue grocery window in New York City, read: "Pure Russet Cider, 4c. a Quart."

"That cider was never moved by a breath of country air," said a a man who was passing the window, "and it was never any nearer an apple than it is now as it stands in the barrel in the rear of the grocery."

"Made of sulphuric acid, then," suggested a companion.

"No; that's too expensive."

"What is it made of?"

"Sawdust. I work in a shop where it's made. Pure apple cider is worth thirty cents a gallon. Sawdust cider costs about one-fourth of that We take the sawdust from a couple of wood yards—hemlock, hickory, maple—every kind, just as it comes. We dump it into a big retort and heat with a coal fire. Just forty-seven per cent. of which boils over is crude vinegar. It has to be purified a bit and boiled down a little, but it is pretty good vinegar. When the wood reaches a certain point in the heating process it becomes charcoal, and is cooled off and sold to filter makers. We can beat the grangers on the vinegar business and not half try."—*N. Y. Tribune.*

VALUE OF A TREE.

A German railway which is building an extension at Niederlahustein has just paid six hundred dollars for one cherry tree. The owner asked nine hundred dollars for it and proved that it crops sold for sums equivalent to the interest on that amount. This is really the true way to estimate the value of a fruit tree. The value of a business or a house is usually estimated by regarding the annual income derived from it as interest on the capital and there is no reason why the value of an orchard should not be estimated in the same way.

No doubt this tree was exceptionally fruitful, but if any Canadian farmer will estimate the average annual crop obtained from one of the best fruit trees in his orchard, ascertain its market price and then calculate how large a sum of money must be put out at interest in order to secure as large an income, he will be surprised at the result. Suppose the rate of interest to be five per cent., then a tree whose average annual crop sells for ten dollars is worth two hundred dollars. If the rate of interest be four per cent. the value of the tree is two hundred and fifty dollars. Of course in making calculations a certain allowance must be made for the aging of the tree. A tree may have a certain value apart from its crop as timber, and it is important to know how long it may be expected to bear fruit and what its value as timber will be after it is cut down. Certain kinds of wood are very costly, and trees that do not bear fruit at all often command very high prices. Unfortunately the profit from trees of this class usually falls to speculators or middlemen instead of to producers. There are men who make a business of inspecting logs and buying up the valuable ones, often paying a mere trifle for what they are sure of selling for a small fortune. A good walnut log is sometimes sold at a very high figure. It would pay the farmers of Canada to make a thorough study of tree culture, the best methods of packing fruit and the value of various kinds of wood. If farmers realized the real value of trees of all kinds they would treat them tenderly and with care and would view with horror their indiscriminate cutting. They would take care to replace the large trees that they cut down either for use or for sale, by young shoots that would grow into valuable trees.

Aside from the direct income to be derived from an orchard or a plantation of walnut or other high priced trees, if the farmers in general devoted more attention to tree culture they would all be directly benefitted. It has been demonstrated by experience both in Europe and America that after a country is denuded of its trees seasons of prolonged drought and annual spring floods are certain to follow. Some districts of Europe formerly renowned for their fertility are now desert wastes, owing to the destruction of trees, and in some sections of the United States similar results have already been noticed. The floods on the Ohio and Hudson rivers have only occurred during recent years, and all who have studied the matter unite in saying that they are due to the destruction of the trees. The snow in an open, treeless country melts rapidly instead of gradually, as in a well wooded country.

So far as the value of a tree concerns only the individual the Government is not called upon to interfere, but it is evident that each tree has a general as well as a special value, and it is the duty of the Government to see that this general value is not converted into a source of general loss.

American newspapers are almost unanimous in advocating the free admission of lumber into the United States, and the chief reason they advance for altering the tariff, in this particular, is the fact that the forests of the United States have almost disappeared, and that unless a stop is put to the cutting of trees, floods, drought and famine will inevitably ensue With the abolition of the American duty on lumber there is certain to be a wholesale slaughter of trees in Canada, and the Government should take every precaution to prevent disastrous results.—*Montreal Star.*

THE question has been asked of contemporary whether boards ever shrink lengthwise—that is, with the grain or not. The same journal answers: "The effect of moisture upon the length of boards is the reverse of its effect upon their width. That is, when the board is wet it is shorter than when it is dry."

THE oldest and the largest tree in the world is a chestnut near the foot of Mount Etna, Italy. The circumference of the main trunk is 212 feet.—*N. Y. Times.*

Perhaps the most extraordinary that success has been achieved in modern science has been attained by the Dixon treatment for Catarrh Out of 2,000 patients treated during the past six months, fully ninety per cent. have been cured of this stubborn malady. This is none the less startling when it is remembered that not five per cent. of the patients presenting themselves to the regular practitioner are benefitted, while the patent medicines and other advertised cures never record a cure at all. Starting with the claim now generally believed by the most scientific men that the disease is due to the presence of living parasites in the tissues, Mr. Dixon at once adapted his cure to their extermination; this accomplished the Catarrh is practically cured, and the permanency is unquestioned, as cures effected by him four years ago are cures still. No one else has ever attempted to cure Catarrh in this manner, and no other treatment has ever cured Catarrh. The application of the remedy is simple and can be done at home, and the present season of the year is the most favorable for a speedy and permanent cure, the majority of cases being cured at one treatment. Sufferers should correspond with Messrs. A. H. DIXON & SON, 305 King street west, Toronto, Canada, and enclose a stamp for their treatise on Catarrh.—*Montreal Star* 1y22.

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PETERBOROUGH, Ont, APRIL 1, 1886.

FOREST RESERVES.

THE report that the Province of Quebec has determined to establish a large forest reserve to the northward, is, if well founded, an evidence of a great improvement in the management of our forest wealth. We can well believe that to the efforts of Mr. Joly, this wise determination is to be largely attributed, and, if so, he has done a good service to the country in a matter which he has always seemed to have at heart.

In the Province of Quebec there has often been shown a more enlightened appreciation of the very important question of the conservation of our fast diminishing forests, and it is therefore only natural that Quebec should now lead the van in this marked change of policy. The other Provinces would do well to note her proceeding and imitate her action in this respect.

The first great desideratum in our forest economy is that there should be such a setting apart of our timber lands from agricultural lands. Settlement not only should not be encouraged, but should be absolutely prohibited in the section set apart for forest. In Canada with its enormous extent of country there is ample room for such forest reserves without denying to the agriculturist space for his plough. We certainly can afford to set aside a certain portion of our territory for this purpose at least as well as France, Germany, Austro-Hungary or even Russia.

There are in fact large tracts of country that are far better fitted for forest than for agriculture, and these should be determined, set apart and reserved from settlement. This would be no hardship to the farmer, for it is indeed no kindness to him to induce him to clear and break up land that can never give him an adequate return for his labour, while we have fertile soil in abundance for all who wish to till it. Even an exceptionally fertile spot in a forest region is not an advisable locality for a farm since the certainty that it can never become the abode of a populous and flourishing agricultural community, must add to the expenses and diminish the facilities of the isolated farmer, as compared with his position in a good agricultural district. On the other hand the forest would not be exposed to the risks that necessarily follow a sparce agricultural settlement, with its burning of fallows and other dangers from fire.

All the Provinces should consider this matter before it is too late, and should immediately proceed to survey the lands that are adapted to be held in forest, and reserve them apart. This in itself would be a great gain even for the present, and it might facilitate hereafter the adoption of a system of scientific forestry, one of the few things in which Canada lags lamentably behind the rest of the civilized world.

RECIPROCITY.

To the Editor of the Canada Lumberman.

MR. EDITOR,—The more I look forward to reciprocity with the U. S. in lumber the more convinced I am it would eventually lead to a greater curse than a benefit. Many inexperienced persons in lumber would think none but a fool would express himself as such, but the day is drawing near when our home consumption to furnish the little world now getting a start within the bounds of our Dominion will require all the lumber it has got. Let those who are so anxious for reciprocity inquire and get posted up about our lumber resources from any old reliable lumber cruiser, and he will at once be informed that at the rate our forests are slaughtered a very few years will stop the output of it. On the river St. John, N. B., above the Grand Falls, not a stick of spruce was cut for St. John market. It was all large pine timber and pine logs thirty-two years ago; now no pine timber, now and then a pine log, and spruce taking from 8 to 10 trees to make one M feet, and now our cedar forests are getting slaughtered by the wholesale by Americans and manufacturers across the lines to save the duty.

I would ask those who are anxious for reciprocity, to show what we can expect to gain by it if we must lose the export duty. From Lake Superior to Nova Scotia, on the millions of feet of lumber we will be deprived of manufacturing, now growing in our forests, which will be utilized by Americans. It will be far better for the Dominion to not allow one stick to leave the country unmanufactured, and pay all import duties to any country we want to ship to. There are plenty of markets for our manufactured lumber besides Uncle Sam's, which would yield fully as good returns, and reap the benefit of its manufacturing to build up our army of labourers and consumers.

If I understand the object of our N. P. it is to build up and tear down factories, by protecting their interests, and I fail to see the justness to discourage the manufacture of our own staple article which is lumber, and encourage the staple article of foreigners, to manufacture cotton, sugar, etc., etc.

If an export duty is to be put on it will be necessary to know how to frame it, to place our mills on an equal footing with the Americans, to manufacture our forest lumber. For instance one cord of cedar will make 3 M shingles, American import duty would be $1.05, which should be charged on every cord export duty. And 1,000 superficial feet of cedar logs will make 13 M shingles, and the import duty would be $4.55, consequently any less than $4.55 export duty on each and every M feet would be offering Americans a premium to manufacture our lumber.

Very respectfully

Yours,

March, 1886. P. D. BYRAM.

THE TIMBER SUPPLY.

To the Editor of the Canada Lumberman.

SIR,—We are again turning our eyes southward closely scanning the distant horizon for the appearance of any sign indicating the lessening or removal of the duty on lumber.

While we are so engaged it might be well to pause and take a retrospective glance, and learn some lessons from the past. The future may be big with coming events, but prior to their development, and while still shadowy, it were well to make preparations for their advent, and for what will most inevitably follow.

The past twelve years teach us lessons which are necessary to be learned and considered well in their relations both to the present and future. The consequence of pursuing a certain line of action must be taken into consideration, more particularly when the evidence of what resulted from following the same elsewhere are clear, and declare in no ambigious terms, that identical results will assuredly follow, whatever we may think to the contrary. We are not free; nor can we escape, from the punishment awaiting those who will not profit by the experience of others, however much we may delude ourselves with false hopes; nor can we expect posterity to avoid the penalty due to the descendants of the improvident and prodigal.

It is not the writer's intention to weary your readers with a long array of figures, but to place before them, as briefly as possible, a few facts from which they must deduct their own conclusions.

In 1874 the Lumbermen's National Association of the United States presented to Congress a memorial and remonstrance against free trade in lumber. From this document we learn as follows:—

The amount of standing pine and hemlock in the United States was estimated by Col. B. Wait to be 325,000,000,000 feet, with 100,000,000,000 feet in the Dominion of Canada The United States Commissioner of Agriculture in his report for the same year stated: "If for 20 years to come the demand for lumber shall increase in the same ratio to the population as in the past 20, the timber on 10,000,000 acres of land will be needed each year for sawn lumber."

During the same year the amount of lumber cut was estimated to be 12,500,000,000 feet. Coming down the stream of time to 1880, we find the amount to be 18,000,000,000 feet, and, in 1884, according to N. H. Eggleston, Chief of the Forestry Division of the Department of Agriculture, Washington, the cut reached the enormous total of 28,000,000,000 feet.

Assuming for all practical purposes the estimate made by Col. B Wait was about correct, the time is not far distant when the supply shall be exhausted. That such is the case evidence is not wanting. Prof. Sargent, special forest statistician of the United States Census Bureau, estimated in 1882 that there remained but eight years' supply. Mr. Leathers, Grand Rapids, in 1885, gives it as his opinion that there are but five years of lumbering in Michigan. He, however, looks to the south to supply the deficiency. It is needless to quote other authorities; the best of all evidence lies in the fact that enormous sums of money are being paid for pine lands. That the Southern and Pacific States possess an abundance is true, but true in a limited sense. The supply being exhausted in the Northwestern States as well as in the Eastern, in which are centred the principal manufacturies, the amount to be required for them will be an increased consumption which will fall on these two areas. This consumption together with a rapidly growing foreign trade, will speedily deplete the forest treasury.

The unavoidable consequence of denuding the ground of trees will rapidly follow, in fact in many places they are now felt, and measures have been taken to remedy the evil so far as can be done at present.

Admitting the estimate of Col. B. Wait for the Dominion of Canada to be correct, we learn from the memorial, etc., that in 1884 the cut amounted to 1,600,000,000 feet. Ten years later it had reached 2,700,000,000 feet. This means that in about 40 years, provided the cut does not exceed 2,000,000,000 feet each year, our supply will be exhausted. This period of time is about the same as that given by so good an authority as Mr. J. K. Ward. *En passant*, the writer desires to acknowledge his indebtedness to both Mr. Ward and Mr. Little, from whose addresses, &c., he has obtaiued much valuable information.

When we consider that in the list of exports of the products of Canada, next to animals and their produce comes lumber, amounting in 1885 to nearly $21,000,000.00, it behooves us to look well into the source of its supply, and endeavor to get at some ida of the results following an unhealthy development of the trade. Of the 2,700,000,000 feet we export 1,600,000,000 feet, the balance representing home consumption. Have we no faith in the future of Canada that we must hasten to destroy the source of one of the most important, in fact the most important, of her products, exporting to foreign climes that which can scarcely be replaced in a life time, and for the reproduction of which we are making no adequate provision? The fact of our having what to-day seems a superabundance of a comparatively cheap material, is no warrant that the near future will not be in want of that same commodity. Bad as it is for this to be done by ourselves, how much worse to permit aliens to strip us of what is most requisite to the building up of our country. What is a forty year supply in the history of a nation; and that supply based on the assumption that no increase of consumption will take place during that period. The increase already in ten years amounts to 1,000,000,000 and that during the time when lumber was comparatively abundant in the U. S., how much greater will it be now that a scarcity has come? Inroads are being made upon our forests by the painfully expeditious and destructive Americans. Attention has been called to them and hopes are entertained that our Government will place a heavy export duty on logs. Neither the difficulty of collecting, nor the gloomy anticipations of American sympathizers, need be a barrier to the imposition of a prohibitory rate of duty. We shall ere long require every stick for our own consumption.

What is to be done must be done at once. Our country is young and in the natural course of events we may look forward to an increased demand for own wants, with a constantly decreasing supply.

Coming generations have claims upon us which we cannot and must not ignore. Let us leave them a portion of a goodly heritage, from which they will know that, instead of squandering our forest wealth in barbaric splendor, or still worse, barbaric sensuality, we, looking down the long vista of coming years, were mindful of them ere yet they reached this tenestrial scene.

A. SIMPSON.

Toronto, March 20th, 1886.

LUMBER PROSPECTS.

"Lumber prospects are exceedingly good this season, indeed better than they have been for many," said Mr. J. R. Booth this morning. "We have had no good season in the woods, and there has been a great cut made."

"How are the foreign markets?"

"Well, we don't often have both the markets English and American, good at once, but this season both are lively. There is a great deal of speculation is the English market, more than there has been of late years."

"Has much square timber been made?"

"Yes, a good deal, more I think than there will be demand for. The consumption has been steadily dicreasing."

"For what reason?"

"Chiefly owing to the increased facilities for carrying small lumber, and again because the price has not yet been remunerative. The increase use of small lumber has also affected the making of square timber."

"Do you think this decrease favorable or otherwise to the trade?"

"It is doubtedly a benefit to the trade. You see in making square timber only the best trees are used, the inferior being left standing. Then in order to square it there is a great deal of waste left in the woods. When small lumber is cut the best, and inferior trees are taken out together and the logs are brought down, and in cutting at the mills the waste is avoided. I think in the interests of trade it is desirable to discourage the making of square timber, and hope to see the cut altogether done away with." —*Ottawa Free Press.*

A MAN named Carey, employed at Hurdman's shanties on the Mississippi river, Ont., was instantly killed a few days ago by being struck upon the head by a falling tree, his brains being scattered all around.

HARD WOODS.

A steady consumptive demand exists for a variety of our hard woods, and a constant change and substitution is going on in the kind of woods used for certain purposes in building. fitting and furnishing. The demand of cherry is steady and we quote $60 to $75 per thousand, for Nos. 1 and 2 of this kind of wood in this market. A car was sold this week at the high er figure. Walnut is firm and in request, more selling at $95 than at $85 per thousand, dealers tell us. Birch, although plentiful enough in the forest, is not easy to find in the market of the quality and dimensions most called for. There is very little selling at $17.00, buyers pay $18.50 to $20 as a rule. Chestnut is quiet and not much sought after. There is more requiry for buttenut, which we now quote as high as $40 to $50. Basswood is an article in very steady request. Soft elm is higher and rock elm unchanged.

The *Lumberman* had recently the following about the Chicago market: "Stocks on hand in the city yards are large and ample for all immediate requirements. The only exceptions are, perhaps, in whitewood, which is very scarce, in dry walnut culls, and in red oak finishing lumber and quarter-sawed stuff. No one can tell why, but red oak actually seems to be more popular than white oak for inside finish, and often commands a higher price."—*Monetary Times.*

THE CAUSE OF DISCOUNTS.

First and last a great many articles have been written setting forth the demoralizing influence upon trade of the practice of making discounts. In this matter, as well as in all others, we find two sides to the question, and both present objectionable features. The habit of perpetually kicking prevails to a greater or less degree in every business house in the country. There are many firms who have a reputation as kickers, that acquire such a distinction entirely through the acts of employes, and while morally responsible are not personally dishonest. A salesman, inspector, or other employe, may become possessed of the idea that he can advance the interests of his employers if he shuts his eyes to justice and secures an advantage over some person with whom they are dealing, by means, which, to use a mild term, we will designate as sharp. There are plenty of employes whose idea of honor does not extend beyond the confines of the lumber yard in which they work, and who believe that to gain an advantage, just or unjust, is to advance the interests of their employer and that it will be appreciated by him and make their services indispensable.

There are dealers who ship lumber and deal with customers on the principal that every identical one of them intends to cheat on the count of inspection, and to offset that possible result will skin the grades or stretch the tally to the utmost limit. Such a policy does not go unnoticed and the average person will retaliate by adopting the other extreme and the ultimate result is a request for a discount. A shipper undertakes to load a car, and from various causes the job extends over a space of several days. It may be that two or three different persons have taken a hand at the tallying, or even if but one is engaged on that duty, the fact of dropping the work and starting again at odd times is sufficient grounds for asserting that an error could very easily have been made in the count. A car load arrives at its destination and the party who holds an order for its delivery sends a truck and hauls away a load or two to one customer and the balance to his yard. The teamster has taken tally of the loads he hauled away, and one or more tally boys in the yard measure the balance and if it does not hold out to the invoice, a claim for discount is made.

A shipper in measuring pieces which contain a fraction of a foot either throws off or adds on the remainder or adopts the just rule of give and take. The firm receiving the lumber may refuse to add on or divide and of course there is a shortage. The system of tallying by hundreds and placing the score on the side of the car or on a shingle, and in other unbusinesslike ways is frequently the cause for a great many unjust kicks, and the allowance of a great many discounts.

There are salesmen by the score who have occasionally so far forgotten themselves as to sell lumber by sample, taking the standard from a pile shown them in the buyer's yard. If a car load shipped on such an order turns out satisfactory it is the exception, not the rule, and the salesman is largely to blame for the discount which is claimed.

The competition of the last two years has caused certain shippers to elevate the standard of grade made by them beyond the limit of any commonly accepted rules of inspection, and now a great many buyers insist upon making the standard severely rigid, and the manufacturer who ships an honest, straight grade of lumber is frequently obliged to discount because a competitor is giving away some of his lumber as an advertisement to secure orders.

These are but a few of the many methods that are in vogue to secure a discount on shipments, and it will be observed that the blame is not to be cast all on one side. The manufacturer in his greed for orders will practice what is commonly called "stuffing;" the salesman will overrepresent, or accepting a low offer will attempt to get out whole by working in a portion of an inferior grade, the consummer will kick because from a laxity of system he has made a purchase fall short, or from a preconcerted determination to secure a discount he authorizes his employes to cut the measurement for defects, and to make the standard so high that the system verges on robbery.

This combination of affairs produces the inevitable result—discount.—*Northwestern Lumberman.*

LUMBER AND TIMBER.

It is a matter of satisfaction that the prospects of the lumbering trade, as a whole, are good. The demand from the United States is strong. The discussion in the American Congress on the Morrison Tariff Bill, and its passage through committee, are held to be of a hopeful character, though they are far from being a guarantee that the measure will pass. Were it not for conflicting interests continually fighting for supremacy, and the side issues introduced into the discussion, there seems no room to doubt that the duty of two dollars a thousand on lumber would speedily be taken off. The effect of this would be to enhance the value of our lumber products generally, and the lower grades especially. It is these lower grades that are more and more difficult to dispose of, and to the export of many of them the duty is an insuperable obstacle. There seems to be an opinion in lumber circles in the States that the abolition of the duty is only a question of time and contracts are being made in advance, on this assumption.

Our exports of timber and timber products to England are not so satisfactory as a whole. Deals have done well, and are likely to do so still; but heavy timber is very slow and difficult of sale, and prices are not encouraging. A good deal of timber has been held over at Quebec for more than one season. If trade were to revive in England an entirely different aspect would be put upon matters; but that appears far off, even yet.

The lumber and timber trade occupy so prominent a position in our industries as to affect the whole mercantile and financial condition. To a certain entent this is true of every part of Canada; but it is more particularly the case in the whole of the regions watered by the Ottawa, certain portions of the province of Quebec, the whole of the Trent Valley district, and the region north of Lake Simcoe.—*Monetary Times.*

GRAPHITE AS LUBRICATOR.

The following interesting matter relative to the use of Graphite (better known under the name of "black lead") is from Prof. John A. Walker's report in "Mineral Resources of the United States" for the year 1893-84:

"With the introduction of heavier machinery the service demanded of a lubricant has become more and more severe. For much of his work it is found that oil will not answer at all, and for much more it answers only at great expense, hence the uses of greases and the more solid lubricants, such as graphite, mica, soapstone, sulphur, etc. When graphite first began to be as a lubricant, anything which gave a stove-polish luster when rubbed was assumed to be "black lead" and fit for lubricating purposes. Experience soon proved it to give varied results—sometimes very good and sometimes the reverse; in fact, it was not reliable because of a lack of uniformity correct sizing and purity and soon fell into disrepute among practical men, though continuing to be be well spoken of in the books. In 1886, however, systematic experiments were begun in this country with a view to producing a reliable lubricant from graphite, and the final result has been very satisfactory.

"Water-dressed dry foliated American graph ite is a little thin flake of graphite of extraordinary properties. Its superiority as a lubricans has been attested by all recent writers on friction. Its coefficient of friction is very low. Its enduring qualities are several times greater than those of any oil. Unlike either oil or grease, it is not effected by heat, cold, steam, acid, etc., and acts equally well under varying conditions of temperature and moisture.

"Many and carefully conducted experiments in the laboratory with Professor Thurston's testing machine, and experience in shops, have shown that for the highest usefulness the flake must be of a certain size and dressed perfectly pure. Graphite never occurs of the proper size and purity for use. Its natural impurities contain substances fatal to anti-friction purposes. Its proper selection, sizing, and perfecting for lubricating purposes is a matter requiring large skill, much machinery, and great experience. The difference between a perfectly pure graphite and one almost pure, but still totally unfit for lubricating, can not be detected by either sight or touch.

"It is recommended dry for steam and air cylinders, mixed with grease for heavy bearings and mixed with oil for light bearings. On being applied to a bearing, it readily coats the surface with a shiny, unctuous veneer. These surfaces then slide on each other with very little friction On being applied to heated bearings, the graphite soon fills up any inequalities of the bearing surfaces due to cutting, abrasion, etc., making them smooth and even, after which the bearing soon cools down and is equally useful for wood or metal surfaces: in short, in all cases where friction exists. If the bearings are loose enough for the introduction of this thin flake graphite, it will prevent heated bearings, cool those already heated, and reduce friction better than anything else. In all cases where the service required of a lubricant is very severe graphite will be found specially useful, as in mill steps, gears, heavy bearings, bed plates, etc.

"This is the most rapidly growing use of graphite. In 1884 a single company sold 250,000 pounds of it for this purpose, branded as 'lubricating graphite,' and probably as much more not so labeled, which was used for the same purpose."

Cholera Preventative.

In order to withstand Cholera and such like epidemics a perfect purity of blood, and the proper action of the stomach, are required. To insure that end, in the cheapest, most available and complete manner, use McGregor s Speedy Cure for Dyspepsia and Impure Blood. There is no purer, safer or more reliable remedy in existence for Indigestion, Dyspepsia, Costiveness etc. Ask your neighbor or any person who has used it. Sold by John McKee. Trial bottle given free

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DR. E. C. WEST'S NERVE AND BRAIN TREATMENT, guaranteed specific for Hysteria, Dizziness, Convulsions, Fits, Nervous Neuralgia, Headache, Nervous Prostration caused by the use of alcohol or tobacco, Wakefulness, Mental Depression, Softening of the Brain resulting in Insanity and leading to misery, decay and death, Premature Old Age. One box will cure recent cases. Each box contains one month's treatment. One dollar a box, or six boxes for five dollars; sent by mail prepaid on receipt of price. We guarantee six boxes to cure any case. With each order received by us for six boxes, accompanied with five dollars, we will send the purchaser our written guarantee to refund the money if the treatment does not effect a cure. Guarantees issued only by J. D. TULLY Druggist, Sole Agent for Peterborough

J. & J. T. MATHEWS

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Car Lots sold on Commission, railway switch in to yard and plenty of room for storage. Yard corner of Stachan and Wellington Ave. Office, 9 Victoria St.

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ON SEVERN RIVER

The undersigned being desirous of confining their operations to their Lakefield Mills on the Trent waters, offer for sale the following limits:—

Township of Hindou, 70 square miles.
" Oakley, 45 " "
" Redout, 22 " "
— An area of 137 square miles.

These limits are estimated to contain 180 million feet of Logs, well watered, and afford means of short hauling from all points, and quick and cheap driving to Georgian Bay. Are offered for sale together with plant, depots, farms, 1,200 acres deeded lands and 50,000 logs, nearly all of which are on the main river, a large proportion of which are 16 feet long. Apply to

R. & G. Strickland,

3mL LAKEFIELD, ONT.

NOTICE.

SEALED TENDERS, addressed to the undersigned, and endorsed "Tender for Indian Supplies," will be received at this office up to noon on TUESDAY, 20th APRIL, 1886, for the delivery of Indian Supplies during the fiscal year ending 30th June, 1887, consisting of Flour, Bacon, Beef, Groceries, Ammunition, Twine Oxen, Cows, Bulls, Agricultural Implements, Tools, &c. duty paid, at various points in Manitoba and the North West Territories.

Forms of tender, giving full particulars relative to the supplies required, dates of delivery, &c., may be had by applying to the undersigned, or to the Indian Commissioner at Regina, or to the Indian Office, Winnipeg.

Parties may tender for each description of goods (or for any portion of each discription of goods) separately or for all the goods called for in the Schedules.

Each tender must be accompanied by an accepted Cheque in favor of the Superintendent General of Indian Affairs on a Canadian Bank for at least five per cent of the amount of the tenders for Manitoba and the North-West Territories, which will be forfeited if the party tendering declines to enter into a contract when called upon to do so, or if he fails to complete the work contracted for. If the tender be not accepted the cheque will be returned.

Tenderers must make up in the Money columns in the Schedule the total money value of the goods they offer to supply, or their tender will not be entertained.

Each tender must in addition to the signature of the tenderer be signed by two sureties acceptable to to the Department, for the proper performance of the contract.

In all cases where transportation may be only partial by rail, contractors must make proper arrangements for supplies to be forwarded at once from railway stations to their destination in the Government Warehouse at the point of delivery.

The lowest, or any tender, not necessarily accepted.

L. VANKOUGHNET,
Deputy of the Superintendent-General of Indian Affairs.

Department of Indian Affairs.
Ottawa, 3rd March, 1886. 9d5

LAKE MICHIGAN TRADE—AN IMPENDING CHANGE.

That the lumber trade of the Lake Michigan districts is passing toward an important change can be plainly seen. The tendency to transition is especially visible in this city, where a large portion of west Michigan, upper peninsula and Green Bay lumber finds a market. The past two years of general depression and close competition to sell on a weak market has nearly wiped out the profit margin between mill and retail yard, when the lumber has to be handled in a wholesale or jobbing way. This has caused manufacturers here, who have distributed their lumber as wholesale dealers, to conclude that lumber at the mill, or by the cargo, has more profit in it than when run through the yards in the line of assorted stock. Some of the Menominee manufacturers are seeking to place their business on a more profitable basis by reliuquishing their yard trade in this city, piling at the mills and shipping direct to retail yards or consumers. Others contemplate throwing up the grading and finer manipulation of lumber entirely, and substituting therefor the selling in cargo lots, or in any way the call may come to them.

It is the general impression among the wholesale dealers of this city that the carrying on of yards here is so costly that a handling bill cannot be made in the sale of lumber, to say nothing of fair profits. But this cannot be the real reason of the merchants' dissatisfaction, for with the exception of difficulty of obtaining a safe line of insurance, and a late increased rate of insurance, it costs no more to run a yard now than it did five years ago. Indeed it may be asserted that a yard can be conducted more economically now than it was before dock rates weakened as they have done during the past two years, if it were not for insurance.

The fact is that the cause of so much dissatisfaction with the yard trade is the fierce competition between the various manufacturing districts, which has grown worse under the influence of depressed demand, low prices, and the new transportation facilities that have been furnished. By reason of the last named evolution, new fields of production have been made accessible, and new avenues to market have been opened up. It has come to this, that a buyer in Kansas, Nebraska or Iowa, can have a choice of any market along the river from St, Louis to St. Paul, of any mill stock in Wisconsin or the upper peninsula, or he can even go around the lake in lower Michigan, if he likes, and thus steal a march on the Chicago wholesale dealer—all because the railroads and the seller will part the Chicago profit in the middle and divide it between them. Thus the manufacturers are brought to the conclusion that there is no object in trying to distribute their product through yards when it can be sold at a fair profit at the mill, without so much risk and worry as the yard business involves. Besides, an important factor in the new departure is increasing demand in the east for product—a requirement that has recently taken a longer reach westward, and grasped larger handfuls than formerly. In order to get what they want, eastern buyers are offering a little more for lumber than it would bring in this or other western markets. This tends to a stiffening of cargo values compared to prices in the yards. The mill owners along the lake shores have also acquired sufficient capital to hold their lumber for all they can get for it. In other words, the conditions that prevailed a few years ago have been reversed. Whereas once the dealers or factors in lumber held the purse strings and permitted the mill men to go on with their sawing by loaning them money, now the manufacturers are the capitalists of the heavier calibre of the two. This change in circumstances enables the mill owners to more nearly hold the balance of power than formerly, and insist on prices that are not favorable to the wholesale handlers.

Besides, the tendency of the retail dealer and the contractor is to go to the mill for their lumber. Retail handlers are also becoming capitalists, for they have relatively made more money within the past two or three years than the wholesale merchants, for the reason that they have been able to buy at almost their own figures. The handlers of large stocks in a retail way are more than ever inclined to buy of first hands, and thus secure the profit that the wholesale dealer is supposed to make by assorting.

What, then, will be the result of the change in tho lake white pine trade that seems inevitable? Will the wholesale trade of this city, South Chicago, Michigan City, Milwaukee and Racine be wiped out? Probably not; but it will, within a few years, fall below its present proportions. While the white pine that is accessible to lake ports lasts, there will be stocks held in this city and at other points for sale by wholesale. The business of assorting will be maintained, if for no other reason than that retail handlers are constantly running out of sorts that have to be supplied at short notice. But the jobber will also more and more cultivate the retail trade at home as well as throughout the country. The time will come when the holders of stock here will lose their distinctive character of "wholesalers," and will sell in round lots at wholesale prices only as an incident of their business, as do large country retail dealers of merchandise sometimes. But this market will always remain a large repository of assorted stocks, which can be drawn upon as occasion requires, by the trade at large.—*Northwestern Lumberman.*

WARPING OF TIMBER.

W. S. Stevenson writes as follows to the *Timber Trades Journal*:—There is a great amount of popular error associated with the wood of the south as compared with the wood of the north side of the tree, it being held that the centre or pith is nearer to the north, and that the annular layers of wood are thicker on the south, and that they possess various degrees of density, shrinkage, &c. This is put forward as a rule, whereas it is only a rare exception, and, wherever it is pronounced, it is invariably traceable to local and other influences. In forest-grown trees, the heads of which are small and uniform in height, the growth of the tree is upwards, and the branches and foliage form umbrageous heads fairly equal all around. In the sections of such trees the woody fibres are found fairly and evenly disposed, the pith, or medulla, in the centre, and the wood on the north and south sides identical in every way. It follows from this, that, as forest grown trees furnish the bulk of the woods of commerce, the question of north or south side wood has no practical appreciable bearing upon the trade. In trees grown in the open, as in the centre of our fields, the stems will be short, the lateral branches large, and the heads, as a whole, well rounded. The reason of this is that the light which is the life of the trees, is all around them. The sides towards the sun, say the south, may possibly be the most verdant, but as the sun is at a great altitude during the few months of the year it has influence upon vegetation, but no marked action upon the disposition of woody layers on the south or north sides of timber trees. The above close and open-grown trees for the rule of vegetation, and we must look to the exceptions for any details touching the questions advanced by "Zero." Take a wood or plantation occupying a given area of ground, the trees surrounded by others will be of straight and uniform growth, whereas those on the outside fringe or skit will be distorted. Such trees, from being partially shaded from the light, will grow all upon one side, the side to the light. Here they will put out large lateral branches, and form thick layers of wood upon the stems, and develop great roots to correspond with the branches above. Such trees in sections will show annular layers of woody matter, those towards the open side thick, soft and porous, and those towards the shaded side thin, hard and horny. It matters, say, in England, little whether the light or open ground is on the east, west, north or south, for, wherever it is, there we shall find the thick and thin layers of woody matter, irrespective of polar position. To this rule of one-sided growth there is the exception of trees depositing their woody fibres in spiral form; the position of the pith, or medulla, in such trees would be erratic. You might in a section, say three feet from the ground, expect to find it inclining to the shaded side, whereas it might be found directly opposite. It is true you may find exceptions in forest growth, for where trees are grown on a hillside, one stepping above another, the foliage will all be produced on the side of the trees towards the light, and the pith or medulla, be found, where spiral growth does not intervene, inclining to the sides where the vegetation is weakest It would matter but little whether such hills rose towards the east, west, north, or south, the vegetation would all incline to the light. In the far north of Europe the case is somewhat different, there the north and south have distinct influence, the trees being stunted, and only putting out branches towards the south Linæus noted such trees in his travels in Lapland, but was unfamiliar with them in the centre of Sweden. He remarked that the wood on the north sides of the fir trees (Pinus Sylvestris) was so hard, tough, and close grown that the Laplanders made their bows of it, and had recourse to it for purposes where hardwood was required. It is fair to suppose that "Zero," in his experience of wood, will never come across trees so influenced in their growth by the south and the north; but if he does he will find the south sides soft, light and shrinkable, and the north sides hard, heavy and subject to little change by the extraction of the moisture. "Zero's" question is put under the erroneous supposition that all trees are influence in their growth towards the south and north; I therefore find it impossible to fram a clear or fitting answer.

LARGE OR SMALL ENGINES—THE SAFE SIDE.

The natural and commendable desire to be on the "safe side" in making a calculation may be, and often is, carried to an extreme, which leads into a greater error than that which it is sought to avoid. A man is going to put in an engine; he has often heard and read of the wastefulness of too small a motor; and so, to be on the safe side he orders an engine which is correctly proportioned for about four times the load which it will be run under, reasoning that a big horse can drag a little load but a little horse cannot drag a big load. There is this difference between a horse and an engine; that while the big horse might not cost any more to buy or to keep, both the selling price and the cost of running an engine increases with its size, owing not only to the increased friction of the larger engine, but to the fact that in order to keep it from exerting its great power it must be run with low steam, a high grade of expansion, and at a very low speed. The owner finds in consequence that he has paid a number of hundred dollars more than he needed for a machine which is less economical than the smaller and cheaper would have been, in order to be on the "safe side."

It is quite as possible, though not so frequent in occurrence, that the boiler power may be too great as it is too little, and as for the boiler material the government authorities are obliged, in the interests of safety, to restrict the fire sheets to a given thickness.

Many superintendents and managers will, to be on the "safe side," fit their boiler room up with all manner of patent traps and get it where it will almost run itself, or so that anybody can run it, and then to be on the "safe side" of the ledger they put any "thing" in to run it. Any "thing" depends upon the safety automatic machinery to look out for everything—he does not even look after the machinery itself, and when it slips up at some critical moment with more or less damage, who is to blame? Any "thing," the automatic safety appliance, or the man who substituted it for brains, to be on the "safe side."—*Saw Mill Gazette.*

BIG WEEK'S BUSINESS.

It is almost impossible to interview T. W. Hastings, the stirring, pushing, enterprising head worker in the business of Mosher & Fisher, of West Bay City, Mich., without getting some interesting and reliable facts for the ear of the reading public.

"How is business, Mr. Hastings?" said the pencil pusher.

"Business is excellent, if we may judge thereof by our own transactions," retorted Mr. Hastings. "During the week back the transactions of Mosher & Fisher have been on a scale of magnitude. Their sales and purchases have been as follows: 350,000 feet of lumber sold to Ohio parties; 4,500,000 to eastern parties; 1,100,000 to western parties. They have also purchased during the week 16,000,000 feet of logs from Thomas H. McGraw & Co.; 25,000,000 feet of logs from Sibley & Bearinger; these latter were intended for East Saginaw mills, but will be brought to Bay City for conversion into lumber; they also purchased during the week 5,000,000 feet of lumber, and invested a sum appropriating $50,000 in pine lands."

"How much do your sales amount to since the close of navigation," queried the seeker after news.

"At the close of navigation the firm had lumber on hand aggregating 21,000 000 feet.

"They have sold up to date 20,000 000 feet.

"The purchases during the same time amount to 5,000 000 feet.

"Leaving lumber on hand at this date 6,000,000 feet.

"Since January 1st, the log transactions of the firm are as follows: Purchased of Smith Bros., Cheboygan, 3,000,000 feet; of T. H. McGraw, 16,000,000 feet; of Sibley & Bearinger, 25,000,000 feet; they have cut on their own land 10,000,000 feet; and having 5,000,000 left over in the Tittabawassee, it gives them a stock for the next season of 59,000 000 feet.

"The mills of McLean. Son & Co., Malone & Co, Laderach Bros., Miller Bros., and Green & Stevens will do the manufacturing for the firm during the season of 1886."—*Lumberman's Gazette.*

BEARINGS FOR MAIN SAW MILL SHAFTING.

In reply to "W. S. F." the *Timber Trades Journal* says that bearings for saw mill shafting are in the latest and best practice made considerably longer than they used to be, with a very satisfactory result both as regards wear and tear and steadiness in running. If you are remodelling your mill we should recommend you to put in bearings about four times as long as the diameter of your shaft, and by all means have them arranged to pivot so that they can adjust themselves to any deviation in the shaft. This is an important matter, but one very often lost sight of, consequently there is a considerable daily loss through increased friction and wear and tear on the bearings, and more power is consumed in driving. It is astonishing how these important matters are neglected even in these days when people should know better. As an illustration we may say we recently went into a box factory where the power was conveyed by a twisted belt running at 10 ft. centres, and the saw benches were about the same distance off, and almost immediately beneath the main shaft. We need hardly say that, with this arrangement, the loss was large, probably nearly £100 a year from loss of steam, loss of speed on benches through slip on belts, increased wear on belts and bearings, less output from benches and worse work. When we pointed it out the reply was, "Yes, perhaps so; but it has done for us for some years, and I don't think we shall alter now." We had therefore nothing further to say.

MATCHES.

Many people now living can remember the time when there were no matches, and people were obliged to depend upon tinder boxes and similar contrivances when they wished to strike a light. It is possible that the time is not far distant when the matches now so universally used will again go out of use. At least a patent is said to have been granted in Russia for a lucifer match that can be used an indefinite number of times, the wood being impregnated with a special chemical solution. Match making is one of the Canadian industries that has attained a high state of development, and matches have usually been much cheaper in Canada than in the United States, partly because the American Government imposed an excise duty on matches, and every box sold had to have a Government stamp.—*Montreal Star.*

THE tug Nat Stickney has been chartered by the Cheboygan Lumber Company to tow logs from Spanish river, Ont., to Cheboygan, Mich., for the season to come.

LIVERPOOL STOCKS.

We take from the *Timber Trades Journal* the following Comparative Table showing Stock Timber and Deals in Liverpool on Feb. 27th 1885 and 1886, and also the Consumption fo the month of Feb. 1885 and 1886 :—

	Stock, 1885	*Stock, 1886.*	*Consumption 1885.*	*Consumption 1886.*
Quebec Square Pine	256,000 ft.	185,000 ft.	40,000 ft.	58,000 ft.
" Waney Board	319,000 "	324.000 "		
St. John Pine	20,000 "	40,000 "	1,000 "	8,000 "
Other Ports Pine	53,000 "	49,000 "	4.000 "	5,000 "
Red Pine	42,000 "	20,000 "	4,000 "	2,000 "
Pitch Pine, hewn	560,000 "	384,000 "	62,000 "	61,000 "
" Sawn	560,000 "	687,000 "	143,000 "	216,000 "
Planks	00,000 "	00,000 "	0,000 "	0,000 "
Dantzic, &c., Fir	96,000 "	58,000 "	4,000 "	2,000 "
Sweden and Norway Fir	50,000 "	57,000 "	5,000 "	1,000 "
Oak, Canadian and American	203,000 "	244,000 "	27,000 "	33,000 "
" Planks	151,000 "	173,000 "	52,000 "	62,000 "
" Baltic	9,000 "	6,000 "	0,000 "	2,000 "
Elm	14,000 "	29,000 "	1,000 "	4,000 "
Birch	61,000 "	143,000 "	20,000 "	38,000 "
Ash	35,000 "	14,000 "	2,000 "	4,000 "
East India Teak	16,000 "	154,000 "	16,000 "	11,000 "
Greenheart	63,000 "	136,000 "	14,000 "	32,000 "
N. B. & N. S. Spruce Deals	24,284 stds	18,305 stds.	1,846 stds.	1,868 stds.
" Pine	560 "	954 "		
Quebec Deals	4.623 "	6,627 "	931 "	672 "
Baltic Red Deals, &c	3,164 "	3,895 "	233 "	107 "
Baltic Boards	107 "	349 "	29 "	00 "
" prepared Flooring	3,032 "	1,431 "	515 "	1,035 "

Chips.

TIES to the number of 20,000 are being got out near Neebing, Ont., Crawford & McDonald having a contract for 10,000.

WILMOT WILSON, of Pickering, Ont, was killed by a falling tree while cutting wood three miles east of Newmarket.

FOREST fires have caused great destruction of timber lately in Sussex county, Va. Considerable cordwood was burned.

AMONG the new firms announced in Quebec is M. Stevenson & Co., lumber, etc.; James Timmony and Walter Stevenson, partners.

IN some parts of Mexico precious woods are so plentiful that the natives build pig styes of rosewood l gs.—*Journal of Commerce.*

A FIRE was started in the woods south of Jamaica, L. I., N. Y., March 7th, by tramps who built a fire to cook. A large lot of timber was destroyed.

A JOURNAL in the interests of carriage builders says hickory axles have advanced 20 per cent. within a year, while good dry wood material is scarce and will naturally increase.

MAINE is one of the states in which great trees grow. A spruce was cut in Caribou, Aroostock county, lately, which at a distance of 105 feet from the ground measured 14 inches in diameter.—*Chicago Tribune.*

RAILWAY men complain of the weight of the passenger cars now built, and show by figures that an engine hauls between five and six pounds of dead weight for every pound of paying passenger weight, reckoned when all the seats are filled.

SOMEBODY has taken the pains to figure out that the United States produces enough lumber each year to load 1,428,581 railroad cars, each carrying 7,000 feet. It is also said that this would make a train 8,500 miles long, or about one-third around the world!

THE Parry Sound Lumber Company, says the *North Star*, have commenced fitting up their steam barge, the Lothair, for the coming season's work. Work on the other vessels of the company to get them ready for sailing by the opening of navigation will be commenced shortly.

A CONTEMPORARY says:—A feminine "Pooh-Bah" has just come to light: She is Miss McBrown, of Chesterville, Ill., and is station agent, baggage mistriss, and telegraph operator for the Midland Railway, at that place. Besides this she runs a lumber yard and a dairy, and holds the enviable position of village belle.

A REVIEW of the season's lumbering operations in Minnesota and Wisconsin shows that the lumber cut has been curtailed to the extent of about 123,500,000 feet, though the demand for lumber is equal to the supply, which covers large stocks left over from last year.—*St. Paul Press.*

IT is said that $15,000 was once paid by Messrs. Broadwood—the famous English piano makers—for three logs of mahogany from the same tree, each fifteen feet long and three feet and two inches square; that is something over $33 per cubic foot. The attraction was the unusual beauty of the "burls," which made it valuable for veneers.—*Wood and Iron.*

A REMARKABLE explosion which occurred in Germany shows the force possessed by dust. A sack of flower falling down stairs, opened and scattered the contents in a cloud through the lower room, where a burning flame set fire to the dust, causing an explosion which lifted a part of the roof of the mill and broke almost all the windows.

A NOTABLE example of the utilization of smoke is afforded in the case of a charcoal furnace at Elk Rapids, Mich. In this furnace, as stated, are manufactured fifty tons of charcoal per day; there are twenty-five charcoal pits, constructed of brick, each pit being filled with 100 cords of hardwood, and then fired. The vast amount of smoke thus produced is made to yield acetate of lime, alcohol, tar and gas.

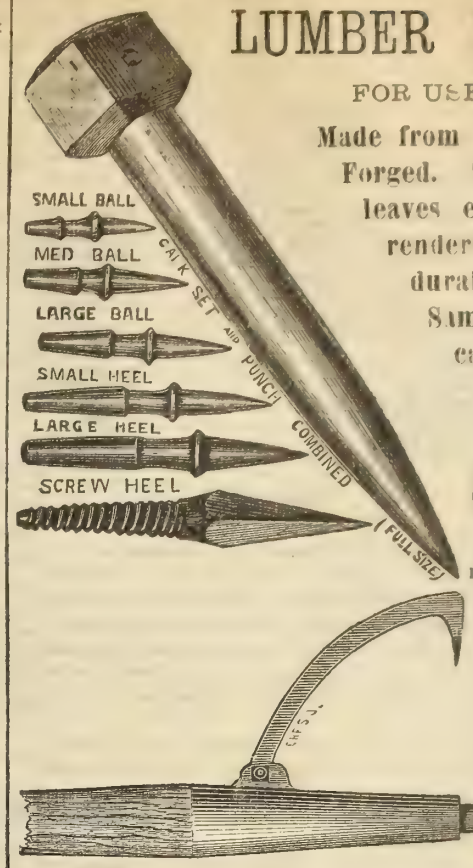
MESSRS. Scott & Scott, an enterprising young firm of lumber dealers in Toronto, have purchased the mill, machinery, plant, &c, together with the timber and limits belonging to the Medonte Lumber Company, near Hillsdale, Ont. The company's contracts for supplying timber, lumber, &c., will be carried out by the new owners. The purchasers have been operating the limits since December last.

As Murney Sills, working in the shingle department of the Deseronto cedar mill, was leaving the mill for his dinner on March 16th, and, while in the act of pulling on his coat, it caught in the driving shaft, pulling him up over it twice and breaking his right arm off about four inches from the shoulder. The unfortunate man was carried to his home, where he had to lie over an hour without a doctor, both physicians being out of town.

Wonderful is the instantaneous effect of West's Pain King in relieving cramps, colic and all bowel difficulties. Worth its weight in gold and costs but 25 cents! Should always be kept in every household. Sold by J. D. Tully druggist

Advice to Mothers.

Mrs. Winslow's Soothing Syrup should always be used when children are cutting teeth. It relieves the little sufferer at once; it produces natural, quiet sleep by relieving the child from pain, and the little cherub awakes as "bright as a button." It is very pleasant to taste. It soothes the child, softens the gums, allays all pain, relieves wind, regulates the bowels, and is the best known remedy for diarrhœa, whether arising from teething or other causes. 25 cent a bottle. Be sure and ask for "Mrs. Winslow's Soothing Syrup," and take no other kind.



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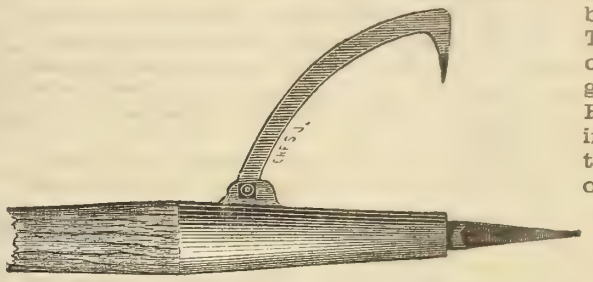

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Market Reports.

TORONTO.

From Our Own Correspondent.

MARCH 24.—All the retailers of lumber here agree that trade is unaccountably dull, and any stranger driving through our city at the present time, and viewing the large number of excavations for buildings now being taken out would come to the conclusion that all the lumber yards were doing a flourishing trade; but a close scrutiny would soon let him in to the secret, and fully explain why our retail men are not doing a brisk trade. Contract work has not yet fairly opened out, and nearly all the building operations that are now being so vigorously pushed forward is chiefly in the hands of speculators, and most of our retail men give them a wide berth, and it remains for the wholesale men to furnish such men by car load. Of course there are exceptions, some of our speculative builders have made their pile, and can command credit from any dealer. This is not the rule, however, wholesale dealers take more chances in this respect than the retail men, and frequently get severely bit for their temerity, as lumber sold in car load lots soon foot up a heavy account, and the lien law as it now stands on our statute books is quite inadequate as a means of protection for any one except a mechanic, consequently our dealers frequently suffer severe losses, and the only effectual way to avoid such losses is to insist that the parties advancing the funds for building shall secure the individuals furnishing materials.

Wholesale dealers are disposing of car load lots readily and prices have weakened on some kinds of stock in consequence of the action of the N. & N. W. R. R. Company in refusing to allow dealers to unload by side of track. The ostensible reason for this course is that the company intend to rearrange their tracks in view of affording more unloading room, which they hold will be needed consequent upon the opening of their extension, north from Gravenhurst to the junction of the C. P. R. R, and dealers have had to push off their stuff at best prices available to avoid demurrage. It is only fair to the railway company to say, however, that they have not pushed their customers at all closely as to time for unloading.

All who are interested are anticipating a good season's trade, and the demand for dry stuff will give the yards plenty to attend to before long, as nearly all the available supply from the mills will soon be forward, so that any one wanting dry lumber will have to go to the yards and get it there.

Some few cases of stocks and 1½ in. plank are still arriving here from Ottawa, but not of a class at all inviting to dealers, being nearly all composed of culls and outs; said outs being mostly thrown out of the clear and picks by reason of shakes. 1½ in. is so hard to obtain, however, at present, that anything that can be worked up will sell at fair figures, and as soon as the new cut is started this class of pine will have to be taken in its green state and put into the dry kilns. Lath are in good demand just now and no large stock of dry to come in. Shingles are plentiful and demand slow, and it is doubtful if the demand will equal that of former years in this city at least, as slate and metallic shingles are largely taking the place of wood and bid fair to come into more general use. There is constant inquiries for 1¼ flooring, and in the rough it is hard to obtain any large supply. All kinds of hardwood are in fair demand. Prices are ruling low, as compared with pine, although the freight is nearly double that of pine, and cost of hauling and cutting nearly double also, yet a good floor of ash or maple can be put down nearly as cheap as one composed of pine, and the day is not far distant when the owners of hardwood lands will come to the conclusion that their timber and time has been literally wasted.

Mill cull boards and scantling	$10 00
Shipping cull boards, promiscuous widths	12 00
" stocks	13 00
Scantling and joist, up to 16 ft	13 00
" " " 18 ft	14 00
" " " 20 ft	15 00
" " " 22 ft	16 00
" " 24 ft	17 00
" " " 26 ft	18 00
" " " 28 ft	19 00
" " " 30 ft	20 00
" " " 32 ft	21 00
" " " 34 ft	22 50@22 50
" " " 36 ft	24 00
" " " 38 ft	27 00
" " 40 to 44 ft	30 00
Cutting up planks to dry	20 00@25 00
" boards "	20 00
ound dressing stocks	16 00@18 00
Picks Am. inspection	30 00
Three uppers, Am. inspection	35 00@40 00

B. M.

1½-inch flooring, dressed	25 00@30 00
1¼ " " rough	14 00@15 00
1¼ " " dressed	23 00@25 00
1¼ " " undressed	14 00
1 " " dressed	16 00@20 00
1 " " undressed	12 00@14 00
⅞ Beaded Sheeting, dressed	18 00@20 00
Clapboarding, dressed	12 50
XXX sawn shingles, ℔ M	2 75@ 2 90
Sawn Lath	2 25
Red oak	20 00@25 00
White "	25 00@30 00
Basswood, No. 1 & 2	18 00@20 00
Cherry, No. 1 & 2	50 00@60 00
White ash 1 & 2	25 00@30 00
Black ash 1 & 2	20 00@25 00

MONTREAL.

From Our Own Correspondent.

MARCH 27.—The activity in business noted in our last report has continued during the past fortnight with regard to city distribution, and a large number of orders have been executed; but the snow storm of last week, and the usual bad state of the roads at the break up of winter, militated somewhat against the country trade.

Business generally compares very favorably with the corresponding period of last year, and some dealers are expecting that their sales during this month will nearly double those of March 1885.

There are no changes in the quotations to note, but the wholesale men are looking for better prices, and this fact seems to have encouraged contractors and others to secure a large portion of their supplies before the anticipated advance takes place.

The following are the quotations at the yards:—

Pine, 1st quality, ℔ M	$35 00@40 00
Pine 2nd " "	25 00@30 00
Pine, shipping culls, ℔ M	14 00@16 00
Pine 4th quality deals ℔ M	10 00@12 00
Pine, mill culls, ℔ M	7 00@ 9 00
Spruce, ℔M	10 00@13 00
Hemlock, ℔ M	9 00@10 00
Ash, run of log culls out, ℔ M	20 00@25 00
Bass, " " ℔ M	18 00@20 00
Oak, ℔ M	40 00@50 00
Walnut ℔ M	60 00 100 00
Cherry, ℔ M	80 00 100 00
Butternut, ℔ M	35 00@40 00
Birch, ℔ M	20 00@25 00
Hard Maple, ℔ M	25 00@30 00
Lath, ℔ M	1 60@ 0 00
Shingles, 1st, ℔ M	2 00@ 3 00
Shingles, 2nd, ℔ M	2 50@ 0 00

CORDWOOD.

Prices are unchanged:—

Long Maple, per cord	$ 6 00@6 50
Long Birch "	6 00@0 00
Long Beech "	5 00@5 50
Tamarack "	5 00 0 00

OSWEGO, N.Y.

From Our Own Correspondent.

We cannot change quotations. The movement has been larger than usual since our last report; the better grades of lumber have been more in demand, and dealers having good selections have had a good trade. Stocks are very much broken and all are anxious for the opening of navigation to replenish. Collections are rather slow but prospects are fair for a good trade.

Three uppers	$42 00@46 00
Picking	32 00@35 00
Cutting up	24 00@26 00
Fine Common	22 00@25 00
Common	14 00@18 00
Culls	11 00@14 00
Mill run lots	16 00@22 00
Sidings, selected, 1 in	30 00@35 00
" 1¼ in	32 00@36 00
Mill run, 1x10, 13 to 16 ft	16 00@21 00
Selected	21 00@24 00
Shippers	14 00@16 00
Mill run 1¼x10	17 00@20 00
Selected	21 00@30 00
Shippers	14 00@16 00
Mill run, 1 & 1½ in, strips	15 00@18 00
Selected	22 00@30 00
Culls	11 00@13 00
1x6 selected for clapboards	25 00@35 00
Shingles, XXX, 18 in. pine	3 10@ 3 50
XXX Cedar	2 75@ 3 00
Lath 1½, No 1	1 80@ 1 90
No 2	1 00@ 1 25

CHICAGO.

AT THE YARDS.

The *Northwestern Lumberman* of March 27th says:—Despite the railroad blockade at St. Louis and southwestern points, caused by the Missouri Pacific strike, the outward movement of lumber during the past week has been heavy. In fact it is doubtful if in any previous March there was more lumber shipped in one week than there has been during the current one. It is also an encouraging feature that the trade this spring is legitimate, not greatly forced, and the lumber is sold at prices within a narrow and positive range—a condition entirely different from that of last season, when prices were soft and yielding, and almost bottomless. Prices are somewhat higher than the highest last year, which gives some chance for profit on last season's purchases, but are yet too low in view of cargo prices for dry lumber.

The strike on the Missouri Pacific lines, and the blockades at St. Louis, Kansas City, Sedalia, and Atchison have been some hindrance to a speedy delivery of lumber on the lines affected, yet this has not checked trade as much as might have been supposed. Orders have continued to come in and cars have been loaded and sent out. The more serious embargo has been at St. Louis, and has been longer continued than at Kansas City. One heavy shipper to Missouri and southern Kansas points jocosely says that if the glut at St. Louis continues much longer the front end of his train will be in Missouri while the rear will be in his yard—thus hyperbolically indicating how heavy his shipments are in spite of the strike.

On Thursday morning the newspapers stated that the switchman's strike at Kansas City was over, and trains were moving on all lines except the Missouri Pacific. This was good news to shippers, and the vividly appreciated because on Wednesday they had been notified by the freight agents that no more lumber would be taken on the Rock Island and Alton roads. If Kansas City can be kept open, Chicago can get along fairly well, as a comparatively small portion of the aggregate of shipments go by way of the Gould lines, though in the segregate the amount is considerable.

It is probable that current shipments have been stimulated by the fear that has prevailed in the West that the railroad troubles would be long-continued, and that they would spread to other systems than those now effected. In fact the yard dealers here have used this motive in their letters and circulars to their customers and travelling salesmen Be sure that the latter have not failed to use the argument upon the retail yard men; and it is a good one it must be confessed. The trouble is not yet over, though it is hoped that the settlement at Kansas City, the vigorous measures being adopted in Missouri, and the cautionary signals being displayed by his highness, General Master Workman Powderly, may be the beginning of the end of the war.

The heavy drain on stocks since the middle of February has seriously broken up assortments that were not too complete in some particulars when trade went into winter quarters. Twelve-inch common boards, 10, 12, 18 and 20, feet long, are very scarce, some yards being out of them entirely. The same is true of some middle river markets, and dealers on the river are now buying boards here in order the eke out small stocks and keep along with their trade. In dimension there is a great scarcity of 2x12, and a considerable lack of 2x4, 2x6, 2x8, 2x10, and all small, and all long timbers and joists. Fencing is also in good demand, and is running low in numerous yards. Some houses have their assortments so broken up that they report having almost too much trade, for the reason that scalping around the district has become a serious matter, as holders are so firm in their views that buying from neighbors is unprofitable. It is expected that the mills will start rather late this season, and there will be little receiving by lake until May 1st. In fact there is no great surplus of dry lumber at the mills that has not been sold. Of course when the lumber was bought last fall or winter by the larger yards begins to arrive, it will ease the pressure for assortments somewhat, but the purchasers will need the bulk of it to keep up their own shipments. It cannot be seen how their is to be much relief to the scarcity of dry sorts throughout the spring if trade is maintained at its present volume. Home consumption is now calling for a large amount of lumber, and this demand will increase until May 1st, anyway. After that the eight hour movement may check building. Just now nobody can tell just how far railroad strikes may spread, and how complete will be the resulting freight embargo. If the labor storm that is prevailing shall increase until it covers the West, the effect would be disastrous to the lumber trade; if it should fair off distribution would continue in heavy volume.

The demand for shingles has been very large this spring, and the houses that make a specialty of carrying a heavy and diversified stock have done a rushing business in this line. Shingles are shipped in every direction. White cedar shingles are making their way into remote regions. One house ships a shaded a A brand, which is sold at 90 cents here, to Colorado, New Mexico, Arizona and California. Such shingles can be laid down in the Rocky mountain regions for $2.10 a thousand.

Redwood lumber from California is attracting attention among the pine dealers. Recent statements in the *Lumberman* about the low prices at which clear redwood can be delivered here has awakened general attention. Cut rail rates from the Pacific coast have brought the matter to the front. A car load of redwood has been received at the yard of Perley, Lowe & Co, Centre avenue and Twenty-second street. Circulars, with price lists, are being received by the dealers. Agents from the Pacific coast are here or on the way for the purpose of working up a trade in redwood. Considerable of this lumber has already been placed this side the mountains, especially at Missouri river points. If the railroads shall encourage this trade from now onward, a large amount of redwood will be distributed within the coming year in the territory tributary to this city.

Receipts of lumber and shingles for the week ending March 25th, as reported by the Lumberman's Exchange:—

	RECEIPTS. Lumber.	Shingles.
1886	10,380,000	2,073,000
1885	10,501,000	1,402,000

FROM JAN. 1, TO MAR. 25 INCLUSIVE.

	RECEIPTS. Lumber.	Shingles.
1886	64,647,000	15,837,000
1885	57,460,000	11,462,000
Increase	7,187,000	4,375,000

STOCK ON HAND MARCH. 1.

	1886.	1885.
Lumber & timber	519,819,852	557,882,664
Shingles	361,133,190	324,267,100
Lath	73,290,876	60,674,489

EASTERN FREIGHT RATES.

FROM CHICAGO AND COMMON POINTS ON CAR LOAD LOTS OF HARD AND SOFT LUMBER.

To New York	30c.
Boston	35c.
Philadelphia	28c.
Baltimore	28c.
Washington	28c.
Albany	28c.
Troy	28c.
Buffalo and Pittsburgh	17½c.
Shenectady	28c.
Wheeling	17½c.
Suspension Bridge	17½c.
Salamanca	17½c.
Black Rock	17½c.
Dunkirk	17½c.
Erie	17½c.
Toronto	17½c.

LONDON.

The *Timber Trades Journal* of 13th says Messrs. Churchill & Sim were somewhat favored in the matter of attendence, there being a tolerably full room at their sale this week. On Wednesday, especially, most of the benches were occupied, and though the keen north-easter that was blowing keep the passage into Bishopsgate pretty clear, in the sheltered corners members of the trade were noticeable discussing the aspects of the market and the future of prices, those agents who had some yet unplaced stocks to dispose of being on the *qui vive* to buttonhole a country buyer, if any of these somewhat rare visitors just now attracted by the likelihood of getting a little lot or two that would bear the railway charges to this locality happened to be on the spot.

The pitch pine went cheap, only one lot reaching 57s. 6d., really nice logs too, a couple of lots going as low as 50s. Mobile and Apalachicola, however, are not generally so well appreciated as the Pensacola logs. The Quebec waney pine ex Queen of Beauty sold fairly well as things go, but we cannot recollect when £5 has been thought a reasonable figure. The parcel ex Queen of the North went at very low

figures, but the logs were chiefly under 20 feet. If a chivalrous buyer had not come to the rescue, so feeble was the demand that prices would have even faired worse for this description. The lot ex Hispania had to be withdrawn on account of no bidding. The square pine likewise was cheap at the prices obtained. The hardwoods were in better request, though the apparent demand assisted prices but slightly, the bidding lying amongst a few of the leading dealers, these having a limit of their own, which they took care not to exceed.

The Guysborough birch, described as fresh, went wretchedly, but the heavy stock in hand is sufficient of itself to account for the depressed prices, in addition the parcel was not a particularly choice one; nevertheless large dimensioned stuff at 50s. is a rare bargian to those who got hold of it.

The St. John timber was better received, though here again the buyers had it all their own way. The nine pieces of curly at 87s. 6d. read better, but this is a description that is not always come-at-able

The deal portion of the sale began with the Simo planks ex Rosa, which sell at £7 10s., 1st and 2nd yellow deals going at similar prices, and battens 15s. less, fairly good values.

Another of the well sold parcels was Soderham 3rd deals ex Abrota, at £10 10s to £10 15s. The mark O x x H is not the best known out side of London, and accepting them as not representing a leading stock the stagnant state of trade would not warrant much higher. The Skutskar, with which they would about compare, disposed of on the last occasion, went at much the same figures. There was a very large line of battens in this shipment, prices being about at their last level. We noticed 3x8 excited competition when under offer.

The Gefle deals ex Abergrange we consider well sold at £14 10s. for mixed 3x9, and the 3rd £10 15s., with 4ths at £8.

The Sundswall parcel ex Diana was cheap at £12 15s. for the mixed deals, and, though not so well favored in the upper sorts, the room apparently did not make any distinction in the price of the next lower qualities between the Gefle and the higher port.

We consider Sundswall 4th and 5th every bit as good as Gefle; in fact, in many respects, rather to be preferred, leaving out the two leading productions.

The room was a full one on Thursday's sale, and the trade seemed in rather better humor to buy, though with such a long spell of frosty weather and consequent stagnation in the building trade, dealers have no inducement to go in largely, and though in a few instances several lots fell to one buyer, the parcels were mostly distributed over the room. Battens appear to be a drug just now, the natural result of the check building operations have received, and most of the lots were bought speculatively rather than for supplying any immediate demand. We shall not be surprised to find this class of wood improving in price when the present frost disappears, which cannot, in the natural order of things, be much further delayed, that will be the time when those who have bought so cheaply now will reap the benefit.

There is no question that but that stocks now are very heavy, but the late opening of the shipping ports will come to the assistance of the market. We shall be having mild spring weather here to carry off the stuff weeks before the Baltic ports are open. The Swedish lower Gulf deals submitted without reserve were not the same fine stock usually coming from that favorite district, the Gefle ex Hispania being S P, and at £12 5s., though it reads low for 1st and 2nd red, was a fair enough price as things go. The flooring seemed a bit better, but we cannot say the demand took an active turn. A change to mild weather, we believe, would work wonders.

Hewn and sawn the dock deliveries are about 700 standards behind the corresponding week last year. That building has received a serious check by the severe weather is allowed on all hands. The trade seems to consider itself frozen up, and to acquesce in the visitation, jobbing a little here and there, just to keep its hand in, and thinking it useless to attempt to do more till a great thaw comes and melts the ice and the hearts of capitalists at the same time. On Monday, the 8th, the thermometer, in a sheltered situation, stood 20 deg. at 7 o'clock, the lowest of all the winter, and there have been eight to ten degrees of frost at the same hour ever since.

As illustrating the sanguine hopes which influenced many of the trade at the close of last season as to prospects improving with the new year, we may instance the Petersburg boards ex Ebrow sold by Messrs. Churchill & Sim, on last Wednesday, at £5 to £5 5s. per standard. When these goods were first brought in last November, we understood importers refused an offer of £6 10s. to clear the entire parcel of these sizes, some 120 standards 1x4, 4½, and 5, preferring rather than make such a reduction on the holding price of £7 5s. to take their chance of the market later on. From £7 5s. to £5 5s. is a great come down, leaving out of sight the dock rent and brokers' charges; yet we are assured things are rather improving—we may well ask since when?

LIVERPOOL.

The *Timber Trades Journal* of March 13th says:—The arrivals of timber continue very light in quantity, which is a matter for congratulation in the face of the small consumption going on at present. A visit to the docks shows an utter want of life and animation, and very little business is evidently being done, from the bare aspect of the carrying companies, wharves and railway stations.

Much of this depression is no doubt due to the continued severity of the weather, which is still so intense as to put a stop to what small quantity of housebuilding there is in progress.

In consequence of this, the distress amongst the laborers usually engaged in the various timber yards, and in the discharging of timber vessels, is assuming a grave appearance. To alleviate this as much as possible proposals are before the corporations of Liverpool and Bootle to commence public roadmaking and other works, and thus give some employment to those who are in such distressed circumstances,

The building for the forthcoming International Exhibition is making rapid progress towards completion, and happily is causing more work in the local joinery shops, which are now engaged in preparing the fittings for stalls, refreshment-rooms, etc., and this little spurt will be welcomed by a branch of the trade which for a long time past has suffered severely amidst the general depression.

We hear of little doing in arrival business, either for Baltic, Quebec, or pitch pine cargoes, and low as prices are, especially for the latter named goods, there is no disposition to buy ahead, the outlook being in no wise such as to induce prudent buyers to operate.

The freight market, in consequence, is in a dull and languid condition. The present quotations to Liverpool may be put down as follows: from Quebec, 20s. for timber, 45s. to 47s. 6d. per standard for deals; St. John, N. B., 17s. 6d. for timber, 42s. 6d. for deals; White Sea, 42s. 6d. to 45s. deals and boards; pitch pine ports, 29s. hewn, and 80s. to 82s. 6d. per standard for sawn timber and deals.

TYNE.

The *Timber Trades Journal* of March 13th says:—The snowstorm of the past seven days has been an effectual stoppage to all business, and has entirely laid aside all outdoor operations. Every railway leading from or to Newcastle has been more or less blocked with snow, some of them for days together. Your readers at a distance will have gathered from the daily newspapers some idea of the havoc committed and the amount of stoppages all works in progress must have sustained. To give to those at a distance some idea of the total stoppage of trade over the district, it may be remarked that the North-Easter Railway traffic return for the week ending March 6th shows a decrease of £7,733, in merchandise and cattle £14,962, and in minerals £12,650. The total decrease of the year up to March 6th as compared with last year amounts to £75,203, which are certainly most alarming figures to ponder.

No arrivals except a few parcels of hoops are reported from abroad.

A few charters for f.o.w. are reported as concluded during the last few days, but they are very few, the rates averaging about 24s. from Sundswall to Tyne.

Most of the saw mills have been closed the greater part of the week, and the time employed in carting away the huge masses of snow.

GLASGOW.

The *Timber Trades Journal* of March 13th says:—The indications of the state of trade afforded by the auction sales of timber and deals held here within the past week are not encouraging. Of a large catalogue, Quebec timber chiefly, submitted at Messrs. Allison, Cousland & Hamilton's sale at Greenock, on 4th inst., only a small proportion changed hands. The following were the prices:—

		Per c. ft.
Quebec waney boardwood—		
47 c. ft. avg. per log		1s 6d
Quebec yellow pine—		
60 c. ft. avg. per log		1s 1d
Quebec red pine—		
30 c. ft. avg. per log		1s 1½d
Quebec 2nd yellow pine deals—		
11 to 23 ft.	11/16×3	2s 0d

There were offers made for various other lots of timber and deals, but they did not come up to a figure satisfactory to the brokers the goods were withdrawn.

The sale at Yorkhill and Queen's Dock, Glasgow, on 10th inst., by same brokers, was also indicative of a dull state of trade.

Bay Verte spruce deals, 14 ft. 10x3, sold at 9½d. per cub. ft. A varied catalogue was gone over, comprising Quebec and Michigan pine deals, Pictou birch, &c., but failed to elicit bidding, the company showing unusual apathy.

The long-continued wintry weather is hindering outdoor operations and preventing improvement in the wood trade.

Imports during the past week have not been of importance. On the whole arrivals since the year began, chiefly made up at this season of teak and pitch pine, are under those of same period last year.

There has only been one arrival of deals since January—a cargo of spruce from Dorchester, N. B.

ALBANY.

Quotations at the yards are as follows:—

Pine, clear, ₱ M	$55 00@60 00
Pine, fourths	50 00@55 00
Pine, selects	45 00@50 00
Pine, good box	22 00@33 00
Pine, common box	11 00@13 00
Pine, 10-in. plank, each	00 42@00 45
Pine, 10-in. plank, culls, each	00 23@00 25
Pine boards, 10-in	00 28@00 32
Pine, 10-in. boards, culls	00 16@00 20
Pine, 10-in. boards, 16 ft., ₱ M	28 00@32 00
Pine, 12-in. boards, 16 ft	28 00@32 00
Pine, 12-in. boards, 13 ft	28 00@00 00
Pine, 1¼ in. siding, select	40 00@43 00
Pine, 1¼-in. siding, common	15 00@18 00
Pine, 1-in. siding, select	40 00@42 00
Pine, inch siding, common	13 00@15 00
Spruce, boards, each	00 00@00 16
Spruce, plank, 1¼-in., each	00 00@00 20
Spruce, plank, 2-in., each	00 00@00 30
Spruce, wall strips, each	00 12@00 12
Hemlock, boards, each	00 00@00 14
Hemlock, joist, 4x6, each	00 00@00 32
Hemlock, joist, 2½x4, each	00 00@00 14
Hemlock, wall strips, 2x4, each	00 00@00 11
Black walnut, gook, ₱ M	100 @120 00
Black waluut, ⅝ inch	80 00@90 00
Black walnut, ¾ inch	00 00@85 00
Scaymore, 1-inch	28 00@30 00
Scaymore, ⅝-inch	21 00@23 00
White wood, 1-inch and thicker	38 00@40 00
White wood, ⅝-inch	28 00@30 00
Ash, good, ₱ M	40 00@43 00
Ash, second quality, ₱ M	25 00@30 00
Cherry, good, ₱ M	60 00@85 00
Cherry, common, ₱ M	25 00@30 00
Oak, good, ₱ M	40 00@43 00
Oak, second quality, ₱ M	20 00@25 00
Basswood, ₱ M	25 00@30 00
Hickory, ₱ M	40 00@40 00
Maple, Canada, ₱ M	28 00@30 00
Maple, American, per M	26 00@28 00
Chestnut, ₱ M	38 00@40 00
Shingles, shaved, pine, ₱ M	0 00@ 6 50
" 2nd quality	0 00@ 5 00
" extra, sawed, pine	4 30@ 4 50
" clear, "	0 00@ 3 00
" cedar, mixed	0 00@ 3 30
" cedar, XXX	0 00@ 0 00
" hemlock	2 25@ 2 37
Lath, hemlock, ₱ M	0 00@ 2 13
Lath, spruce, "	0 00@ 2 25

BUFFALO.

We quote cargo lots:—

Uppers	$45 00@46 00
Common	17 00@18 50
Culls	12 50@13 00

TONAWANDA.

CARGO LOTS—MICHIGAN INSPECTION.

Three uppers	$42 00@44 00
Common	18 00@24 00
Culls	10 00@13 00

WINNIPEG.

The Winnipeg *Commercial* of March 22nd says:—There has been at last some indications of returning life in the lumber trade, though the actual movement has not yet assumed any decided proportion. The improvement noted has been principally in enquiries, which goes to show that contractors are now on the alert and making their calculations for the coming season's work. Dealers expect a fair trade to set in soon and with the steadier and firmer prices now ruling, together with the reduction in the supply, a more prosperous season may be looked for.

BOARD OF TRADE RETURNS.

The following are the returns issued by the Board of Trade, for the month of Feb. 1886; and also for the two months ending Feb. 1886:

MONTH ENDED 28TH FEB., 1886.

Timber (Hewn).	*Quantity. Loads.*	*Value. £.*
Russia	157	1,253
Sweden and Norway	23,038	31,026
Germany	1,386	5,127
United States	7,525	22,356
British India	213	2,425
British North America	471	1,911
Other Countries	44,412	44,496
Total	77,202	108,644
Timber (Sawn or Split, Planed or Dressed).		
Russia	1,204	1,642
Sweden and Norway	11,998	26,718
United States	17,191	45,417
British North America	1,596	4,146
Other Countries	1,378	5,729
Total	33,367	83,653
Staves, (all sizes)	2,673	12,943
Mahogany (tons)	3,804	29,488
Total of Hewn and Sawn	110,569	192,297

TWO MONTHS ENDED FEB. 28TH, 1886.

Timber (Hewn).		
Russia	964	5,073
Sweden and Norway	41,036	57,911
Germany	2,617	8,172
United States	15,807	53,867
British India	3,819	50,442
British North America	1,859	5,651
Other Countries	72,799	91,446
Total	138,901	272,562
Timber (Sawn or Split, Planed or Dressed).		
Russia	4,844	8,417
Sweden and Norway	33,785	75,119
United States	26,042	71,002
British North America	8,906	18,128
Other Countries	2,945	12,163
Total	76,522	184,829
Staves (all sizes)	7,338	41,582
Mahogany (tons)	6,475	53,338
Total of Hewn and Sawn	215,423	467,391

WOOD-WORKING PATENTS.

The following list of patents relating to the wood-working interests, granted by the United States Patent Office, March 16th, 1886, is specially reported by Franklyn H. Hough, solicitor of American and Foreign patents, 925 F. Street, N. W., Washington, D. C.

338,104—Rafting logs, &c.,—H. R. Robertson, St. John, New Brunswick, Canada.

338,005—Saw, drag—I. B. Warren and C. M. Potter, Waucoma, Iowa.

337,912—Saw machine, band—D. K. Allington, East Saginaw, Mich.

338,017—Saw mill, band—H. R. Barnhurst, Erie, Pa.

338,170—Saw mill, band—A. F. Griswold & & H. R. Barnhurst, Erie, Pa.

338,124—Saw mill, reciprocating—W. M. Wilkin, Erie, Pa.

338,125—Saw mills, saw sash for—W. M. Wilkin, Erie, Pa.

337,947—Sawing machine, circular—D. A. Greene, New York, N. Y.

PATENTS ISSUED MARCH 23.

338,669—Log turner—W. Ingalls, Mobile, Ala.

338,334—Lumber, device for binding together—J. T. Barber, Hanibal, Mo.

338,440—Lumber dryer—P. B. Raymond, Indianapolis, Ind.

338,570—Plane, bench—J. A. Traut, New Britain, Conn.

338,434—Saw mill set works—A. I. Loop, North East, Pa.

338,434—Saws, machine for rolling—L. O. Orton, Philadelphia, Pa.

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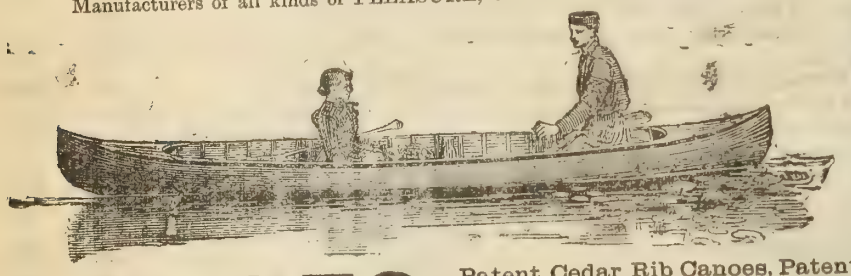

CANOES

Patent Cedar Rib Canoes, Patent Longitudinal Rib Canoes, Bass wood Canoes, Folding Canoes, Paddles, Oars, Tents, etc., etc,

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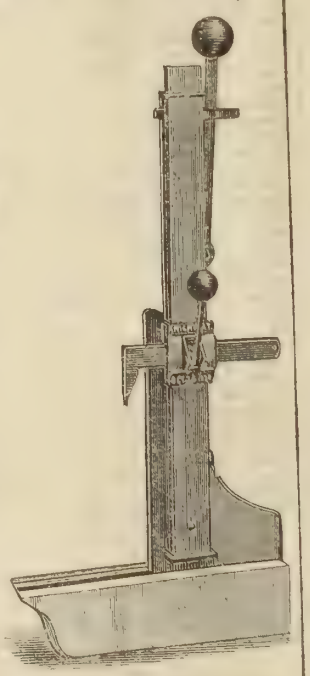

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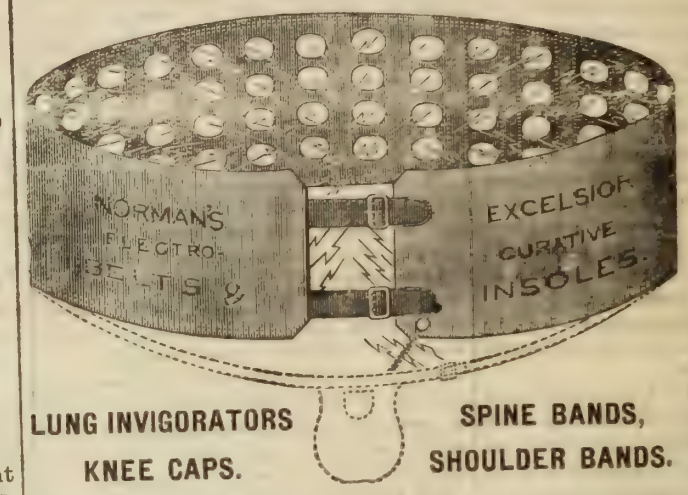

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Sisters of Charity

Charity, attached to St. Mary's Infant Asylum, Dorchester, Mass., certify to the inestimable value of Ayer's Sarsaparilla in the treatment of sore eyes and skin diseases, among the many unfortunate children under their care. Mrs. S. D. Bodwell, Wilmington, Mass., writes concerning the treatment of her daughter, who was troubled with sore eyes, as follows: "I gave Ayer's Sarsaparilla to

My Little Girl,

and must say that she never took anything that helped her so much. I think her eyes never looked so well, as now, since they were affected, and her general health is improving every day. She has taken but half a bottle." A. J. Simpson, 147 East Merrimack st., Lowell, Mass., writes: "My weak eyes were made strong by using Ayer's Sarsaparilla." C. E. Upton, Nashua, N. H., writes: "For a number of years I have been troubled with a humor in my eyes, and was unable to obtain any relief, until I commenced using

Ayer's Sarsaparilla

saparilla. I believe it to be the best of blood purifiers."

may be "fairest and foremost of the train that wait on man's most dignified and happiest state," but the dignity and happiness of man cannot long endure without the health that may be obtained in a few bottles of Ayer's Sarsaparilla. A. W. Parker, lumber dealer, 209 Bleury street, Montreal, Que., writes: "After being troubled with Dyspepsia for a year, and with Salt Rheum

For a Number of Years,

I was cured of both diseases by using six bottles of Ayer's Sarsaparilla." M. G. Traine, Duxbury, Mass., writes: "I have found Ayer's Sarsaparilla an efficacious remedy for bilious troubles and Dyspepsia." Henry Cobb, 41 Russell st., Charlestown, Mass., writes: "I was completely cured of Dyspepsia, by the use of Ayer's Sarsaparilla." Wm. Lee, Joppa, Md., writes: "I have tried Ayer's Sarsaparilla, and it has done me so much good that I shall always regard it as the best of blood purifiers." Eminent physicians prescribe Ayer's Sar-

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in all cases requiring a powerful alterative treatment.

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2. It is devoted to the development and utilization of our forest wealth.
3. It furnishes complete and reliable quotations of prices of lumber in all the leading markets.
4. Its columns are filled with interesting reading matter, valuable alike to the land owner, manufacturer or dealer.
5. It costs only $2.00 per year to have it sent, post-paid, to any address in Canada, and no land owner, lumber dealer, manufacturer or individual in any way connected with timber industries, can afford to do without it.

☞TO ADVERTISERS.

It has a circulation among saw mill owners, manufacturers, lumber and timber dealers and all classes connected with the timber business.

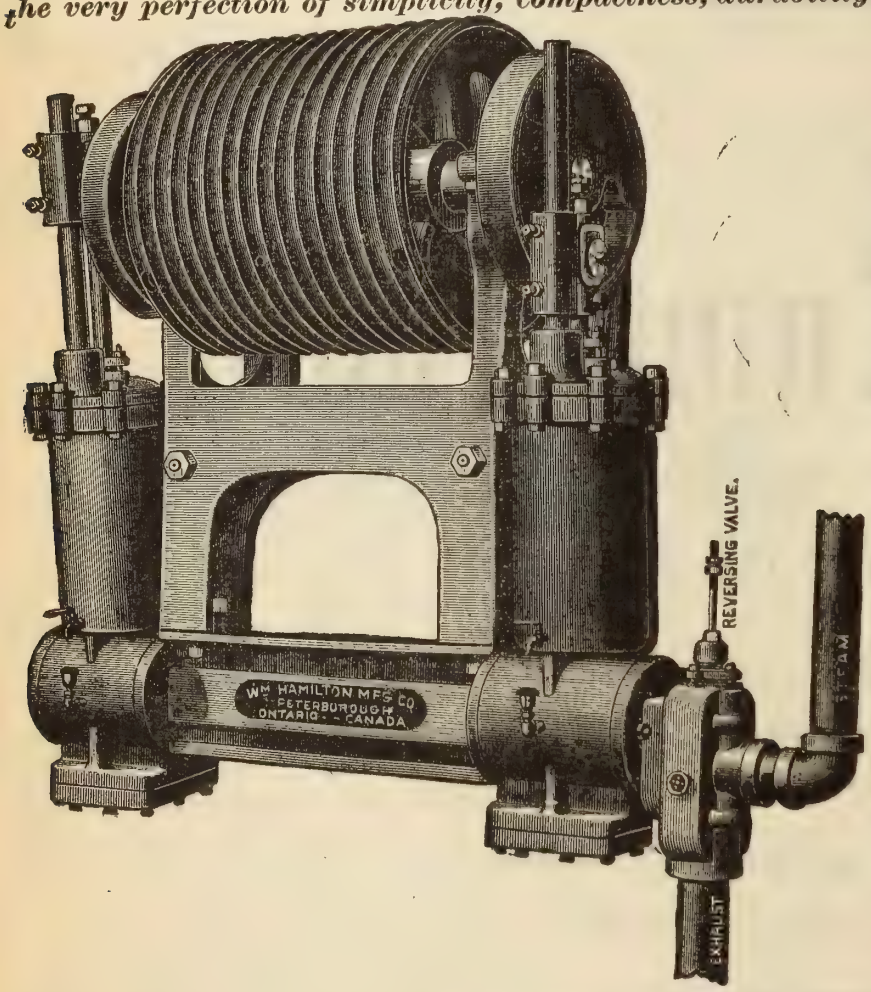
Examine the field, count the cost, and you will at once decide that the CANADA LUMBERMAN is the

———CHEAPEST, BEST, MOST RELIABLE and ONLY TRUE MEDIUM———

for placing your goods or wares before the saw-mill men and lumber and timber dealers of the Dominion.

CUNNINGHAM'S
PATENT OSCILLATING TWIN ENGINE
FOR STEAM FEED IN CIRCULAR MILLS WITH RACK OR ROPE.

This Engine has practically but two moving parts, aside from cranks and shafts. The whole array of eccentrics, valves, valve rods, connecting rods, cross heads, slides, levers, rock shafts, bell cranks, etc., is done away with, and the very perfection of simplicity, compactness, durability and cheapness attained.



The above engraving illustrates the Twin Engine, 10x16, for Rope Feed, for Saw Mill Carriages. The spool is 27 in. diameter, 30 in. face, is grooved 2 in. pitch for 1½ in. rope. The shaft is steel, 4½ in. diameter, with disk cranks. No connecting rods, eccentrics or valve rods to get loose and out of order. The ports are in the trunions, and worked by an oscilliation of the cylinders, and are held in their place in the downward motion by a steam cushion below. The sawyer's valve is a perfect balance, and by moving this valve the engine can be reversed, stopped or started almost instantaneously if necessary, as the sawyer has perfect control of it by his lever either to go fast or slow. Should the sawyer let go of his lever either by mistake or any other cause, it is balanced so that the valve will come to the centre and cut the steam off both cylinders and stop the feed. When standing, the lever is locked or fastended, so that is is impossible for it to start off itself. The engine stands upright below the carriage, and bolted to two upright beams, placed on the mill for the purpose. When a rack is preferred in place of the rope, we put on a steel wheel 30 in. in diameter, and the engine placed high enough to work into the rack on carriage bar, or if the beams come in the way, an idler wheel can be used between engine and rack segs; or, the engine can be placed at a distance and have a shaft from it to the carriage; or it can be placed in the engine room, where it is under the control of the engineer for oiling, thence by shaft and pinion to carriage rack bars. These engines are well adapted for cutting long logs, or where the logs are mixed, the advantage of this feed will be apparent to mill men. When the carriages are used in two or more sections, the couplin and uncoupling of each section is quick and simple.

There were two of these feeds working this summer and giving the best of satisfaction, one with rope feed at James Playfair & Co's Mill, Sturgeon Bay, near Waubaushene, and one at the new mill furnished by us to Francis Carswell & Co., at Calabogie Lake, on the Kingston and Pembroke R. R. This mill is working with the Rack and Pinion feed, and drops from fifteen to seventeen stock boards per minute. We have also sent one to the Rathbun Company, Deseronto, to put in to feed their heavy Circular Mills. They will also commend themselves for various other cases, especially for running Elevators, hoisting Engines, and wherever a simple and easily reversible motion is required.

We would also call attention to our Improved Hand Saw-Mill for cutting logs

☞ *We guarantee this to be the best Mill of its kind got up, and would ask any one wanting a good Band Saw-Mill to communicate with us. We would also call the attention of Mill Men to our new IRON GANGS, CIRCULAR MILLS and MILL MACHINERY. For further information, prices, &c., address the Manufacturers,*

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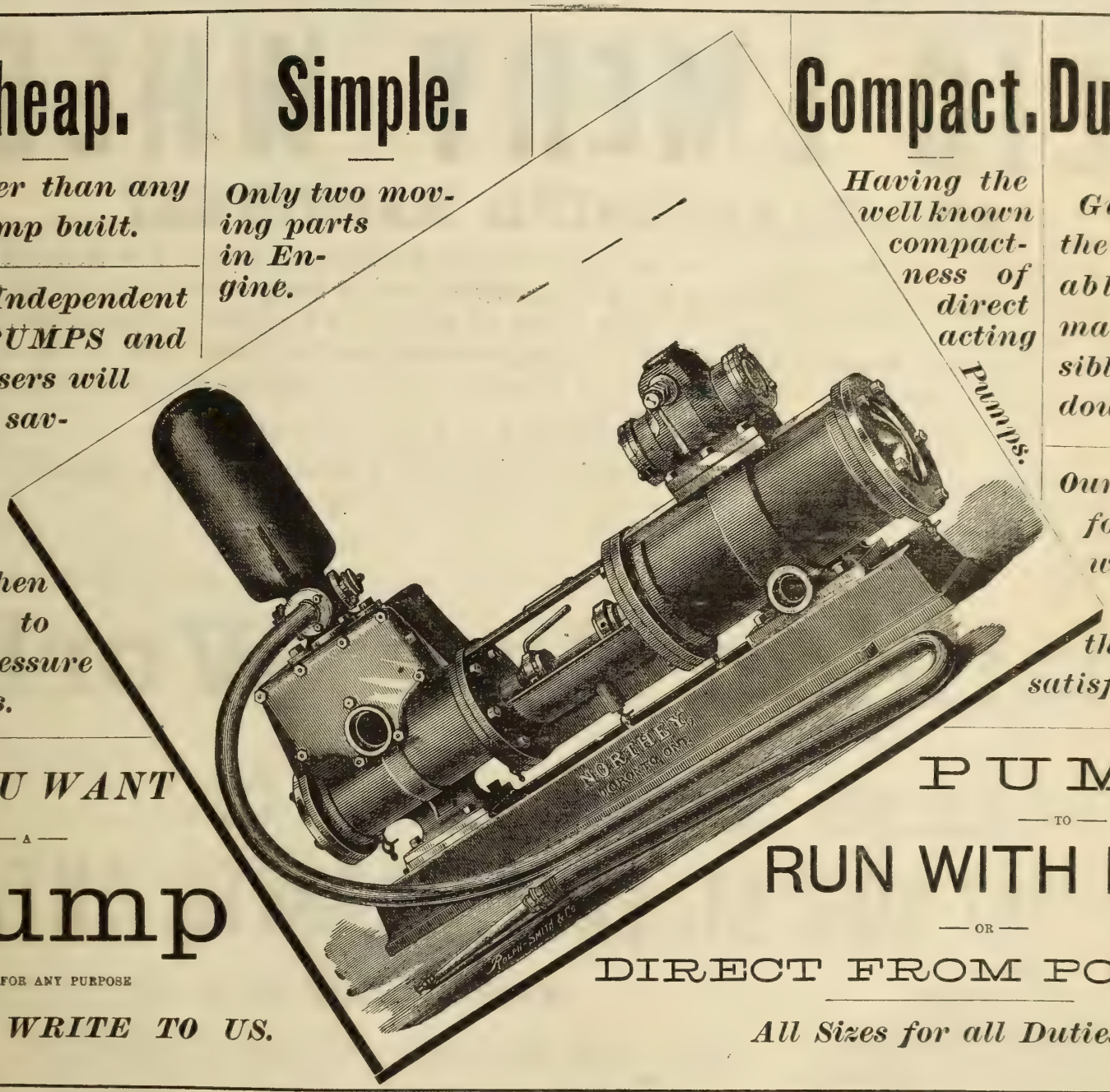

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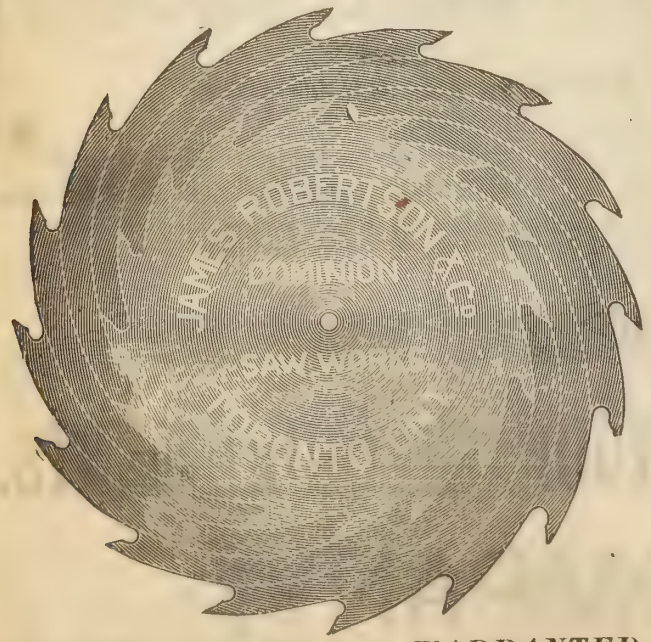

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VOL. 6. PETERBOROUGH, ONT., APRIL 15, 1886. NO. 8.

THE OUTLOOK FOR VESSELS.

The Kingston, Ont., *Whig* of a recent date says:—

There is considerable difference of opinion in regard to the opening of navigation and the marine trade. Some vessel men do not think the outlook is all bright, or that business will increase as the season advances. There are others who say that the vessels will be kept moderately busy, that there will be considerable freight to handle, and that some thing like living rates will be paid. Already in American ports the indications are favorable, and charters at Chicago are higher than they have been at this date in three years. "I know for a fact," said a vessel owner, "that Dunham's fleet have been chartered, some to go to Georgian Bay and some to go to Buffalo. The rate to Buffalo is 5½ cents per bushel on wheat, a figure higher than has been paid in very long time. I am also told that higher figures have been obtained by other vessels. A few days ago I read that charters to Oswego at 5½ cents per bushel was refused. That was higher than the rate paid during the whole of last year. Another thing I know, that more vessels have changed hands in Chicago and Detroit during the past three weeks than have changed in as many years previously."

The ore trade promises well. More furnaces are going in the States now than heretofore, and of course the best Canadian ore will be in demand. Considerable of the article will be shipped from Kingston. Vessels that have received only 70 cents per ton for carrying ore from Escanaba to Ohio ports have been chartered this year at $1.10 per ton. There will also be a good deal of phosphate handled here. Some of it will be carried across the lake, while considerable will go to Montreal en route to Europe.

Of lumber the sales have eclipsed those of many previous years. More lumber will be sent from Ottawa to Oswego by the Rideau Canal than ever before. Then there will be a good business in posts and ties. As far as square timber is concerned, much of that which came from upper lake ports will be carried by steam barges and consorts. Sailing vessels are not now given much of this freight. "The steam barges can handle it cheaper than we can, said a well-known captain. "Ten years ago a timber dealer would charter 100,000 cubic feet for a schooner, which would keep her busy the whole of the season; but now they can get that quantity handled at one trip by the barges and their consorts, and get the stuff to market early in the year." A vessel-owner has chartered his craft from Toledo to Kingston for four loads of timber at $50 per M cubic feet. This a remarkable low rate. "I imagine," said captain Booth, who was seen after the others had spoken, "that the marine business will be quick after navigation opens."

The longshoremen of Oswego have fixed the following sechudle of rates for handling cargoes: All vessels and barges of 300,000 feet capacity and over, 25 cents per thousand for the entire season; all barges and vessels under 300,000 feet capacity, 20 cents per thousand until August the first; after August 1st, 25 cents per thousand; shingles, four cents per thousand; lath, five cents per thousand; timber, board measure, 35 cents per thousand; hop poles, $3 per thousand; heading, 15 cents per thousand; hardwood 30 cents per thousand; posts, 30 cents per cord; stave bolts, 35 cents per cord; blocks, 30 cents per cord; cedar ties, 1½ cents apiece; all other ties 2 cents apiece; telegraph poles five cents each. Captains here, who have examined the list, say that the rates are such that they cannot pay, and they advise that in handling timber, etc, the contracts be made f.o.b. in and out, thus letting capital and labor fight the thing out.

Mr. Davis' shipyard is a busy one. The steam barge Freemason has been remodelled as to upper works; two steam yachts are being finished, to be ready for service in May. One of them is for Mr. Miller's use at Peterborough. A large sail boat has been built for Dr. Clarke The yacht Laura has been lengthened and in part remodelled.

The str. Rideau Belle has been lengthened 16 feet, giving room for an addition of four state rooms and a ladies' cabin. A compound engine, from a Detroit model, being manufactured for her by McEwen & Son, of Kingston, will greatly increase her speed, and make her more popular than ever. She will run to Smith's Falls on the Rideau, connecting with the steamer Olive for Ottawa and Montreal, thus making a through line on a most picturesque route. Captain Noonan, of the Rideau Belle, will make it very pleasant for passengers and tourists. He will be assisted by Captain Fleming, formerly of the steamer Gypsy.

At Breck & Booth's wharf considerable repairs have been made to the schooner F. J. King. She has been altered from a two-masted to a three-masted vessel. New decks have been added, and such other improvements made as will make her a first class vessel. The cost has been about $3,000. The schooner Jessie H. Breck has also been overhauled and repaired and will come out with a new suit of canvass. Her old sails were destroyed by the fire in Lewis' chandlery store. Captains of the vessels are: King, Capt. Griffin; J. H. Breck, Capt. E. A Booth, jr. The schooner Breck will clear as soon as the ice disappears, for Oswego, where she will load coal for Hamilton, bringing back a cargo of timber.

Extensive repairs have been made to the schooner W. R. Taylor. She has new decks, deck frames and other needed requirements. About three thousand dollars have been expended upon her. The schooners White Oak and Herbert Dudley have also undergone needed repairs.

The expenditure in fitting up the steam barge Tecumseh and her consorts, the M. C Cameron and Cavalier, will reach over $6 000 The work has been under the supervision of Capt. Theo. Allen. The officers of the crafts are:—Tecumseh, Capt. Manson; M. C. Cameron, Capt. J. Miller; Cavalier, Capt. Anderson.

The captains of the other vessels in port are: Schooner Annandale, Capt. Patterson; schooner Folger, Capt. Dandy; schooner Grantham, Capt Simmons; schooner Oliver Mowat, Capt J. Saunders; schooner Herbert Dudley, Capt. J. Parsons; schooner White Oak, Capt. Joseph Dix; schooner W. R. Taylor, Capt. James Dix.

Capt. R. Coutts, of Bowmanville, has been engaged to command the schooner Acadia Capt. Wellbanks, who was in command last year, has opened a lumber and coal yard at South Bay.

A Montrealer will ship over 1,500 tons of iron to the west. The iron will be brought to Kingston on barges and transhipped for its destination into vessels.

A REMARKABLE LUMBER RAFT.

The St. Louis *Globe-Democrat* says:—The only raft of lumber that ever ran from the mouth of the Wisconsin river through to New Orleans was started in June, 1867. There was 1,100,000 feet in the raft. It required over two months to complete the trip, and cost the owners over $1 500 aside from the cost of pilots which was nearly $500. There was a change of pilots three times—one running from Wisconsin to St. Louis, one from St. Louis to Vicksburg, and one from there to New Orleans There was a crew of thirty men upon the raft, and they slept and took their meals on the fleet. Thousands of people viewed the raft after it had passed Vicksburg, for the people that far south had never seen a raft of such mammoth proportions, and long before it reached the Crescent City it was known as "the floating city." At New Orleans several tugs with city officials aboard and many prominent citizens came out to meet the fleet. A peculiar fact about this raft was that, after it was taken out on the bank at New Orleans, there was a sudden sharp advance in lumber figures at St Louis, and the owners concluding that they could make more money out of it here than at New Orleans, had it brought back on barges and cars at a greater loss than it was sent down for.

THE Michigan vessel men are endeavoring to form a combination for the purpose of delaying the shipping of lumber until what they regard as a remunerative price for freight shall be offered.

PECULIAR LUMBER SHIPMENT.

A Cumberland county, Nova Scotia, lumberman is engaging in a novel enterprise. He proposes to take about 3,000,000 superficial feet of piles, logs, spars, hardwood timber and boards to New York in the form of an immense raft. The dimensions are: Length, 410 feet; width, 55 feet; depth, 35 feet; and it will draw 21 feet of water. It is being built upon a well constructed cradle which will be launched with the raft and removed from it in the water, leaving the raft with the chains and binders to support itself. It is torpedo shaped at the bow and stern, and a cross section amidships will be in the form of an elipse. It will, when completed, weigh 8,000 tons The weight is so distributed over the four sets of launchways as to exert a pressure of eighty pounds to the square inch, which is about two-thirds the pressure allowable on ordinary launchways. When completed the cost will be about $20,000.

It is proposed to tow the raft to New York by an "ocean tramp" or by two tugs as soon as lauched, which is expected to be midsummer. There have been occasional lots of spruce piles fastened together and towed to Boston or New York but they have been very small compared with the proposed raft and inquiry among Boston dealers fails to reveal that any shipment approaching anywhere near the size of the one psoposed was ever before known.—*Ex.*

"WORTHLESS" LUMBER.

Furniture makers are to-day using lumber which was called worthless ten years ago. Whitewood or poplar is used in immense quantities. The growing scarcity of our natural supply of lumber leads manufacturers to experiment with so-called "worthless" varieties. Cypress is working into favor for architectural finish, and we would not be surprised if some enterprising manufacturer should come out with a most desirable piece of furniture, possessing a delicate, finely marked grain, and yet consisting of nothing but unpretentious cypress. Hard pine makes a nice looking job when finished in good shape, but has the serious objection of being full of pitch. Cypress has much the same appearance as hard pine, but the pitch is happily absent The wood commonly known as "gum" has been successfully utilized. It being worked into a great many forms, despite its well known warping qualities, which are represented as being so great that the lumber "will not stay in the same county two successive nights." We are informed that picture frames have been successfully made of gumwood, and rumour adds that the very qualities that have hitherto condemned it have been utilized in the manufacture of self-rocking cradles.—*Building.*

Subscribe for the CANADA LUMBERMAN.

EFFECT OF SALT IN WATER.

It is well known that a salt dissolved in water raises its boiling point. A saturated solution of common salt boils under atmospheric pressure at between 227° and 228° Farenheit, instead of 212° as fresh water would have done. It was now an open question what the temperature of the steam or vapor which comes off from this brine will be. Some authorities claim that being in all respects like the steam from fresh water it will have the temperature of common steam at the atmospheric pressure, i. e., 212°, while others claim that the steam will be at the temperature of the boiling brine, and hence superheated or above the temperature due to its pressure.

It is obvious that at the instant of formation the steam must be at the temperature at which the solution boils. The increased cohesion of the molecules of water due to the solution of salt, requires more heating to separate them and the temperature, at which their cohesion is overcome, and they take the form of steam, is raised. Starting with the temperature of the solution, 228°, the bubbles of steam pass up through the hot brine, certainly losing none of their heat, for the brine is at their own temperature, and are freed at its surface. Now when these bubbles of steam appear at the surface of the solution from which they are generated, and fill the steam space of the vessel in which it is contained as fresh steam of atmospheric pressure, what becomes of the extra heat which it contains? A portion of it will be rendered latent in the evaporation of entrained water in the steam, a portion will be radiated from the walls of the vessel, but the steam will show a temperature considerably above 212 degrees, i.e., it will be a considerable degree superheated.

A florence flask holding a litre was filled with a saturated solution of common salt. By the application of heat the temperature was raised to nearly 258°, when violent solution took place, and a thermometer whose bulb was immersed in the brine became stationary. The long neck of the flask was by a cork having two holes, one for the thermometer and the other of a size sufficient to allow the steam to escape freely. This neck and that portion of the flask above the water line were therefore full of steam at the pressure of the atmosphere, and by drawing the thermometer out of the brine and allowing it to remain in the steam the diminution or increase of temperature could be noted. In every instance in which this was done the temperature fell from nearly 228° in the brine to 221° in the steam, no noticeable variation in the figure occurring with the change of position of the bulb in the neck between the lowest point which the water could not boil up upon it, and the highest position to which it could be raised in the neck.—*Boston Journal of Commerce.*

SOME REMARKABLE TREES.

In Madagascar is to be found a tree called the traveller's tree, yielding a copious supply of fresh water from its leaves. As it will thrive in any arid country where planted, its benefits to the traveller are great.

In Venezuela there is the cow tree, which grows on otherwise barren rocks. Its leaves are feathery and crisp, but by making incisions in the trunk a peculiar greyish milk comes out, which is tolerably thick and of an agreeable balmy smell. The natives gather around these trees at sunrise and bring large bowls with them to receive the milk, for towards mid-day the heat of the sun turns the milk sour. The sight of cow trees puzzles the innocent traveller, who cannot account for the trunk being plugged up all over with bungs and short sticks. The natives also use the milk as a gum.

The butter tree was first discovered by European travellers in the centre of Africa; from the kernel of the fruit is produced a nice butter, "which," says Livingstone, "will keep a year." On a par with this is the Manna tree, found in Calabria and Sicily. In August, when it is the custom to tap the tree, a sap flows out. It is then left to harden by evaporation, after which the manna, of a sweet but somewhat sickly taste to any but those accustomed to it, may be gathered. In Malabar there is the tallow tree. From the seeds of this, when boiled, is produced a firm tallow, which makes excellent candles. The guava tree of the Indies bears a fruit giving large quantities of a rich and delicious jelly.

But the most remarkable tree yet discovered flourishes on the island of Fierro, one of the largest of the Canary group. The island is so dry that not even a rivulet is to be found, yet there is a species of tree the leaves of which are narrow and long and continue green throughout the year. There is also a constant cloud surrounding the tree, which is condensed and falling in drops keeps the cisterns placed under them constantly full. In this manner the natives of Fierro obtain water, and as the supply is limited the population must of necessity be limited too.

In Japan and some islands in the Pacific there is the camphor tree. The camphor forms in the trunk of the tree in concrete lumps, and some pieces have been found as thick as a man's arm.

The sorrowful tree is found only in the island of Goa, near Bombay, and is so called because from morning until the time of sunset no flowers are to be seen, but soon after it is covered with them. As the sun rises the petals close or fall off. Stranger still, the flowers blossom at night all the year round and give out a most fragrant ordor.

There is another curious tree in Jamaica known as the life tree, on account of its leaves growing even after severed from the plant. Only by fire can you entirely destroy it.—*Lumber World.*

LINDSAY.

A Long Run.—About the 15th of April Mr. J. Coburn, well known as the oldest foreman in timber circles in this district, expects to leave with a force of seventy men, to bring down logs and timber for Rathbun & Co., Deseronto. The logs come from Deer Lake into Crow river, thence to Crow Bay, on the Trent river near Campbellford; and thence to Bay of Qunite at Trenton. The timber passes through Haliburton, Peterborough, Hastings, Northumberland and again Hastings, to Bay Quinte—a long run.

Factories and Workshops.—We have been 'looking around" to see what factories in addition to those already here would pay in Lindsay. Our people should not look forward to gigantic industries in many departments similar to Sylvester Bros' works; but there seems ample room in the fertile belt that lies between Lakes Simcoe on the west and Pigeon on the east and the "Pine Ridge" on the south and Nipissing district on the north to guarantee the support of other moderately large factories. Tin lined butter tubs, cheese boxes, woodenware, sewing machines, felt and leather boots and shoes, buttons, besides a dozen and one other industries might readily command an unlimited market at home. Let some of Lindsay's citizens with latent wealth invest their surplus capital and thus improve their own and their town's future. Efforts should also be made to induce the Grand Trunk to increase their workshops here. As a rule railway men are good citizens and add wealth to a town.—*Warder.*

Mr. Ralph Maxwell has completed his winter's bush work, broken camp and is now at the Cataract House. He has got out upwards of 75,000 feet of fine board timber for his father, Mr. F. P. Maxwell, of Toronto. It has been hauled onto the ice on Pickerel Lake and boomed, ready for the break-up. This fine lot of timber will be floated to Burk's Falls and shipped to Collin's Bay, near Kingston, via the Northern and Pacific Junction to Toronto, and by rafting to Collins Bay. If the railway is not ready to receive and carry freight in time, the timber will go the old route via the Maganettawan river to Byng Inlet, where it will be barged and taken through the Georgian Bay, Lake Huron, the St. Clair river, Lake St. Clair, Detroit river, Lake Erie, thence through the Welland canal, Lake Ontario to Collins Bay. Mr. John Wagner, Mr. Maxwell's clerk, says the winter has been a favorable one for the bush and that the timber they have taken out is of a very fine quality.—*Burk's Falls Arrow.*

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do	*July 13th,*	*do*	*November 2nd,*

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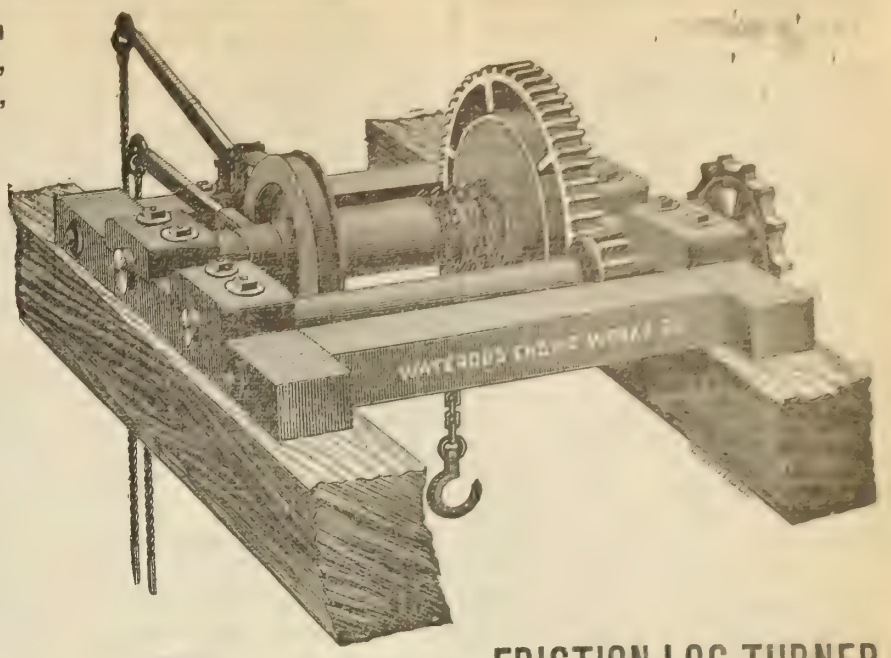

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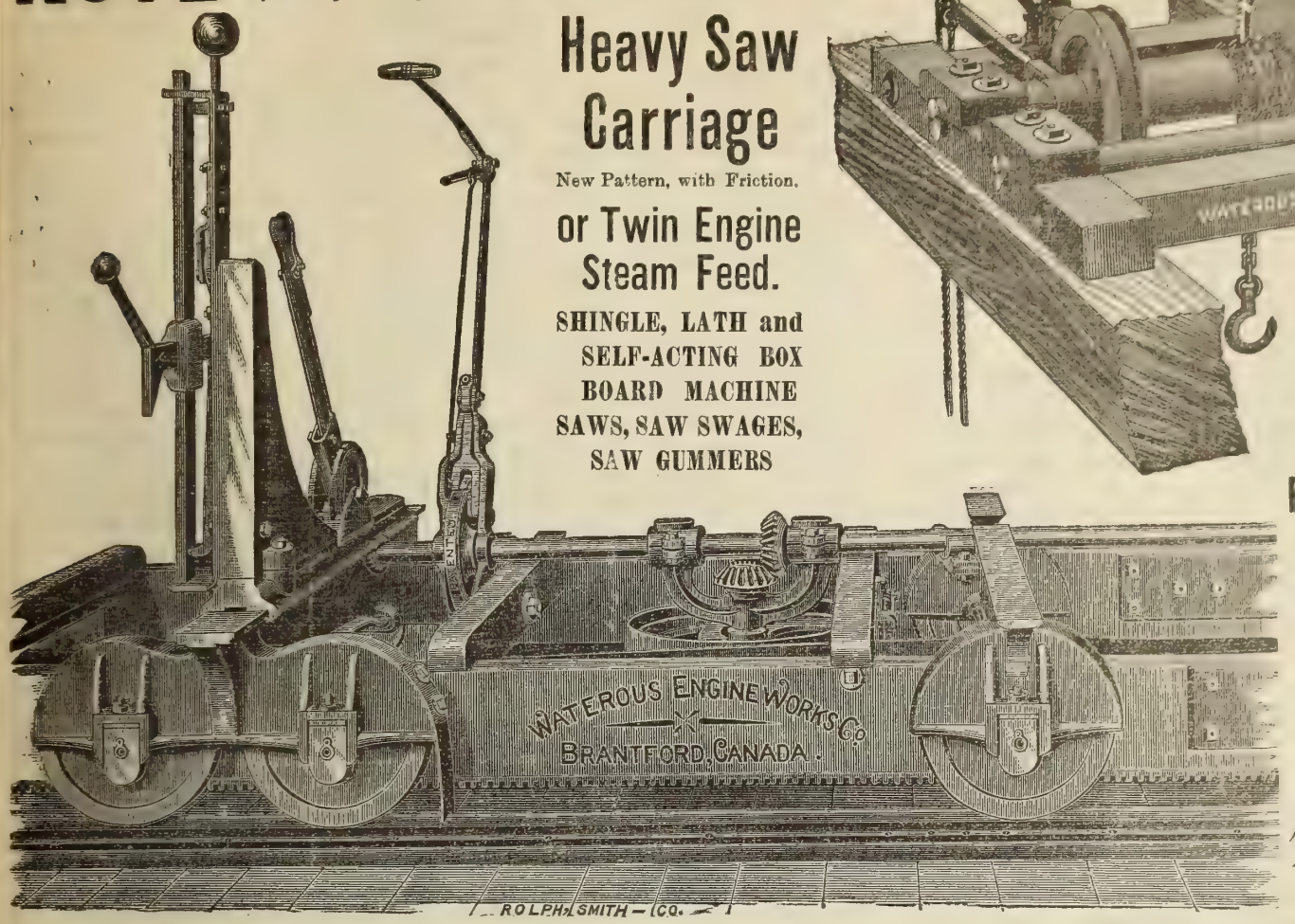

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FILING SAWS—THICK AND THIN SAWS—PITCH AND NUMBER OF TEETH.

The circular saw to-day is a tool that few have mastered. There is a vast difference between the kind of saws required for small mills and those needed for large, fast-cutting mills The great trouble with most circular saws is that they have too much set. Some 8 gauge saws have 5-16″ set. This requires 25″ more power, and the constant strain on the saw tends to buckle it, for it has no support, as the space between the saw and the log is 3-32″, and this allows the saw to bulge that much betwixt the teeth and the centre, which will soon cause it to buckle or dish. But the worst evil of all is that the saw kerf is nearly as great as if not more than the thickness of the plate, so most of the dust that is cut out by the set is allowed to pass down between the side of the saw and the log, and this heats the rim. It is clear that 5-32″ cannot carry 9-32″ ahead of it when the tendency is for the tooth to press through the dust. Saws that are sharpened on an automatic sharpener overcome this difficulty to a great extent, as the throats are kept square and the edges sharp. But we cannot afford to sharpen a pony mill by the automotic device, and the saw throat does not wear so much, as it carries only about two inch feed. This kind of saws should be gummed but little, but the operation should be performed very often to prevent gumming, as they always dread it, some mill men make the teeth 2″ long instead of 1¾″, and consequently the saw brings dust enough back to keep the sawyer and tail sawyer covered. If his teeth were 1¾″, the saw would be all right when it came from the gummer. It should be about an 8 gauge 56″ saw with 36 teeth, with as much pitch as possible.

For this mill the sawyer wants a good upset, not a good sawyer and a bad upset, and as the upset is used in nearly all mills of larger capacity I will state how it ought to be employed. The upset should fit the tooth exactly, and the first blow must be lighter than the rest, so as to guard against a break. The swage should not be held too far over or too near the operator, as the result will be a broken corner or point, or the saw will be out of round. Great care should be taken in holding it square across and level, otherwise, when the front is filed square, the tooth will be at an angle, and to overcome this there must be as much filing on the back as on the front to get the tooth square, and then the set is nearly all gone, so more swaging must be done. Probably the next tooth will be swaged better, and it will then be longer. Such work with an upset fractures many corners and weakens others so that before the first log has been sawed they break, then the saw maker and the upset are blamed. If the upset had been properly used the teeth would not have been broken. A few strokes of the file are sufficient and a light touch on the back, then side-file, and the saw is ready for work so far as filing goes. I am speaking to show the difference in the way saws are managed, I know plenty of just such sawyers, and their employers are no better.

A sawyer recently came into the mill I am connected with, and I happened to meet him in the yard, we were strangers, but being "brothers" soon got acquainted. Going over to the mill we passed a lot of newly sawed boards 12 feet long, and on seeing them my companion stopped me, looked at them, turned one over, put on his spectacles, looked again rubbed his hand over the board and then said to me:

"You carry pretty good feed."

"Sometimes we do," I answered.

"Yes," he said, "you were cutting over a 12 foot feed when you sawed these."

"Oh, no," I answered, "that's beyond all reason."

"No," he replied, "I have never been in a mill yet where I could not tell the feed as soon as I saw the lumber. I have been saw-milling since 1850 and know something about a saw, and don't you forget it."

I told him he must call the length of the board the feed.

"No," he replied, "show me the feed that saw cut if you can."

"I can't," I said.

"It is you who don't know what feed is, can't you see that saw cut that board before it made a revolution?"

"No," I said, "but tell me how you can always find out so easily the feed of a saw."

"Well, I'll tell you," he said, "When you see the marks on the board the distance between them is the feed, and I know the saw that cut these boards was cutting over 12-foot feed, because the lumber is smooth from one end to the other and has no marks."

"Look around," I replied, "and you will see that all our lumber is smooth. Our saws do not mark the lumber."

"How can you help it?" he asked.

"I keep my saws round."

"But when 'she' loses a corner or two.'

"But she 'keeps' them."

"But doesn't she mark anyhow?"

"No. I use the side-file which makes an even set."

"You file on the side. I file that way."

Then I told him I referred to a file made and put in a frame for the purpose. He had never seen one.

We went on to the mill, he looked around a little and then left without saying good-bye He was a sawyer of 35 years experience. So among sawyers there is as much of the "cutting out for a sawyer and missed in the making" as with the farmer and the merchant. The farmer who knows how to manage his farm will succeed, while his less skilled neighbor can scarcely make a living. One merchant will get rich, and the dealer next door will fail.

In using the file it is essential to be able to detect when it is working "square." The sound of the file must be the operator's guide If the files squeak, it is too far over and out of the timber. If it cuts a clear cut, it is too far in. When the file is pushed square there is a slight squeak, nearly a clean cut. About one sawyer out of 20 will file nearly right. I know that perfection cannot be attained, but as a general thing the sound of the file makes your flesh crawl.

A few sawyers file a clear cut in front and then to get the tooth square, it is squeak, squeak on the back of the tooth and the saw is then generally filed into the timber. To run a file straight without rocking is more of an art than square filing. When the file is pushed straight, the front of the tooth will have the same light from edge to edge, but if the least rock is in the file it will be shown by one side being a shade darker than the other. Only a good eye can apply this test. I would like to hear from some others on this subject.

When the tooth is finished, and the centre of the tooth higher the file has rocked a little. If the centre is apparently lower that shows good filing.

Mills of 25 M to 40 M per day require a saw entirely different from those I have been describing. I see some of my brother sawyers in writing for your paper omit to mention the difference in the saws of different capacity. The 8 gauge 56 inch, with 36 teeth, would run in our mill hardly long enough to saw up one log. We use No. 8x8 gauge, 64 in., 100 teeth; speed to 10,500 feet on an average feed of 6 in. and 8 in. and often 12 in. and 16 in. Our saws do not need as much pitch as the other and would not run with as much, § is what I give them with ¼ scant set. The teeth are 1§″ long, the back as high as I can run to clear, which is pretty close, as the teeth are close together, but none, on an average, cutting over 1-16 in., but no more than the former with 56 in. teeth. But they can be easily crowded beyond that, so the teeth are not keep in a strain by being forced to do all they can. We saw cypress have the fastest cutting mill on the principal Mississippi river and make the best lumber.

We cannot cut as much as the pine mills, for our timber is large and cannot be handled quickly, some sticks making as much as 8,000 feet board measure. We average 25,000 and 30,000 and have gone beyond this, on a 12 block and hand feed shingle machine. We cannot run thinner saws because the bark is of a hemp nature, which is very tough to cut. I hammer my saws about once a week, but have no regular time. The tension will last about two weeks (I am including all the saws for log sawing).

We change three or four times a day, but cannot be regular, as timbers covered with mud may necessitate changing a little sooner. I never file our board or log saws, but sharpen them altogether on Covel's automatic sharpener, which gives an edge that will last much longer than the file. The corners are not worn so much as they are by hand filing.

We use the Kinny swage. as it is generally known. It is sold by M. Covel, Chicago. It gives entire satisfaction, for it is much quicker in operation than the upset and saves saw plates. I had about the same trouble a great many have had in getting it properly adjusted, but it is indispensable in a large mill.

I am an advocate of thin saws. They save timber, power and are much to be preferred when fixed up in the mill, but they have one serious fault, and this is that they are very liable to get sprung. If the filer understands his business it is only a few minutes work to repair them, but where it is necessary to send them to a saw hammerer some distance away, expense and delay follow.

Thick saws "stand the racket" better. Thin saws need more teeth and require more hammering. They will not hold their tension long I am alluding now to fast mills. Thin saws work better than thick one in smalls. if the sawyer has a fair knowledge of his trade. If not a thick saw should be used It is never necessary for them to be sprung set. I believe in the work being regular on the point of the teeth, and as the corner does nearly all the work, sprung set teeth do nearly all their work on one side. They run heavier for several reasons, one is that the teeth do not cut clear, they wedge in cutting, and the side that has no corner is exposed to a great friction, and in knots will often spring and break out. A great many say the spring set runs lighter. They probably experienced with a saw that had twice as many teeth as it needed if the sawyer will take a saw with 100 teeth and another with 50 teeth and fix the latter up "double set" it will make smoother lumber and run longer than the other. There is exactly the same number of corners in both cases. but the spring set teeth will spring and lose their set. Some say the double set will lose their corners, but they never will if they have been fixed up right. They might if they had 5-16″ set, but we do not care about wasting that much timber, power, saw plate and money.

For shingle and small, thin circulars only spring set will do. The inserted tooth will not do; there are one or two makes which answer better than others and are used by a great many. I do not think they have dust room for the number of teeth needed for fast sawing, and if they have enough they are so close together as to leave hardly sufficient saw plate to hold them in. The throat soon lets the dust pass on each side, as I have described, heating and expanding the rim and loosening the teeth and soon out they come. These saws require more hammering than others, because the jamming and driving necessary in putting in new teeth and rivets stretches the rim. They are in use, as a rule, only in the small mills or for soft timber like white pine.

As regards the makes of saws I have but few preferences. Some are a little better than others, but they will all run. One thing may be said with reference to the manufacturers who make saws without hammering. Their saws generally show more hammer prints and lose their tension quicker than those of some other makers. The tension cannot be put in a saw to stay. Gumming, the constant strain and the centrifugeal force stretch the rim. But the worst trouble of all is the heating of the rim, for then the rim is laboring four different ways to give the hammerer work, and he soon gets it —*J. H. M. in Saw Mill Gazette.*

Messrs. Ira O. Smith, of Michigan, and J. H. Swan, of Chicago, within the past week or two have bought thirty-five million feet of pine timber in northeastern Missouri. Mr. Smith informs that they expect to buy about one hundred million feet of pine in that vicinity and are continually buying small quantities. "We have great faith in pine trees," remarked Mr. Smith, "and have bought these as a speculation."—*Muskegon Chronicle.*

MUTUAL INSURANCE.

A movement is on foot in England for founding a "Mutual Insurance Association for Saw Mill Owners" The idea was mooted a few years ago, but for sometime has been in abeyance. An effort is however, being made to give it practical shape. The scheme is outlined in the *Timber Trades Journal* as follows:—

"It is proposed that the insured become shareholders, in the proportion that they participate in the benefits of the company in the same manner that is now adopted by many shipowners, in the insurance of their ships, but that no one policy, in the early days of the Association, at all events, be larger than £2 000; that certain well-digested rules be laid down for observance by the insured, with the object of minimising the risk of fire occurring on their premises; that a scale of charges be laid down, regulated by the quality or condition of the risk, as favorable to the insured as can reasonably be framed to carry on the successful working of the undertaking, and it is hoped this would not exceed 1½ per cent. There would, of course, be various questions to be decided by the directors or other officers appointed, such as naming a time before which a loss shall be claimed in full against the Association in the event of fire, also the foundaton of a reserve fund and other details.

"The object of forming such an Association is to mutually assist owners of saw mill property to insure at reasonable rates of premiums, as the present system of being dependent upon companies, who do not specially lay themselves out for such business, is felt to be an injustice, especially so as their rates are at times out of all proportion to the nature of the risk.

"The rates of premiums imposed in many cases are such as to impose a heavy tax upon saw mill owners, such a tax that no small number are uninsured, or only partly insured, as they prefer to carry all or part of the risk themselves, and to become their own insurers, to paying extortionate premiums.

"We believe there is a desire on the part of many saw mill owners for the establishment of such an undertaking, as it cannot be sound or politic for them to pay extortionate premiums, or to become in all or in part their own insurers."

THE INVENTOR OF THE CIRCULAR SAW.

Referring to an article on the above subject *Timber* gives the following extract from a letter received from a Canadian correspondent:—

"Referring to the article 'The Inventor of the Circular Saw,' in the issue of *Timber* of the 19th December, I do not think Mr. Benjamin Cummings, the inventor of the circular saw, as I remember one brought from England some 63 years since, which was in use near my old place in Co. Queens, in this province, and can still be seen there. The arbor is used for an intermediate shaft, and the old saw is knocking about the shop; but I will hunt it up and take care of it, so as to fight the Yanks on it. The grinding was done across instead of as at present, circling. The old chaps ran it by a chain belt; the nut was placed on the wrong way and would yield to the strain, slacking the saw and puzzling the old chaps generally. It was discarded before I can remember, but when a lad, I recollect looking through the mill and amusing myself with it. I was born in 1819, and it was put up about 1822 or 1823; but your 'auld folk' can put the Yankee straight if they like. I do not know when circular saws came into use, but Mr Cummings, if he made the first, must have done so more than 60 years ago."

Mr. Chas. Mickle has purchased a mill site opposite the railway wharf, and has commenced to build a new mill. The size of the main building will be 40x90, two stories high, and attachment to one end of twenty feet. It will contain one circular and two shingle machines. Mr. Mickle has a stock of about 12,000,000 to cut, and in order to accomplish it it will require to run both mills to their full capacity through the season. Mr. Mickle is also building for his own use a steam tug of 40 feet keel—48 feet over all, and 11 feet beam. The contractor is Mr. Simpson who built the Kenozha.—*Banner*

NORTH HASTINGS LUMBER CAMPS.

The following letter in reference to the lumber camps in Hastings county, Ont., is published in the *Ontario* of Belleville:

DEAR SIR.—I intended when writing a few weeks ago to follow up my observations of the north country, but have been short of time. I have to add a few remarks: There is none of the older villages of our county that has shown the amount of improvement as Marmora for a few months back. It is, I suppose, the oldest village in the north, but for very many years went backward, but in the last two years has more than doubled its permenant buildings A large cloth factory, a number of fine blocks of brick stores and tasty private houses surprised me after a few months absence. The hotels are commodious and the stores well filled. Much of this, I think, is due to the enterprise of Mr. Pearce. Another feature of the importance of north Hastings is her lumber interest. Of this, from accident, I know more of the Gilmour firm, but I know that the Rathbuns, Eddys, Booth, McArthur's Brown sons and many jobbers are doing a wonderful business.

Turning to the Gilmours, I had business at their camp in Tudor a few weeks ago, and was pleasingly disappointed to find the large amount of timber still standing in that part of the county. But their most extensive operations are in Wollaston Chandos and Cardiff, although that does not by any means cover their limits west of Hastings county. Happening to be at Coehill a short time ago, and wanting to see some parties in one of the camps, I had the good fortune to meet with the superintendent, Mr. J. Nicholson, who informed me he was going the next morning to inspect the camps and kindly offered me a seat with him, and to him I owe very much both for information and the opportunity of seeing those I wished. Seated in his cutter behind a spanking team we visited four camps and travelled some miles on foot while he examined their work in the woods, and on the landing at Vaneleek, which was nearly covered for seven miles and rode between 30 and 40 miles. There again I was pleased to see large sections of standing pine and cedar timber and large quantities of cherry, birch, black ash, white ash and other timber for consumption, large quantities of which are being got out and landed on the track of the C. O. R for shipment by rail as it will not float. The Rathbun Company, however, is doing the most of that. To give your readers some idea of the magnitude of this year's drive the Gilmours alone have a million pieces, over 700,000 pieces of pine and the balance cedar. I did not learn just what the Messrs. Rathbun have, but I believe they are not far behind, and taken as a whole their timber this year is very fine. They had cut one tree alone in Cardiff that measured 9,042 feet of lumber. Their roads are the best. Nature would seem to have just fixed a pass through the hills for a road, yet they have to spend thousands in grading the roads. I was on one over seven miles long which was smoother than the streets of Belleville. Their sheboggan sleighs are monsters in that line, the runners six feet apart, the bunks eight feet long and their loads are almost incredible. The foreman reported a load the day before of nineteen standards and 42 feet, and when I tell you a standard is 20 inches beside the sleigh, you may have some idea of the load. The Gilmours this year have nineteen camps and two thousand two hundred men besides jobbers. I could not help but contrast the past with the present in board and other accommodations in camp. Thirty years ago we had but little variety in lumber camps. For breakfast, bread, cold pork and cold water; for supper cold water, pork and bread. If we wanted tea, sugar or potatoes, we were free to buy them and cook them too. But I had the pleasure of taking dinner both in Tudor and Cardiff in the dining camps. They were about the same and I took a note of the cusine at the latter. We had the best of bread—I wish some of our Belleville bakers could have seen it and—well, I won't say any more—stewed beef, boiled pork, potatoes sweet biscuit, apple pudding and pie, tea and granulated sugar; for supper we had the good bread again, butter, potatoes, two kinds of meat, apple sauce, sweet biscuits, apple pie, the best of fried cakes, and a dish they called friccasied—I don't know what it was made of, but it was rather too good, for I ate so much I was sick after—tea and sugar. The pastry was too rich for the stomach of us who are in the habit of eating the plain food of Belleville. I asked Mr. Nicholson if that was the every day fare. No, but they changed the class of pudding and pie and cake, that was all. You will ask how can lumbermen afford such board? The answer rather surprised me; said he, the actual cost per man per day was 21 cents, that included cost of material and expenses of running the camp, while in old times when men were fed on bread and pork, flour laid down $10 per barrel and pork $50, it cost about 70 cents per day. But I weary you.

Yours, etc.,

OBSERVER.

VALUE OF LINES OF EVERGREENS.

To the Editor of the Canada Lumberman.

SIR.—As spring will soon be here, will you allow me to suggest to your farming readers the importance of devoting a few days to planting windbreaks. The portions of forest retained where the country was cleared are rapidly fading away. In some parts of Ontario, indeed, it has been very difficult to preserve them as they blow down; and when this difficuty does not exist, they are largely drawn upon yearly, either for fuel or to obtain more land for the plough, so that in a few years much of the farm land in Ontario will be destitute of shelter, and will suffer all the evils which have resulted in other regions from the same cause.

The rows of deciduous trees which are being planted here and there will be very valuable: but there is not one planted, as yet, where there should be twenty. It is a subject which will very soon force itself upon the minds of our people; and there are two suggestions relative to it. The first is to begin before shelter is needed; trees take time to grow. The next is, why not grow trees which will be of use in winter, when shelter is most needed rom the wind and cold? Deciduous trees are of little use, the evergreens are much.

All through the country there are to be had, in unused fields, or the borders of woods, numbers of young evergreens—pine, spruce, or cedar. Either of these will answer—the last for the damper ground—the two first for the dry. All ground for trees, however, is the better for drainage. If quantities of these young trees were transplanted this spring, either directly into lines along the exposed sides of farms, or if very small into the garden to transplant again next spring, it would be the most paying work ever done on most farms.

The best time to transplant evergreens is the first week in June, but it can also be done very well in early spring. The most successful planting I have known was 750 trees, four feet high, transplanted when in spring, the ground had frozen again two inches deep, so that a good sized piece of earth come with each cut around. Only four were lost. Smaller trees, of course, are more easily managed. In Massachusetts, last year, I saw them, six inches high, being planted out by the thousand. As to distance apart, all will do, from a foot to six feet. Close planting is best, they can be transplanted afterwards.

I have let me say, obtained opinions and evidence on this subject from many practical men, who have watched the result of experiments of this class for many years, and have also seen many instances myself. I have no hesitation in saying that, if the country were properly sheltered by evergreen windbreaks, crossing every here and there, farm property would be worth one-fourth more for agricultural purposes than much of it is at present.

Yours, etc.,

Toronto, March 27th. R. W. PHIPPS.

THERE is a floating planing mill in the Allegheny river, at Pittsburg, 70x170 feet and two stories high, with windows and doors like any house. It is owned by J. W. Cook & Co., of Allegheny. It has been supplied with all the the necessary machinery. The same firm owns a floating saw mill. The two will be operated together.

Perhaps the most extraordinary that success has been achieved in modern science has been attained by the Dixon treatment for Catarrh Out of 2,000 patients treated during the past six months, fully ninety per cent. have been cured of this stubborn malady. This is none the less startling when it is remembered that not five per cent. of the patients presenting themselves to the regular practitioner are benefitted, while the patent medicines and other advertised cures never record a cure at all. Starting with the claim now generally believed by the most scientific men that the disease is due to the presence of living parasites in the tissues, Mr. Dixon at once adapted his cure to their extermination; this accomplished the Catarrh is practically cured, and the permanency is unquestioned, as cures effected by him four years ago are cures still. No one else has ever attempted to cure Catarrh in this manner, and no other treatment has ever cured Catarrh. The application of the remedy is simple and can be done at home, and the present season of the year is the most favorable for a speedy and permanent cure, the majority of cases being cured at one treatment. Sufferers should correspond with Messrs. A. H. DIXON & SON, 305 King street west, Toronto, Canada, and enclose a stamp for their treatise on Catarrh.—*Montreal Star* 1y122.

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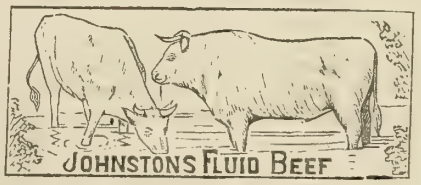

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NOTICE.
SEALED TENDERS, addressed to the undersigned, and endorsed "Tender for Indian Supplies," will be received at this office up to noon on TUESDAY, 20th APRIL, 1886, for the delivery of Indian Supplies during the fiscal year ending 30th June, 1887, consisting of Flour, Bacon, Beef, Groceries, Ammunition, Twine Oxen, Cows, Bulls, Agricultural Implements, Tools, &c. duty paid, at various points in Manitoba and the North West Territories.
Forms of tender, giving full particulars relative to the supplies required, dates of delivery, &c, may be had by applying to the undersigned, or to the Indian Commissioner at Regina, or to the Indian Office, Winnipeg.
Parties may tender for each description of goods (or for any portion of each discription of goods) separately or for all the goods called for in the schedules.
Each tender must be accompanied by an accepted Cheque in favor of the Superintendent General of Indian Affairs on a Canadian Bank for at least five per cent of the amount of the tenders for Manitoba and the North-West Territories, which will be forfeited if the party tendering declines to enter into a contract when called upon to do so, or if he fails to complete the work contracted for. If the tender be not accepted the cheque will be returned.
Tenderers must make up in the Money columns in the Schedule the total money value of the goods they offer to supply, or their tender will not be entertained.
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Deputy of the Supeintendent-General of Indian Affairs.
Department of Indian Affairs.
Ottawa, 3rd March, 1886. 645

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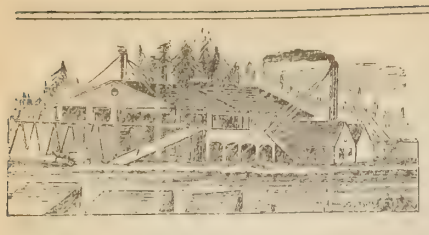

THE CANADA

LUMBERMAN

DEVOTED TO THE LUMBER AND TIMBER INTERESTS OF THE DOMINION.

PUBLISHED SEMI-MONTHLY BY THE

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Communications intended for insertion in the CANADA LUMBERMAN, must be accompanied by the name of the writer, not necessarily for publication, but as a guarantee of good faith. Communications to insure insertion (if accepted) in the following number, should be in the hands of the publishers a week before the date of the next issue.

The CANADA LUMBERMAN is filed at the Offices of MESSRS SAMUEL DEACON & Co., 154 Leadenhall Street, London, England, who also receive advertisements and subscriptions for this paper.

PETERBOROUGH, Ont, APRIL 15, 1886.

DUTIES ON LUMBER AND LOGS.

THE proposal now before the United States Congress to take off the customs duty on imported lumber has been met by its opponents with the proviso that the change shall not take place in the case of any country that imposes an export duty on logs. This is evidently aimed directly at Canada, and is in pursuance of the policy of our neighbors of drawing upon our forests while conserving their own. Recently they have made large purchases of timber limits in Ontario with the design of taking logs thence to their own mills, and therefore they are more urgent than before to be unimpeded by an export duty.

From this proposal in Congress we may learn the lesson that we would do well to maintain our export duties on saw logs, or even to increase them. Those who attach great importance to the removal of the United States import duty on our lumber, may readily see for themselves that they are more likely to obtain this change if we maintain the leverage afforded by our export duty on logs. If we freely give them what they require they will assuredly be less willing to meet our views, which we can only hope to obtain by having something to offer in exchange.

There are, however, many who think it would be even more beneficial to retain the export duty on logs than to obtain the placing of our lumber on the free list. They object to see logs taken out of the country by foreign mill owners when we might have the profit of converting them into lumber at our own saw mills. On the other hand they doubt whether the remission of the duty on lumber might not be partially offset by a reduction in the price.

Whichever of these views is taken the natural conclusion is that it would be a very unwise policy to allow our logs to be exported without paying duty, at all events unless we secure some adequate compensation for yielding this privilege. The export duty should therefore be maintained, increased and enforced. It should indeed be increased to $2.00 a thousand so as to counterbalance the duty charged by the United States on our lumber.

It is said that already the payment of the duty is evaded as to many logs that are exported. From the extensive purchases of limits that have recently been made by our neighbors there is every likelihood that this practice of evading the duty will become more prevalent unless due precautions are taken. Some, indeed, argue that it would be impossible to collect the duty with such a long shore line, combined with close proximity to the international boundary. We cannot, however, see the force of this objection. Vigilant officers could make attempts at smuggling so hazardous and costly as to cause them to be abandoned as unprofitable, and surely our legislators could devise provisions that would make the vessels, the timber limits and other valuable property involved in such practices responsible for dishonest infractions of our laws. A few seizures and forfeitures would frighten all but the most reckless from a continuance of such illegal and fraudulent practices.

A RIVER DRIVING BILL.

ALTHOUGH the bill introduced by Mr. Murray, M. P. P., for North Renfrew, during the last session of the Ontario Legislature, was dropped by the special committee to whom it was referred, yet as it was generally conceded that some legislation in the same direction was desirable and that the matter would again be brought before the Legislature at its next session, we deem it advisable to place the bill as introduced by Mr. Murray before our readers in order that the trade may become fully informed as to the kind of legislation which some of their number are endeavoring to have placed on the statute book.

As the importance of such legislation can scarcely be overrated, and as too much legislation is passed in a hasty and undue manner at Toronto, we think it would be well for those directly interested to place their views before the public, through the columns of the LUMBERMAN, so that if a measure of this kind is passed it will be in the general interest, and not for the benefit of a few at the expense of the many —as some apprehended this one would have proved had it been passed in the shape in which it was introduced.

The following is the bill:

1. Any person putting or causing to be put into any lake, river, creek or stream, in this Province, any saw log or other timber for the purpose of floating the same to the place of manufacture or market shall make adequate provisions, and put on a *sufficient* force of men to break jams of such saw logs, or other timber in or upon such lake, river, creek or stream, and to run or clear the same from the banks or shores thereof, and to run or drive the same so as not to hinder the removal of any saw logs or other timber from the banks or shores thereof; nor obstruct the floating or navigation of such lake, river, creek or stream.

2. In case of the neglect of such person to make such adequate provision, and put on such sufficient force of men, as aforesaid, it shall be lawful for any other person engaged in floating or running saw logs or other timber in such lake, river, creek or stream, obstructed by reason of such neglect, to cause such jams to be broken, and such saw logs and other timber to be run, driven or cleared from the banks of such lake, river, creek or stream, at the cost and expense of the person owning such logs or other timber, and such owner shall be liable to such person for such cost and expenses.

3. The person so causing such jams to be broken, or such saw logs or other timber to be run, driven, or cleared, shall have a lien on such saw logs and other timber, for his reasonable charges and expenses for breaking jams, and for running, driving and clearing the same, and shall be entitled to take and retain possession of such saw logs or other timber, wherever the same may be found, or so much thereof as may be necessary to satisfy the amount of such charges and expenses, and all costs, and may after 30 days' notice to the owner, if the owner be known, and advertisement thereof for three successive weeks, at least one in each week, in a newspaper published nearest to where such saw logs or other timber may then be, sell by public auction, subject to the lien of the Crown, if any, for dues, the said saw logs or other timber, or so much thereof as may be necessary to satisfy the amount of charges and expenses, and all costs, rendering the surplus on demand to the owner.

4. If the owner of the saw logs or other timber is not known to the person claiming the lien, then such person may after advertisment thereof for four successive weeks, at least once in each week, in the *Ontario Gazette*, and in a newspaper published nearest to where such saw logs or other timber may then be, sell by public auction the said saw logs or other timber or so much thereof as may be necessary to satisfy the amount of such charges and expenses and all costs.

5. Any person whose saw logs and other timber in any lake, river, creek or steam, in this Province, are so intermixed with the saw logs or timber of another person, that the same cannot be conveniently separated for the purpose of being driven or floated to market, or place of manufacture, may drive all saw logs and other timber with which his own are so intermixed at the cost and expense of the person owning the same, unless such owner furnish a fair proportion of plant and men, and do or cause to be done a fair proportion of the work necessary to be done in driving all the said logs and other timber, so intermixed, and such owner shall, unless he so furnish a fair proportion of the work in driving said saw logs and other timber as aforesaid, be liable to such persons for such costs and expenses, and such person shall have a lien on such saw logs and other timber for his reasonable costs and expenses for driving the same, and shall be entitled to take and retain possession of such saw logs or other timber, wherever the same may be found, or so much thereof as may be necessary to satisfy the amount of such charges and expenses and all costs, and may sell the said saw logs and other timber in the manner mentioned in the sections hereinbefore mentioned, but subject to the provisions as to notice and advertisement thereof as in said sections mentioned.

6. If the owner of the said saw logs or other timber shall disput the amount claimed by a lien holder he shall, within five days from the receipt of the notice of sale, to be given by such lien holder to such owner, give notice in writing to such lien holder, that he disputes the amount claimed and thereupon the following proceedings shall be had unless the parties otherwise agree upon the amount to be paid:

1. Such notice shall state the name of an arbitrator and call upon the lien holder to appoint an arbitrator on his behalf within five days after service of such notice, and in default of such lien holder making such appointment it shall be lawful for the Judge of the County Court of the county, or the Stipendiary Magistrate of the Judicial District, as the case may be, in which such saw logs or other timber are situate, upon request of the owner to appoint such abitrator, and the two arbitrators so appointed shall forthwith appoint a third arbitrator in the matter;

2. If after the arbitrators have been appointed, as aforesaid, they fail or neglect for the space of five days to appoint a third arbitrator, the said Judge of the County Court or Stipendiary Magistrate shall, within four days after a request in writing made upon him by either of the two arbitrators appointed as as above, appoint a third arbitrator;

3. The arbitrators may require the personal attendance and examination on oath of the parties and their witnesses and the production of all documents relative to the dispute, and may determine by whom the expenses of the arbitration shall be defrayed, together with the amount thereof, and shall make and deliver their award and determination within twenty days from the date of their appointment, and the said lien holder may retain his lien and possession of the said saw logs and other timber until such award is made and delivered, and the amount found thereby and costs is paid by such owner to such lien holder.

7. If the owner does not forthwith pay the amount and costs which the arbitrators determine that he shall pay, such lien holder may proceed to sell by public auction the said saw logs, or other timber, or a sufficient portion thereof, to satisfy the award and costs, and the subsequent costs incurred by such sale, first giving notice of such sale by advertisement for two successive weeks, at least once in each week, in a newspaper published nearest to where such saw logs or other timber may then be.

8. Any person whose saw logs or other timber are intermixed in any lake, river, creek, or stream, with the saw logs or timber of any other person, and who for any reason desires to separate the same, or does not wish to continue the drive, shall at his own cost and expense separate his said saw logs and timber from the saw logs and timber of such other person, and securely boom the same to one side, in such manner as to allow a free passage for the saw logs and timber of any other person who may wish to continue the drive.

OUR CROWN DOMAIN.

THE following facts and figures with regard to the crown domain of Ontario for the year 1885 are taken from the annual report of the Commissioner of Crown Lands:—

The total receipts of the Department for the 12 months were $736,864.95, made up as follows:

LAND COLLECTIONS.

Crown Lands	$ 85,285 99
Clergy do.	9,403 23
Common school lands	18,981 58
Grammer do. do.	1,578 59
Rent	1,166 00
In suspense	10,000 00
Total on land account	$126,415 95

WOODS AND FORESTS.

Timber dues	$412,738 99
Ground rent	41,182 44
Bonus	151,402 70
In suspense	15 22
Total	$604,339 35

In this sum, however, is included the sum of $148,558 received on account of the special sale of limits held last October, leaving the actual ordinary revenue of the year but $455,781.

The only other receipts besides these two were $1,004 for casual and surveyors fees, and $5,105 for refunds on various accounts.

On the other hand the expenditure of this Department, besides the $36,350, which the Crown Land office in Toronto costs annually, footed up $242,787.55, made up as follows:—

Land agents salaries	$ 9,796 00
Timber agents salaries	8,290 00
Agents disbursements	1,529 37
Miscellaneous	268 85
Wood ranging and inspection of timber lands	20,170 86
Forest fire protection	7,911 00
Refunds	8,798 88
Colonization roads	121,435 32
Surveys	48,227 00
Contingencies	13,483 81
Two per cent. on timber cut on road allowances paid to municipalities	2,406 46
Board of surveyors	380 00
Total	$242,787 55

The total number of acres sold during the year was 102,826, for $92,092, or a little less than 90 cents per acre.

Of the $29,963.40 received on account of clergy, common school and grammar school lands, $14,385.70, or nearly one-half, was for interest on the original purchase money. The sales of lands belonging to these three trust funds during the year was but 2,908 acres for $3,075.

The number of persons located on free grants during the year was 1,296, who took up 176,351 acres as free grants, and 149 of these purchased 5,998 acres besides. The number of locations cancelled during the year was 563, and the number of patents issued but 581.

The number of persons located on free grants by each agent was as follows:—

T. C. Taylor, Bracebridge	160
Mrs. T. McKay, Parry Sound	81

S. G. Best, Maganetawan	152
E. Handy, Elmdale (Parry Sound)	115
J. S. Scarlett, Nipissing	145
Wm. Fielding, Minden	41
D. Anderson, Apsley	34
C. R. Stewart, Haliburton	17
J. R. Tait, L'Amable	98
G. W. Dawson, Pleona	68
Jas. Reeves, Eganville	65
John Whelan, Brudwell	87
J. D. Kennedy, Pembroke	34
B. J. Gilligan, Mattawan	71
C. P. Brown, Sault St. Marie	9
J. F. Day, Bruce Mines	3
A. G. Duncan, Marksville	30
Amos. Wright, Port Arthur	26
J. D. Cockburn, Nipissing district	0
A. Kennedy, Renfrew	0
R. Macpherson, Frontenac	0
W. L. Nichols, Algoma	0
Total	1,236
Number of agencies	22
Cost of agencies	$10,293

The woods and forest revenue of $455,781 for the year was drawn from the three districts into which the Province is divided as follows:—

From the Ottawa district $187,114; from the Belleville district $80,716; from the Western district $187,949. The amount derived from the auction sale was, of course, all obtained from the western district.

The area under license was:—

	SQR. MILES.
Ottawa district	6,503½
Belleville district	1,537½
Western district	9,174
Total	17,215

Or equal to 11,017,600 acres.

The quantity of white pine saw logs cut on the Crown domain, in 1885, was:—Ottawa district, 1,886,536 pieces, measuring 1,201,565 standards of 200 feet board measure; Belleville district, 1,099,277 pieces, measuring 537,912 standards, and western district 975,987 pieces, measuring 608,530 standards; total, 3,961,857 pieces, measuring 2,348,007 standards, average measurement per log 118 feet board measure. Average of Ottawa district 127 feet; Belleville district 98 feet, and of the western district 124 feet. The total quantity of "other" saw logs cut was 44,354 pieces, measuring 18,153 standards.

Of square timber the total make of white pine was 59,758 pieces, measuring 3,164,866 feet, and of which 24,566 pieces was made in the Ottawa district; 10,686 in the Belleville district, and 24,506 in the western, while that of red pine was 489 pieces, measuring 23,427 feet.

Of boom and dimension timber the total make was 139,240, equalling 149,611 standard logs.

The output in the whole Province of the undermentioned woods was as follows:—

	PIECES.	FEET.
Elm	252	10,617
Ash	710	26,655
Maple	9	241
Oak	9	519
Tamarac	59	1,963
Birch	7	276
Hemlock	963	39,620

The cut of railway ties was 43,707 in the Ottawa district; 33,440 in the Belleville district, and 930,246 in the western, or a grand total of 1,015,393 ties.

Of other woods there were got out: 1,611 cords of hard and 23,036 of softwood, 6,808 telegraph poles, 280 traverses, 215,523 lineal feet of cedar, 943 cedar posts, 3,127 cords of bolts, 1,695 spiles and 559,296 feet of bridge timber.

The total amount of trespass dues accruing during the year was but $4,987.

Why will you suffer when 25 cents will buy a bottle of West's Pain King and one dose will cure the worst case of colic or cramps and a few doses will cure summer complaint, dysentery, diarrhœa or flux. Go to J. D. Tully's and purchase a bottle without delay.

Chips.

THE *Banner* says Mr. Isaca Cockburn's cut of timber this season is 6,000,000 feet in addition to 100,000 feet of square timber.

GREECE is not commonly supposed to be a timbered country, yet a recent official report show that a ninth part of its area is forest land.

THE Minister of Education has set apart Friday, 7th of May, as "Arbor Day." On this day teachers, students, trustees and ratepayers, should join in planting trees.

THE amount expended by the Crown Lands Department of Ontario for Fire Ranging in 1886 was $7,911. The amount proposed to be expended in 1886 is $8,000.

A YOUNG man named Wm. Gainer, of Minden, Ont., was caught by the top of a tree he had cut down, and buried in the snow. His brother came to his rescue after a time and dug him out. He was not very seriously injured.

THE Lumber Exchange Bank has been organized, at Tonawanda, N. Y., with a paid up capital of $100,000. The officers are, Edward Evans, president; Joshua A. Bliss, vice-president, and James H. Rand, cashier.

THE New York Superintendent of Public Works has sent requests to all officials along the State canals to arrange for the opening of the canals at the earliest period practicable for the public benefit—if possible by April 25.

A MAN nammed Bennett, of Walla Walla, W. T., lately received 18,000 locust and box elder to set out on his farm in that vicinity. Isaac Chapman has also bought the same number of trees to plant on his ranch in the same vicinity.

AT Eganville, on April 8th, Edward Jessup, employed at the saw mill of Mr. J. D. McRae, got his left hand caught between to cog wheels and all the fingers and about half the palm was taken off. The thumb can be saved.

AN Ottawa despatch says that Messrs. Sherman, Lord & Hurdman have purchased from Messrs. J. & G. Bryen, of Port Cologne, timber limits on the River Kippewa. The firm proposes extending this business very largely this year.

THE Lieutenant-Governor of the Northwest Territories has set apart Saturday, May 1st, as "Arbor Day," and the people of the Territories are earnestly invited to set aside all other occupation on that day and go heartily into forest and other tree planting.

A LOCAL paper says that the Government tug *Bayfield* is having her upper works rebuilt, preparatory to her summer's work of exploring the Georgian Bay. Last summer she did some very useful work in locating hidden rocks and placing their position on the chart.

B. F. CRAIG, senior member of B. F. Craig & Co., Corning, Ark., has sold his interest in the firm's mill and lumber business to A. M. Edgar, of Edgarsville, Ont. Mr. Craig retires after having built a fine mill, and miles of standard gauge railroad, and established a good business.

THE Calgary, N. W. T., *Tribune* says:—Mr. S. J. Hogg went up to Cochrane on Sunday last, returning on Wednesday. He visited the timber limits of the Calgary Lumber Co., which embrace an area of about 8 miles square, and found a better range of timber than he had seen any other place east of the Columbia. The compay have their tramway to their mills about completed, and intend to commence operations at once, expecting to be able to turn lumber into the market in about a month. The timber is of the Cypress variety, and comparatively clear. The saw mill is fitted up with all the modern equipment, and is now in perfect working order.

IN the vicinity of Keene, N. H., there are 40 pail and tub lathes. Each lathe turns out an average of 100,000 pails a year, consuming 450 cords of sapling pine, giving a product of 4,000,000 pails to 18,000 cords of timber. The 20 tub and bucket lathes use a large quantity, and many staves are sold out of the district. It is probable that 40,000 cords of sapling pine is consumed in this industry.

THE lumber merchants of the Chaudiere, says the *Ottawa Free Press*, are quite jubilant at the prosperous outlook for their trade during the coming season. At present the mills are only waiting for the ice to break up, to start work. Several shantymen and others who have been lumbering during the winter are already making their appearance, so as to be in readiness for the opening of the mills. It is generally reported that the season's output of logs will be very large, and in some instances has even exceeded the expectations of the lumber merchants.

THE Orillia *Packet* says:—The second log which was to have been cut in Mr. Tait's mill this spring caused a serious break down. In canting it on to the carriage an unlucky inequality and the enormous weight of the stick combined, proved too much for some of the castings, and although rhe shingle department was kept running, the rest of the mill had to be shut down for a few days. The log in question very much resembled those of Californian fame, and must have been an older resident than M. Quinn himself.

THE MORRISON BILL.

The *Lumberman's Gazette* says:—"The Canadian journals have stated that the Morrison tariff bill does not propose to put manufactured lumber—that is pine timber cut into boards, etc., such as are manufactured at the Ottawa and other Canadian mills—upon the free list, but the bill only covers the various kinds of wood used in the manufacture of furniture. One of these clippings we sent to the Hon. Wm. C. Maybury, M. C., at Washington, with an inquiry as to the correctness of the statement of the Canadian journal. Mr. Maybury kindly replies that the Canadian journal is wholly mistaken. The intention of the tariff bill is to admit pine timber (lumber) free of duty, with a proviso against an export tax on the part of the Dominion Government. The *Gazette* did not misunderstand the intention of the bill, but thought it would be well to fortify its opinion by the statement of a member of the committee of ways and means. Mr. Maybury's views are too pronounced to lead us to believe that he would countenance a bill that was a mere jugglery of words and did not fairly and squarely knock out the Michigan manfacturers of lumber by admitting the Canadian manufacture into the United States free of duty."

RE-SURFACING WOODEN PAVEMENTS.

Some interesting experiments have be lately made with a view to cutting and re-surfacing the London wood pavements that are already raid to have become uneven through excessive wear or other causes. The machine for the purpose is the invention of Arthur C. Bicknell, Chester; in appearance it is not unlike an ordinary traction engine, propelling itself and carrying in front of it a large revolving horizontal head fitted with cutters and driven by friction gearing. The experiments have been carried out in Manchester; a number of old wooden blocks that had been taken up from a worn-out, road, and were full of stones and grit, were obtained, and were relaid in concrete and fitted in wirh cement and sand, the usual method of making a road. A week was then allowed for the cement to thoroughly set before the cutting head was applied, the surface was then taken off, the cuts varying from one-half to three inches in depth; the deeper the cut the better the machine appeared to work, the cutters getting below the grit and and stones on the surface. The speed at which the cutting head advanced was about one foot a minute. It is expected that further experiments will come into general use, thus making locomotion more agreeable, prolonging the life of our roads and lessening the vexatious stoppage and delay to traffic that so frequently occurs when roads that are really only half worn out have to be taken up and entirely relaid.—*London Engineers.*

AMONG the appropriations made for the improvement of streams, for the driving of timber, during the recent session of the Ontario Government, was one for $2,750 to meet one-half the cost of reconsturcting dam across Burnt river at Kinmount.

THE Ontario Government proposes to expend $20,000 in erecting barns, stables, farm offices, carpenter's shop, blacksmith's shop, implement shed and experimental diary, during the present season to replace the buildings burned at the Model Farm at Guelph last year.

A SUBSCRIBER writes that the season's cut of Messrs. Scott, Scott & Co. (successors of the Medonte Lumber Company, Hillsdale) will exceed 4,000,000.

If you are afflicted with rheumatism call on J. D. Tully, druggist, immediately and procure a bottle of West's World's Wonder or Family Liniment, it is a certain and positive cure. It is infallible for sprains, cuts, bruises, burns, scalds and all diseases requiring external application. Price, 25 and 50 cents per bottle. Sold by J. D. Tully, druggist.

It is a fact that can be verified everywhere that West's Cough Syrup is the only compound known to science, that can eradicate the seeds of consumption in its early stages, and completely cure Coughs, Colds, Asthma, Bronchitis and all Throat and Lung difficulties. Sold by J. D. Tully, druggist. Price 25 cents, and 50 cts and $1.00 per bottle.

J. & J. T. MATTHEW
Ship Owners and Agents.
LUMBER AND TIMBER CARGOES A SPECIALTY.
TORONTO, Ont., 109 Bay Street.

GEORGE GALL
WHOLESALE and RETAIL
HARDWOOD LUMBER
MERCHANT
Car Lots sold on Commission, railway switch in to yard and plenty of room for storage. Yard corner of Stachan and Wellington Ave. Office, 9 Victoria St.
Telephone Connection. L

FOR SALE
VALUABLE
Timber Limits
AND
50,000 SAW LOGS
ON SEVERN RIVER

The undersigned being desirous of confining their operations to their Lakefield Mills on the Trent waters, offer for sale the following limits:—

Township of Hindou, 70 square miles.
" Oakley, 45 " "
" Redout, 22 " "
An area of 137 square miles.

These limits are estimated to contain 180 million feet of Logs, well watered, and afford means of short hauling from all points, and quick and cheap driving to Georgian Bay. Are offered for sale together with plant, depots, farms, 1,200 acres deeded lands and 50,000 logs, nearly all of which are on the main river, a large proportion of which are 16 feet long. Apply to

R. & G. Strickland,
3mL LAKEFIELD, ONT.

Chips.

McCURNEY & Co. have three million feet of logs boomed on Lake Joseph, Ont.

THERE are 17,000,000 feet of logs in the North river, Lovering, Ont., which is greater than at any previous season.

MAXON & Co., at Au Gres, Arenac county, Mich., recently finished a hoop mill, and will turn out 10,000 a day.

THE talk is that the Menominee river drivers will this spring be paid $2.50 a day, an advance over last year's wages of 50 cents to $1 a day.

DON. J. LEATHERS, of Grand Rapids, Ira O. Smith, of Muskegon, and J. H. Swan, of Chicago, have been prospecting in Minnesota for a tract of 125,000,000 feet of pine.

NOYES BROTHERS and John Saxton recently sold Merrick & Murphy, of Menominee, Mich., 130,000,000 feet of logs in the vicinity of Florence, Wis, for $7 a thousand. John W. Molloy sold 250,000 feet of logs for $8 a thousand.

J. T. HURST, of Wyandotte, Mich., is reported to have sold to West Bay City parties a tract of pine, estimated to cut 8,000,000 feet, situated on the Mackinaw division of the Michigan Central railroad, at a consideration of $40,000.

THE Bow River Lumber Company, the concern composed of Eau Claire, Wis., men, that bought timber lands on Bow river, Alberta, in the British Northwest, has concluded to build a mill in that region, with 50,000 or 60,000 daily capacity.

THE annual report of the Board of Trade, of Toronto, states the exports of the forest products from that port for 1885 to have been valued at $256,139. The principal item was 19,398,000 feet of plank, boards and joists, valued at $245,183.

HUNTRESS & BROWN, of Duluth, have bought the Gibbs & Mallett tract of pine, in the vicinity of Beaver bay, north shore of Lake Superior, 60 miles from Duluth. The price was $1.50 a thousand stumpage. The pine is estimated at 40,000,000 feet.

WM. WOODBARRY, a lad 17 years of age, had one of his hands taken off by a circular saw in Atcheson's wood-working shop in Toronto on April 5th. The wounded boy was taken to the general hospital, where the injured member was attended to.

IT is reported that a party of capitalists have bought all the white oak timber on the bottom lands of Tallahatchie river, Miss, from Tippah down to Wyatt, and work has already been begun in converting the timber into pipe staves for the European market.

EXPORTS of lumber and coal from Puget Sound ports, B. C., are growing. The lumber exports for February were 16 608,000 feet valued at $200,000; the coal exported aggregated 20,890 tons, valued at $117,000. Steamships carried away oats, wheat and other produce, valued at $50,000.

THE institution of Arbor Day was a new departure in Ontario schools last year. It seems to have been as successful as could reasonably be expected the first year. The total number of trees planted was 30,648 in 38 counties, Simcoe heading the list with 3,560, Wentworth coming next with 2,700, and Middlesex next with 2,100. All the others planted less than 2,000, the metropolitan county of York having only a petty 1,200 to show.

A DESPATCH from Ottawa says that it is expected that a larger number of men than usual will be employed this season in the Chaudiere lumber mills. The outlook on every side is regarded with satisfaction, and a demand for lumber from several new centres is expected. The cut, it is also believed, will be in the neighborhood of 300,000,000 feet. Prices are somewhat firmer and a further improvement is confidently expected.

THE tolls from lumber on the Ottawa and Chambly Canals are less by $7,000 than during the previous year, which is attributed to the shipments by the Canada Atlantic Railway. And to the slides and booms, the accrued revenue from which is less than that of the previous year by 42 per cent. Mr Miall says: "Three causes have contributed to this result: 1st. The quantity of timber cut was less than the previous year; 2nd. The quantity of square timber carried by rail was greater; and 3rd. There is an increasing disposition to locate the mills nearer to the timber limits, and to transport the sawed lumber by rail."

NEW BRUNSWICK lumbermen complain that that the stumpage dues are excessive; and, says the *Monetary Times*, the fact that the receipts from them showed a decrease of $24,000 last year, would seem to show that they are not exceptionally productive. But the reply of the Government to a deputation of lumberers which asked for a reduction, was that the Government could not spare the revenue, and there the matter ends for the present. The lumber trade of the Province can ill afford to bear exceptional burthens; and if the experience of another year of this charge be unfavorable, perhaps the Government may, by that time, find some way out of the difficulty.

ART OF WOOD CARVING.

It is quite impossible to say in what century wood carving was originated, but there is no doubt it is a very ancient art, having been practised in Assyria, Babylon, Egypt and Greece from the earliest times of which we have any record. About the year 1491 B. C. it is said that one Bezaleel, of the tribe of Judah was specially selected for his skill as a workman in gold, silver, brass, gem cutting and setting and carving in wood, to execute the work upon the tabernacle and its furniture. The Egyptians were justly renowned for their skill in carving, as is abundantly shown by their chairs, biers, couches, arms, chariots, etc. It is recorded that the ornamentation of the Temple of Solomon and its furniture about 1005 B. C. was beautifully executed, the doors being of olivewood, and on them were carved "cherubim and palm trees, and open flowers." The carving was overlaid with gold. Other doors were of fir similarly carved.

BEFORE PARLIAMENT.

In the Private Bills Committee, at Ottawa, Mr. Wright's bill to incorporate Messrs. E. B Eddy, G. H. Millen and S. S. Cushman, of Hull; and R. R. Dobell and Thos Beckett, of Quebec, and others, as the E. B. Eddy Manufacturing Company, with power to carry on the business of lumberers, lumber merchants, manufacturers of matches, sashes, doors, woodenware of all kinds, packing boxes and packing box shooks, wood pulp and pulp from any other material, end all kinds of pulp and paperware or chemicals, and timber and lumber in all its branches, and also the business of general merchants, manufacturers, forwarders, common carriers, wharfingers, warehousemen and ship and vessel owners, was passed with amendments.

Mr Sutherland's (Oxford) Bill to grant certain powers to the Sable and Spanish Boom and Slide Company, Algoma, was passed with amendments.

OILING WOOD.

Waggon makers or repairers can save their stock from worms by oiling with linseed oil. Singletrees, doubletrees, neck-yokes, spokes and cross-bars that are of white hickory and are kept in stock for a year or more will be eaten by worms if not kept in a dark place or otherwise protected. Coal and korsene oil are good also, and the expense of applying is but little. Linseed oil is preferable, as it acts to some extent as a wood filler, filling the pores and thus aiding the painting which follows in its proper place. A boy can take a rag dipped in the oil and go over a large number of pieces in a day's time, or a vat can used long enough to admit of several dozen at a time, and put where they can drip for one or two minutes. The expense of this is much less than those who have not had the experience might imagine, and far less than the loss of stock by worms. Some manufacturers oil all their white hickory stock before shipping.—*Ex.*

THE FURNITURE WOOD MARKET.

Lumber dealers say that retail dealers and consumers generally are rapidly comprehending the fact that all the mechanical part of furniture manufacture can be done as cheaply upon mahogany and rosewood as upon cherry or maple, and the finishing with probably less cost, since artistic staining is not necessary, and are beginning to demand that add tional cost of lumber alone shall enter into the calculation of the advance in price. Manufacturers are said to be rapidly seeing the justice of conceding as much, and the consumer is no longer so easily balked in his hunt after articles in the precious woods. Already the trade in mahogany lumber has felt the impetus of this, and dealers in this wood state there is now more mahogany, baywood and rosewood sold to manufacturers of furniture than in any preceding period, and they say that consumers already seem adepts in figuring the addition that is just in the price of a mahogany over a cherry or walnut suit, whether parlour or bedroom and the more precious woods seem upon the eve of assuming the place they occupied of old in the estimation of the public. Cherry is said by lumber dealers in the city to have long held a place of prominence, partly on account of being a hard and durable wood, easy to manipulate, but chiefly because it is so easily stained to imitate more precious woods. They say walnut has a field of its own, but the same reason of substitution no doubt contributed to its long held popularity. They declare that cherry, which has been so nearly entirely esteemed for its imitative qualities, must, under the broad light of the plentitude of mahogany, rosewood and ebony, lapse to the place in the catagory of lumber to which it properly belongs. *Carpenter and Builder.*

B. C. LUMBER INDUSTRIES.

The Vancouver *Herald*, in giving a sketch of Voncouver, says:—

The lumber resources of British Columbia are very great. A dense forest of giant firs and Douglas pine lines the coast and reaches far up into the mountains, a source of wealth upon which the people may draw for generations to come. The Douglas pine is the most abundant and possesses the greatest commercial value. It covers the coast and islands in great dense forests extending as far north as the Skeena river. It grows to gigantic proportions and straight as an arrow. For shipbuilding it is specially adapted, and its great length and toughness make it peculiarly adapted for masts and spars. The seat of the greatest lumbering industry in the Province is Burrard Inlet, and one of these mills, the Hastings saw mill is on the site of the city of Vancouver, the other is directly opposite on the north shore of the Inlet and known as Moodyville saw mill.

The Hastings Saw Mill Company, cuts about 20,000,000 feet of lumber annually, and the Moodyville Co. nearly 25,000 000. It is shipped to South America, Honolulu, China, and Australia, while spars and masts are sent to Europe. This industry might be developed to immense proportions and never be without a market.

Building materials are cheap. The price of the several classes of lumber are as follows:—Rough lumber, $12.00 per thousand feet; rustic, 2d class, $15 to $17; do., 1st class, $20 to $22.50; finishing lumber $22.50 to $25; laths and shingles, $2.50 per 1,000; bricks, from $8 to $10 per 1,000; lime from 50c. to 70c. per bushel

Vancouver will become the capital of the Province, and probably the commercial capital of the Pacific coast of this continent. It is the terminus of the great Canadian Pacific railway, and is one of the transhipping points of the world. It will become the centre of all industries and the distributing point of all manufactures, produce and imports of Canada, and a large portion of America, by the close connections it will have with India, China, Japan, Australia, South America and the Pacific islands by steamship lines.

With such a connection in commerce Vancouver cannot fail to become one of the great cities of the world—a London, a New York, a Liverpool or a Glasgow. May we add one word more—let the council have this greatness always before their eyes and mar it not by that loathsome thing that has done so much to spoil the beauty of other cities on the Pacific. We have exaggerated nothing, and will leave it to those who come to visit us to judge, and the result of their judgment will be their becoming permanent citizens in this the foundation of a future great city.

AN IMPORTANT LUMBER CASE.

In this important case, in which Mr. Donald Guthrie, Q C, of Guelph, and the other defendants were charged with misrepresenting the business which the company was formed to take over in order to induce subscriptions for stock, the Supreme Court of Canada recently gave a unanimous judgment, affirming the judgment of the Court of Appeal and of Mr. Justice Ferguson in favor of the defendants, dismissing the action. Mr. Justice Gwynne wrote the principal opinion, and the concluding sentence of it was as follows:—

"Now, having read with the greatest care every particle of the evidence, and having given the best consideration I could to the argument of the learned counsel for the appellants, as delivered orally before us; and as expanded at large in his printed factum, I feel compelled to say that in my opinion the defendants are not only free from any just imputation of the gross fraud with which they are charged in the statement of claim, but they are equally free from any reckless disregard of the truth or falsity of the statements made in the prospectus, and that they prepared that document with an honest intention of fairly representing according to their knowledge the condition of the business for the taking over of which the company was proposed to be incorporated, and that they *bona fide* believed to be true every statement made in the prospectus, both as to the condition of the business in which they were engaged and as to the prospects of the proposed company, of which, I think, they have given in addition to their evidence upon oak in the cause the strongest possible proof by having taken among themselves $40,000, or more than 50 per cent. of the preference stock issued by the company. And I cannot but add that the fact that the plaintiffs in these suits voted for the defendants as directors of the company after they had made the investigation in which they acquired all the information upon which they based these actions and caused them to be brought, seems to my mind to show that the plaintiffs themselves did not believe the defendants to be guilty of the frauds now imputed to them, the charges as to many of which, as appears by the examinations of the plaintiffs, seem to owe their origin to the zeal of the pleader who prepared to statement of claim rather than to the plaintiffs or any information derived from them."

THEY MADE A SALE.

As it comes to the ear of the *Lumberman* there was a very amusing transaction in maple flooring in this city not long ago. Such flooring is now sold for about $28 a thousand, which, considering the value of strips, and the planing mill charge of manufacturing them into flooring is a low price. The salesman of a concern doing a large maple business got a customer in tow and offered him flooring for $27. Immediately after this offer had been made a member of the same concern came around who was informed by the gentleman who wanted to buy that he had been offered flooring at $27.

"Oh, they are cutting prices, are they?" said the member of firm. "If that's what they are up to I'll give it for $26."

The gentleman said he would consider the proposition. The salesman soon called again and his customer told him of the $26 offer.

"They think they are smart, don't they. If that's the way they are going for us I'll make it $25 50. We'll see what kind of stuff there is in them anyway," said the salesman.

Following his lead the junior member of the firm called around again, and was told by the gentleman who wanted to buy that if he desired to sell the stuff it would be necessary for him to go a little lower as it had been offered at $1 50 a thousand less than the price he last named.

"It has. Well, to settle it, we'll give you that flooring for $24 50."

"It's a bargain," the gentleman replied. "I'll take it."

When the member of the firm returned to the office he booked the order. "I sold this flooring almighty cheap." he said to his salesman, but I'll let them fellows know that we can sell flooring as cheap as the best of them." And he smiled triumphantly as he stuck a cigar between his teeth and lit a match.

The salesman stepped to the book and looked at the name of the gentleman to whom the flooring was to go in blank astonishment.

"And have you been bidding for that man's trade?" he asked.

"You bet I have!"

"And so have I," said the salesman.

Then they struck an attitude, and looked at each other after the manner of two dromios.

The member of the firm turned around, elevated the tails of his Prince Albert, and said, 'Kick me!"

The salesman turned his back to the member of the firm, and pulled his short sack coat close around the small of his back, and echoed, "Kick me!"—*Northwestern Lumberman.*

THE STATE OF TRADE.

Private reports from various lumber centres to the *Lumber World* are given below:

GRAND RAPIDS, Mich.—Lumbermen here post no changes in prices. They profess to be cheerful over the outlook.

PITTSBURGH, Pa.—No changes in prices are published. The conditions reported last month are about the same.

MILL SPRINGS, Mo.—No prices have been changed. On account of the railroad strikes business has been suspended.

OSWEGO, N. Y.—Quotations are unchanged and the business outlook has not materially altered since last month's report.

BOSTON, Mass.—Some changes in the price of spruce and lath, an increase in both cases are posted. Business is promising.

MUSCATINE, Iowa.—The list of prices remains unchanged and the business conditions show no alteration since last month's report.

CHICAGO, Ill.—Cooper stocks remain about the same as last month. Business is moderate and better things are hoped for the spring trade.

ST. LOUIS, Mo.—There is nothing to note in the way of changes at this time. Conditions same as reported last month. The bad influence of the strikes is being felt.

TOLEDO, Ohio.—Prices remain about the same. Trade is increasing slightly but the uneasiness caused by the strikes in the southwest is being felt by all consumers.

NEW YORK CITY.—Steadiness and cheerfulness characterize this market. Immense building operations promise well for our trade. The manufacturers of wood finishings are busy. The spring trade will open brisk.

NASHVILLE, Tenn.—No special changes are noted. Prices are firm, dry stocks scarce and orders numerous. The Nashville Lumber Co have sixty days work ahead and are putting in a band saw to be ready for operation April 15th.

BAY CITY, Mich.—The list of prices show few changes and the business outlook is the same as last month. Logging estimates have not been realized. Unfavorable weather is said to have materially reduced the intended cut. Dealers are hoping much from the season about to open.

MILWAUKEE, Wis.—Few changes in prices are recorded except in flooring, dry common boards, timber, joists and scantling. The southern strikes have had a bad influence on trade, as they have tended to diminish demand. Quite an extended movement has now set in and prices are firmer as dry stocks are reduced. The prospects are more encouraging than at any time heretofore.

THE LUMBER OUTLOOK.

Owing to the absence in Europe of the senior member of the firm of E. B. Eddy & Co., the gentleman interviewed at Hull was not disposed to make any statement. The cut, however, is calculated to exceed 50,000,000 feet. The party interviewed was not inclined to gush over the situation, unlike many of those engaged in the industry across the river. He thought that the activity which has given the market such an appearance of strength has been thoroughly speculative. He also as firmly asserted that there was nothing in the outlook to warrant the activity reigning just now.

All the Chaudiere lumbermen speak highly of the project to extend the Canada Atlantic tracks into the lumber yards. They claim that it will result in more benefit to the city than any scheme adopted during the past ten years.

A member of the firm of Grier & Co. ridiculed the idea of the lumber supply running short in the near future, in consequence of the continued encroachments of the lumbermen in every direction. He said that there was still an inexhaustible stretch of pine extending that had not yet been reached while the areas cut upon years ago can be visited again in the course of a few generations. Advices from the road showed that the weather was favorable for getting out logs. The snow has not yet disappeared, and has facilitated teamsters in the task of hauling out to the rivers. The shanties of the firm are seven in number, and are located on the Coulonge, Petewawa river, Bissett's creek, and Lake Temiscamingue, employing in all over 350 shantymen.

Mr. Booth could not be found by a reporter. The cut of this firm is estimated at over 55,000,000.

From private information received by a gentleman in this city from the Hon. H. G Burleigh, an extensive lumberman in New York State, now at Washington, it is learned that there will be no change in the tariff on lumber this year. It was generally expected among the trade, that the duty would this season be removed entirely from lumber exports; and consequently there was something like a boom in cutting and shipping circles. We are pleased to learn however, that our Canadian lumbermen will not be seriously affected by this prospect, as the cut for 1886 is already in most cases disposed of.—*Ottawa Journal.*

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We want Live, Energetic Agents in every county in the United States and Canada, to sell a patent article of good merit, on its merits. An article having a large sale, paying over 100 per cent profit, having no competition, and on which the agent is protected in the exclusive sale by a deed given for each and every county he may secure from us. With all these advantages to our agents and the fact that it is an article that can be sold to every householder it might not be necessary to make an "extraordinary offer" to secure good agents at once, but we have concluded to make it to show, not only our confidence in the merits of our invention, but in its saleability by any agent that will handle it with energy. Our agents now at work are making from $150 to $600 a month clear and this fact makes it safe for us to make our offer to all who are out of employment. Any agent that will give our business a thirty days' trial and fail to clear at least $100 in this time, above all expenses, can return all goods unsold to us and we will refund the money paid for them. Any agent or general agent who would like ten or more counties and work them through sub-agents for ninety days and fail to clear at least $750 above all expenses, can return goods unsold and get their money back. No other employer of agents ever dared to make such offers, nor would we if we did not know that we have agents now making more than double the amount we guaranteed, and but two sales a day would give a profit of over $ 25 a month, and that one of our agents took eighteen orders in one day. Our large descriptive circulars explain our offer more fully, and these we wish to send to every one out of employment who will send us three one cent stamps for postage. Send at once and secure the agency in time for the boom, and go to work on the terms named in our extraordinary offer. We would like to have the address of all the agents, sewing machine solicitors and carpenters in the country, and ask any reader of this paper who reads this offer, to send us at once the name and address of all such they know. Address at once or you will lose the best chance ever offered to those out of employment to make money.

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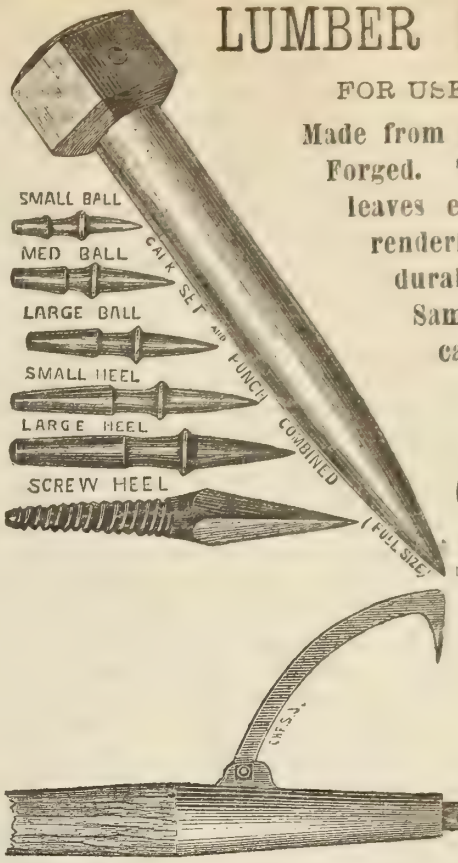

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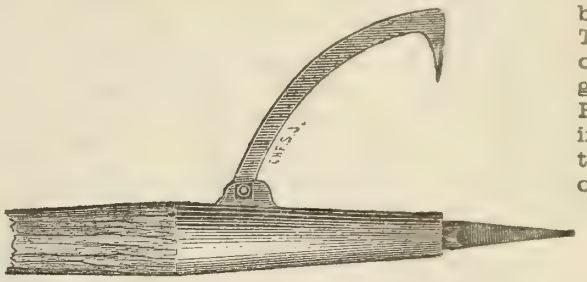

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Market Reports.

TORONTO.

From Our Own Correspondent.

APRIL 9.—The building season has now fairly opened and all the yards are doing a good stroke of business, the main drawback being the wretched condition of the roads between the railroad yards and the main street leading thereto, good teams not being able to bring as much lumber from the cars as should under favorable conditions be hauled by one horse. The railroad yards are a disgrace to the companies owning them, and the approaches leading to them a serious reproach to our city corporation. If the real value of the work is taken into consideration it is worth more money at present to deliver a car of lumber from the track to the yards than to bring the same car from the mills to this city. However, in spite this, by a liberal expenditure of oaths by the teamsters and a large waste of horse flesh, considerable lumber is now being moved from cars to yards and filling of contracts. The most serious question presenting itself to dealers just now is, where to procure enough dry lumber to meet demands until the new cut is fit to move. Nearly all the lumber piled off by track side is of the coarse grades of boards and plank, certainly not 50 per cent would run dressing and better, and the demands from the American side will have the preference for any of the better grades now at the mills.

Shipments from the docks have already commenced, the first cargo of 250,000 having left here for Oswego, ex schr. Jessie Drummand, shippers and owners, Messers. Christie, Kerr & Co. A second vessel is now loading for the same firm. It is generally conceded, however, that shipments during the early part of the season will be light, as all the available stock of last season's cut will soon be shipped out, leaving the present season's cut for early fall shipments.

Lath are coming in more freely, and good demand for dry stock. The ruling price for car load lots is $1.90 per M pieces, on car here. 12 in. stock boards are scarce and numerous inquiries for the coarser grades is made daily.

More attention is given to the various kinds of hardwoods by some of our wholesale firms this spring, and considerable quantities will be shipped eastward to Boston and other places during the coming summer. To sum the whole matter up the outlook for the present season's trade is bright and a general spirit of hopefulness pervades all those interested in the lumber trade.

Mill cull boards and scantling	$10 00
Shipping cull boards, promiscuous widths	12 00
" stocks	13 00
Scantling and joist, up to 16 ft	13 00
" " " 18 ft	14 00
" " " 20 ft	15 00
" " " 22 ft	16 00
" " 24 ft	17 00
" " " 26 ft	18 00
" " " 28 ft	19 00
" " " 30 ft	20 00
" " " 32 ft	21 00
" " " 34 ft	22 50@22 50
" " " 36 ft	24 00
" " " 38 ft	27 00
" " 40 to 44 ft	30 00
Cutting up planks to dry	20 00@25 00
" boards "	20 00
ound dressing stocks	16 00@18 00
Picks Am. inspection	30 00
Three uppers, Am. inspection	35 00@40 00

B. M.	
1½-inch flooring, dressed	25 00@30 00
1½ " " rough	14 00@15 00
1¼ " " dressed	23 00@25 00
1¼ " " undressed	14 00
1 " " dressed	16 00@20 00
1 " " undressed	12 00@14 00
¾ Beaded Sheeting, dressed	18 00@20 00
Clapboarding, dressed	12 50
XXX sawn shingles, ℔ M	2 75@ 2 90
Sawn Lath	2 25
Red oak	20 00@25 00
White "	25 00@30 00
Basswood, No. 1 & 2	18 00@20 00
Cherry, No. 1 & 2	50 00@60 00
White ash 1 & 2	25 00@30 00
Black ash 1 & 2	20 00@25 00

OTTAWA.

From Our Own Correspondent.

MARCH 26.—With the dawning of spring things about the great lumber mills at the Chaudiere are beginning to put on a bustling appearance, and men and horses are busily employed in getting things ready for the cutting season. It is confidently expected that this year will witness the largest cut of lumber at these mills ever seen before. The prospects, according to the mill owners themselves, were never so bright, and they expect that all their energies will be fully taxed to meet the demand. A project has been on foot here for a considerable time to extend the line of the Canada Atlantic railway to the lumber yards, and the city council and the railway officials have finally agreed on terms, and now preparations are going on actively to carry the project to completion. When this scheme is carried through, which will be accomplished in a few months, lumber can be loaded actually from the saw without the intervention of horse appliance. With the advent of this extension the lumbermen are to put up planing mills immediately on the site now occupied as piling grounds, and the lumber cut to be shipped, will, in future, be piled along the railway track. It is wonderful the expectations of this project. It will undoubtedly be an immense saving to the lumbermen as well as a great convenience, and will also give a largely increased carrying trade to the railroad. This extension, it is estimated, will cost the railway company about $140,000. Heretofore it was felt awkward the shipping of lumber from the mills, owing to the distance it had to be hauled, but with this scheme all that will be done away with and the shipping can be done much more speedily. The lumbermen are to be congratulated on the increased facilities which will come of this scheme. They will now be in a better position to compete than ever before and will not be slow to use the advantage thus placed within their reach. The cutting of the logs in the woods is now practically over for the season, and the drawing is almost completed and weary men and horses can be seen daily coming down from the woods in droves. There are no fears entertained about the logs cut being brought down, as the peculiar kind of a winter gives abundant hopes that water for the drive will be plentiful. In the bush there is a great accumulation of ice and this will keep the spring freshets feed until all the logs cut on the different small streams can be got into the Ottawa river.

APRIL 9.—It was expected with more or less confidence for some time past that the duty on saw lumber to the United States would have been taken off, but by recent advices from the United States agent of the Chaudiere lumber dealers this expectation is doomed to disappointment. This United States agent states most positively that the contemplated relief will not take place, as the duty is to be maintained. The Michigan and other lumber dealers in the United States brought to much pressure to bear on the authorities at Washington, and the tariff will remain just as it was. It might have been known that as long as a tariff was for the benefit of their own people Congress would not consent to remove it, and this being the case, why cannot our Government put an extra export duty on logs, and protect our forests? is the question asked by more than one. It would certainly be to the benefit of the Dominion at large, this protection of our forests, not to speak the protection due the Canadians who have a large capital invested in this industry. As long as the United States sees fit to tax our exports they certainly should be made pay something for our raw material. The cut throat policy of allowing American lumbermen to deplete our forests at their own sweet will, and only pay a nominal price for this privilege, is bound to work anything but beneficially, and now that it has been ascertained without a doubt that the United States are determined to keep up a stone wall against our lumber dealers, why, our Government should reciprocate the feeling and endeavor to either protect our forests by a reasonable export duty, or else gather into the country's treasury some recompense for the wealth taken away. This question has to be met sooner or later, and every day lost in delay will work disastrously. It will not do to find this thing out when the fine forests along the Lake Superior shore are shorn of their wealth, and this wealth gone to enrich a foreign people. Our Government will certainly be very lax in the duty they owe to the country if by their neglect any waste or loss occurs.

In a very short time now the buzz of the saw at the great mills at the Chaudiere and other districts in this locality will be heard, as the spring is evidently at hand. Every preparation has been made for the seasons operations, and all that is required now is balmy weather for the hum to commence. The prospects for getting down the logs to the mills is excellent, and no difficulty is expected as the water will be high. Already large droves of men are penetrating to the different shanties ready with the going of the ice to engage in the drive.

MONTREAL.

From Our Own Correspondent.

APRIL 10.—A brisk business continues to be done here, and considerable activity prevails at the retail yards; car load lots are also moving freely.

The improvement in the market noted lately is expected to be still bettered on the opening of navigation.

It is reported that the last year's supplies are almost exhausted in the lumbering districts, and that large sales have been effected of next season's supplies. These facts make the dealers here look for better figures.

There are no change to note in the prices since last report.

The following are the quotations at the yards:—

Pine, 1st quality, ℔ M	$35 00@40 00
Pine 2nd " "	25 00@30 00
Pine, shipping culls, ℔ M	14 00@16 00
Pine 4th quality deals ℔ M	10 00@12 00
Pine, mill culls, ℔ M	7 00@ 9 00
Spruce, ℔M	10 00@13 00
Hemlock, ℔ M	9 00@10 00
Ash, run of log culls out, ℔ M	20 00@25 00
Bass, " " ℔ M	18 00@20 00
Oak, ℔ M	40 00@50 00
Walnut ℔ M	60 00 100 00
Cherry, ℔ M	80 00 100 00
Butternut, ℔ M	35 00@40 00
Birch, ℔ M	20 00@25 00
Hard Maple, ℔ M	25 00@30 00
Lath, ℔ M	1 60@ 0 00
Shingles, 1st, ℔ M	2 00@ 3 00
Shingles, 2nd, ℔ M	2 50@ 0 00

CORDWOOD.

The cordwood market has been fairly active and there has been a good demand for all kinds at steady prices.

Long Maple, per cord	$ 6 00@6 50
Long Birch "	6 00@0 00
Long Beech "	5 00@5 50
Tamarack "	5 00@0 00

CHICAGO.

The *Northwestern Lumberman* of April 10th says:—Though there is still a fair distribution of lumber from the yards, it must be admitted that trade is somewhat quieter than it was a short time ago. Orders are not coming so numerously, and the trains on track are smaller. The dealers themselves acknowledge a percentage of falling off. The shrinkage is attributed to several causes. Some say that the labor troubles in the southwest have had a depressing influence on the demand; others that the low price of grain is preventing sales among farmers, retail dealers for this reason fearing to stock up. The muddy state of the roads is a hindering cause in the view of some. It is said by a few that the firmness with which lumber is held in the leading markets induces timidity or hesitancy on the part of country dealers; they prefer to get along with as small purchases as possible until the afflux of green lumber shall soften the market. All these propositions shall have weight, and are influencing, to some degree, the present volume of trade. But the wholesale yard men of this city repeatedly overlook the fact that there is usually a falling off of demand in April, and are always disappointed on that account, when it is something they should each year expect.

The reason why the country demand for lumber falls off after April 1st is because the flush of the spring trade is then over. The southwestern spring requirement begins to show up about the middle of February. During the fore part of March Nebraska, Iowa, Illinois and Indiana wake up and call for lumber. By the last of March the retail yards have bought in the stock necessary to carry them along for several weeks. It is natural that country dealers should then wish to pause and consider a little. They know that the mills will soon start, and that there is likely to be a softening of prices in consequence. When April comes dry stocks in the wholesale yards have been broken up in assortment by the early spring trade, and holders are insisting on firm prices. This is especially so this year on common and cull lumber, classes most needed in the western shipping trade. It is probable that some are now hesitating about buying on this account.

While there is usually a falling off in April from the rushing trade of March, it does not follow that absolute dullness is characteristic of April. On the contrary it is month of steady demand, and probably the current month will be no exception to the general rule. The call for local building purposes commonly increases as spring advances. The railway and manufacturing demand also rises as warm weather approaches, so that a healthy trade is maintained, but the flush of the country spring demand is over by the first of March, as has been said. Under ordinary circumstances there is no more rush and vim in trade until August and September.

Receipts of lumber and shingles for the week ending March 25th, as reported by the Lumberman's Exchange:—

RECEIPTS.	*Lumber.*	*Shingles.*
1886	5,507,000	1,370,000
1885	4,745,000	876,000

FROM JAN. 1, TO APRIL 8, INCLUSIVE.

RECEIPTS.	*Lumber.*	*Shingles.*
1886	75,653,000	18,445,000
1885	66,691,000	13,462,000
Increase	8,962,000	4,983,000

STOCK ON HAND MARCH. 1.	1886.	1885.
Lumber & timber	519,819,852	557,882,66
Shingles	361,133,190	324,267,100
Lath	73,290,876	50,674,489

EASTERN FREIGHT RATES.

FROM CHICAGO AND COMMON POINTS ON CAR LOAD LOTS OF HARD AND SOFT LUMBER.

To New York	25c.
Boston	30c.
Philadelphia	23c.
Baltimore	23c.
Washington	23c.
Albany	23c.
Troy	23c.
Buffalo and Pittsburgh	15c.
Shenectady	23c.
Wheeling	15c.
Suspension Bridge	15c.
Salamanca	15c.
Black Rock	15c.
Dunkirk	15c.
Erie	15c.
Toronto	15c.

ALBANY.

Quotations at the yards are as follows:—

Pine, clear, ℔ M	$55 00@60 00
Pine, fourths	50 00@55 00
Pine, selects	42 00@47 00
Pine, good box	22 00@33 00
Pine, common box	13 00@15 00
Pine, 10-in. plank, each	00 45@00 47
Pine, 10-in. plank, culls, each	00 25@00 27
Pine boards, 10-in	00 30@00 32
Pine, 10-in. boards, culls	00 16@00 20
Pine, 10-in. boards, 16 ft., ℔ M	28 00@32 00
Pine, 12-in. boards, 16 ft	28 00@32 00
Pine, 12-in. boards, 13 ft	28 00@00 00
Pine, 1¼ in. siding, select	40 00@43 00
Pine, 1¼-in. siding, common	15 00@18 00
Pine, 1-in. siding, select	40 00@42 00
Pine, inch siding, common	13 00@15 00
Spruce, boards, each	00 00@00 16
Spruce, plank, 1¼-in., each	00 00@00 20
Spruce, plank, 2-in., each	00 00@00 30
Spruce, wall strips, each	00 12@00 12
Hemlock, boards, each	00 00@00 14
Hemlock, joist, 4x6, each	00 00@00 32
Hemlock, joist, 2½x4, each	00 00@00 14
Hemlock, wall strips, 2x4, each	00 00@00 11
Black walnut, gook, ℔ M	100 @120 00
Black waluut, ¾ inch	80 00@90 00
Black walnut, ¾ inch	00 00@85 00
Scaymore, 1-inch	28 00@30 00
Scaymore, ¾-inch	21 00@23 00
White wood, 1-inch and thicker	38 00@40 00
White wood, ¾-inch	28 00@30 00
Ash, good, ℔ M	40 00@43 00
Ash, second quality, ℔ M	25 00@30 00
Cherry, good, ℔ M	80 00@85 00
Cherry, common, ℔ M	25 00@30 00
Oak, good, ℔ M	40 00@43 00
Oak, second quality, ℔ M	20 00@25 00
Basswood, ℔ M	25 00@30 00
Hickory, ℔ M	40 00@40 00
Maple, Canada, ℔ M	28 00@30 00
Maple, American, per M	26 00@28 00
Chestnut, ℔ M	38 00@40 00
Shingles, shaved, pine, ℔ M	0 00@ 6 50
" 2nd quality	0 00@ 5 00
" extra, sawed, pine	4 30@ 4 50
" clear, "	0 00@ 3 00
" cedar, mixed	0 00@ 3 25
" cedar, XXX	0 00@ 0 00
" hemlock	2 25@ 2 37
Lath, hemlock, ℔ M	0 00@ 2 13
Lath, spruce, "	0 00@ 2 25

BUFFALO.

We quote cargo lots:—

Uppers	$45 00@46 00
Common	17 00@18 50
Culls	12 50@13 00

TONAWANDA.

CARGO LOTS—MICHIGAN INSPECTION.

Three uppers	$42 00@44 00
Common	18 00@24 00
Culls	10 00@13 00

OSWEGO, N.Y.

From Our Own Correspondent.

Note change in quotations in ash, basswood and lath. The spring trade is much improved, but the stocks here are very much broken; dealers are looking for a good trade on the opening of the canal.

Three uppers	$42 00@46 00
Picking	32 00@35 00
Cutting up	24 00@26 00
Fine Common	22 00@25 00
Common	14 00@18 00
Culls	11 00@14 00
Mill run lots	16 00@22 00
Sidings, selected, 1 in	30 00@35 00
" 1½ in	32 00@36 00
Mill run, 1x10, 13 to 16 ft	16 00@21 00
Selected	21 00@24 00
Shippers	14 00@16 00
Mill run, 1½x10	17 00@20 00
Selected	21 00@30 00
Shippers	14 00@16 00
Mill run, 1 & 1½ in, strips	15 00@18 00
Selected	22 00@30 00
Culls	11 00@13 00
1x6 selected for clapboards	26 00@35 00
Shingles, XXX, 18 in. pine	3 10@ 3 50
XXX Cedar	2 75@ 3 00
Lath 1½, No 1	1 85@ 2 00
No 2	1 00@ 1 25
Ash, 1st & 2nd 1 to 4 in	16 00@20 00
Basswood, 1st & 2nd, 1 & 1½ inch	18 00@20 00
" culls, " "	8 00@11 00

GLASGOW.

The *Timber Trades Journal* of April 3rd says:—The arrivals of wood goods at Clyde ports continue light, comprising for the past week one cargo of pitch pine and sundry small imports of oak planks, staves, etc., per steamers.

The only public sales to note is one of deals, which took place here at Yorkhill Wharf, on 25th ult., Messrs. Edmiston & Mitchell brokers.

There was a fair attendance; advantage was taken of the recently opened underground railway, which, having a station at Yorkhill, affords a convenience for buyers coming to the sales The catalogue submitted comprised Michigan pine deals and Quebec and lower port spruce deals; only a small proportion changed hands the demand being very quiet.

The output from the Clyde shipbuilding yards for March was nine vessels, 8,169 tons, an unusually small monthly return. For the quarter the tonnage launched amounts to 28,669 tons, as against 38,316 tons in 1885, and 63,309 tons in 1884 at corresponding date. It is some satisfaction to note, however, that of the work in hand there is a substantial increase, as compared with the state of matters in March, 1885, it being computed that there are at present in the course of construction over eighty vessels, of all kinds, representing, in the aggregate, some 150,000 tons, as against between 50 and 60 vessels, of about 90,000 tons in March of last year.

Among the applications granted at the last meeting of the Glasgow Dean of Guild Court was one of some importance, by the Glasgow Athenæum (Limited), to take down existing buildings and erect new buildings in St. George's Place. The new Athenæum is estimated to cost about £15,000.

The following is a note of prices:—

Michigan 1st pine deals—		Per c. ft.
16 ft.	7/10×3	2s. 9d.
12 to 18 "	10/24×2½	3s. 2d.
Do. 2nd—		
12 to 16 ft.	14/20×2½	2s. 1d.
St. John, N. B., spruce deals—		
22 ft.	9×2	0s. 9½d.
17 "	9×	0s. 9½d.
13 & 14 "	9×3	0s. 9d.
11 "	9×3	0s. 9½d.
9 & 10 "	9×3	0s. 8½d.
Dorchester, N. B., spruce deals—		
16 to 22 ft.	11×3	0s. 10½d.
16 "	9×3	0s. 9½d.
Do. Battens—		
9 to 11 ft.	6/7×2½	0s. 7½d.
Do. ends—		
2 to 8 ft.		0s. 7½d.
Shediac, N. B., spruce deals—		
13 & 14 ft.	9×3	0s. 9½d.

LIVERPOOL.

The *Timber Trades Journal* of April 3rd says:—With a total absence of public sales during the past week there has been but little animation shown in the whitewood market, though an improvement in the demand is perhaps perceptible. This, of course, is in a measure attributable to the sudden change in the weather, which has affected the building trade by affording it a chance of building into life, though we are sorry to say it appears by no means in a vigorous condition.

Though the general grumble all round of the bad state of trade loses nothing of intensity, yet locally there is an impression that we may have now seen the worst and live in hopes that the "good time coming," which has been so long deferred, may soon be within view. At present buyers are still holding off the market, presumably in the hope that, if prices do not go lower than they are now, they will, at any rate, not advance materially; but really the market rates have dropped to such a depth that any slight disturbance of the position might cause an advance before the over-cautious buyer dares to make a move.

The stocks on hand of the principal articles in the market, notably yellow pine timber, spruce deal, Norwegian flooring, and other goods, compare favorably with those held at this time last year, and holders of spruce deals especially are inclined to be firmer in their demands than they have been for some time past.

LONDON.

The *Timber Trades Journal* of April 3rd says:—Business seems to be very quiet around the coast, but some fair lines have been sold during the past week at current prices, and very considerable sales of good stocks could have been made had sellers been disposed to give way in their quotations. The amount of sales effected for leading makes compares very favorably with last year's statistics, and we believe that the total quantity placed this season equals or exceeds that sold during a similar period last year. Sellers, therefore, feel themselves justified in maintaining a firm attitude, especially considering the lateness of the season, and the fact that many leading importers, both in England and France, have not yet filled a tithe of their requirements.

London buyers seem holding back as much as ever, and we learn of little f.o.b. business being actually effected, although agents have done their best to carry contracts through. When dealers here can purchase at auction ordinary goods at 10s. to 15s. less than it would cost to import, it is hardly to be expected that they will purchase on f.o.b. terms until they can see their way clearer than is possible at present. This condition of affairs is likely to continue so long as over-production forces shippers to send forward to the London market unsold goods, which are either sold to arrive at excessively low rates, or knocked down at auction at ruinous prices.

Things are very quiet at the sales; and many of those attending being onlookers, although now and again putting in a bid, the proceedings were unmarked by any animation beyond what always appertains to goods put up without reserve by public auction. We noticed that one or two large dealers who were not buyers last week, were again in the field, and one of them went in for considerable lines, probably influenced by the fact that he got them nearly all at his own price, competition being of the most limited kind.

On Thursday the attendance at the saleroom was rather better, and if there was any difference, the back benches struck us as being better filled; but we cannot say the same of prices. If these were equal to those of the day before, it was as much as they were. The Gefle deals, ex Abeona, went fairly well for mixed, as did the 3rd plank; but the Petersburg best yellow Gromoff's, did not reach £12, and most of the other descriptions and sizes were equally cheap.

Flooring prices ruled low, though we were glad to observe that now and again a reserved lot was bid for; but this is very little to go upon, and merely indicates that sellers have put the limit pretty much on a level with market rates. Mr. Alexander B. Sim occupied the rostrum, and the sale, notwithstanding that prices ruled low, did not hang about much, the bidding at times being fairly active.

Nobody seemed to have an encouraging report of the outside market doings, and we hear on all sides that the building trade is even worse than it was last spring.

In the Canadian trade, says the *Journal* of March 27th, things seem to be going on in the even tenor of their way. We have just heard that a couple of vessels have been chartered by Messrs. Bryant, Powis & Bryant, limited, Three Rivers to London, all deals, at 47s. 6d., the charter we recorded last week also being for the same firm. We may observe, *en passant*, it is very seldom that any hardwood is shipped from Three Rivers. At the present rates of freight shipowners must be out of pocket. How long this will last it is difficult to tell, but at present there are no signs of any improvement. The shippers from the other side of the Atlantic, who generally pay the mother country a spring visit, appear to be making a longer stay than usual in the metropolis. Amongst those whose names have come under notice now in town are Mr. Dobell, Mr. Burstall, Mr. Murphy, all from Quebec, the lower ports being represented by Mr. Snowball, of Miramichi, and Mr. Girouard, of Betsiawitz. Mentioning the spruce ports reminds us that, though this class of wood continues dull, Mr. Snowball has nevertheless made his usual contract with the Leadenhall street firm.

Considerable quantities of pine deals have been sold for forward delivery at satisfactory prices. The market in London continues to be well sustained, especially in the lower qualities, stocks of which are about to be somewhat limited. The demand for fourth pine appears to have grown with the supply. A few years back this quality was unknown, and now it is inquired for on all sides. Thirds also have become a staple article of consumption amongst users of pine.

WOOD-WORKING PATENTS.

The following list of patents relating to the wood-working interests, granted by the United States Patent Office, March 30th, 1886, is specially reported by Franklyn H. Hough, solicitor of American and Foreign patents, 925 F. Street, N. W., Washington, D. C.

338,967—Morticing machine—A. J. Heuse, Baltimore, Md.

338,967—Planing and matching machine—C. Johnson, jr., Baltimore, Md.

338,787—Saw filing machine—S. C. Rogers, Hamilton, Ontario, Canada.

339,000—Saw mill, reciprocating—H. Mc Evilla, Muskegon, Mich.

338,884—Saw mills, log pusher for—R. W. Shelburne, Blandville, Ky.

338,693—Saw setting device—C. J. Belch, East Minneapolis, Minn.

339,020—Saw vice—O. Seely, Syracuse, N. Y.

PATENTS ISSUED APRIL 6.

339,195—Boring machine, square hole—A. E. & J. C. Lake, Big Prarie, O.

339,554—Boring tool and holder, combined—S. P. Graham, Galt, Ont.

339,109—Lumber, compound—J. Marris, Philadelphia, Pa.

339,s39—Saw mill, band—C. Esplin, Minneapolis, Minn.

339,576—Saw sharpening machine—L. O. Orton, Philadelphia, Pa.

339,314—Turning wooden spirals, machine for—V. Merklen, New York, N. Y.

THE Muskoka *Herald* says:—The Mills of the Georgian Bay will munufacture this year 203,500,000 feet of lumber. In addition to this there will be 16,500,000 feet, for export in log. The cut at Gravenhurst and vicinity will be 52,500,000 feet an the mills of Severn, Lethbridge and Longford will turn out 22,000,000 feet of lumber. The cut of board pine on the Georgian Bay, Muskoka and Severn rivers, including a small quantity of square timber on the Severn, will be about 1,532,000 feet. This is a large cut and it looks as if the manufacturers expect better times in the lumber trade.

JOHN A. A. BENSON, representative of the Waterous Engine Works Company, of Brantford, who has just returned from North Bay, *via* Ottawa and the C. P. R., having driven from Gravenhurst across through Muskoka and Parry Sound district, reports sales in their line good. Jobbers are happy, the winter being as if it was made to order, and snow is plentiful from the terminus of the Northern to the Dominion capital.

LUMBER IN ALASKA.

THE *Alaskan*, of Sitka, Alaska, in its issue of February 27th, remarked as follows:—

The lumber question, unless congress gives us at once some legislation which will authorize the purchase of timber lands, or timber, in Alaska, is going to be a very serious one, and produce much trouble in the immediate future. Letters from Juneau mention the fact that a great deal of building would now be going on there, but for the fact that there is no lumber at all on hand. There can be no doubt that a large influx of population will commence next month; indeed the tide has already begun to set in. It is certain that works looking to the thorough development, and continued operation of several ledges which have thus far been worked only to the amount of the necessary annual assessment labor, and designed by the ledge owners, will be commenced as soon as the material can be got together. Every year adds something to the known placer area of the territory. All this steady growth of the mining enterprises carries with it a corresponding increase in all kinds of business used to a growing country, and there is no article the importance of which is more felt than lumber. It seems indeed hard that the facilities which might be so easily made available here, to the rapid opening up of the country, should be denied to the people, and that the territory should remain still a monument not only of the perfidy of the goverment which owns it, but of the loss and detriment which such perfidy carries with it. Honesty is the best policy, and the United States would soon be enjoying a happy realization of the truth of the proverb in the income from Alaska, if it would but try its application to the development of the territory, by the simple accordance of just and equal laws with those enjoyed by all the people elsewhere.

The Seattle *Chronicle*, of a late date, had the following:

By a recent order of the interior department saw mills in Alaska are not permitted to cut logs and manufacture the same into lumber, except for the personal use of the proprietors of the saw mills. The order is based on the fact that there are no land laws in that territory, and no person can acquire ownership to real property. The only person who have title to real estate are a few Russians who owned land in Sitka at the time of the transfer of the territory to the United States. Of course the transfer did not deprive them of the title to their land. The effect of the order has been to close the five saw mills in Alaska. The largest was located at Wrangel and had a cutting capacity of about 20,000 feet a day; another was near Sitka, with a capacity of 8,000 a day. The five mills had a total capacity of 50,000 feet a day when in full operation. There is at present considerable demand for lumber in Alaska, particularly at Juneau City, where a cargo of 500,000 feet would be snapped up in double quick time at from $25 to $30 a thousand. There is a considerable influx of prospectors and miners into the country, which will cause an increased demand for lumber. The shipment of lumber there, at least for a time, would undoubtedly be exceedingly profitable. The sailing vessel on her return trip, could put in at Glacier bay and and load with magnificient ice cut from one of the natural wonders of the earth—a great glacier breaking off by small degrees and falling into the sea. This ice could be cut and sold at handsome rates in the markets of Victoria, Seattle and Portland, where natural, thick, pure ice is an unknown thing.

"Foreign Trade Gazette."

The *Foreign Trade Gazette* is the name of a monthly journal recently established in New York and devoted to international, commercial and financial topics. It is printed in English and Spanish, the same intelligence being printed in parallel columns, one column being in English and the other Spanish. At present the United States has the bulk of the trade with the countries in the Americas, in which Spanish is the prevailing language—the West Indies, and Central and South America—but we hope to see the Canadian trade with these countries increased.

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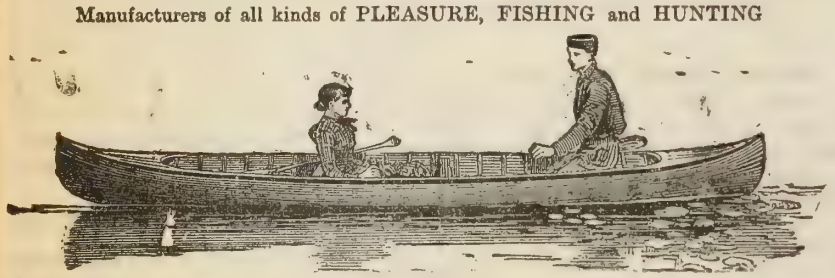

CANOES

Patent Cedar Rib Canoes, Patent Longitudinal Rib Canoes, Bass wood Canoes, Folding Canoes Paddles, Oars, Tents, etc., etc

Gold Medal, London Fisheries Exhibition, 1883.

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MANUFACTURER OF

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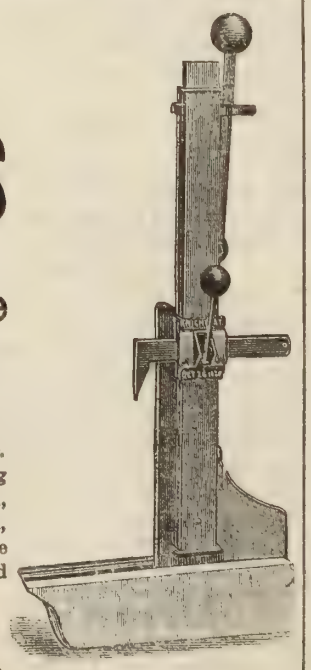
SAW MILL DOGS

The Sawyer's Favorite

For Holding Logs upon a Saw Mill Carriage while being Sawn into Lumber.

These Milldogs I guarantee to give satisfaction in every case. They will hold a frozen log as well as a soft one, for cutting cantling, Square Timber, &c. These Dogs cannot be excelled, sell them all on their own merits, give ten or fifteen days trial, and then, if not satisfactory, return them to my order, as I have no agents on the road this year, I will sell them at a reduced price. Send for Circular and price list.



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Norman's Electro-Curative Belt!

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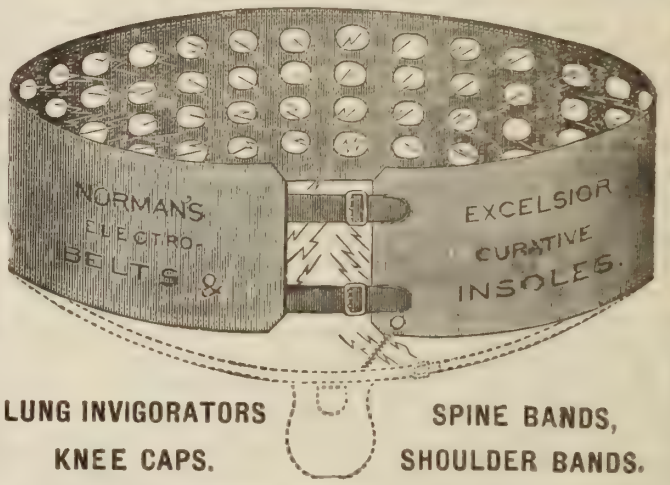

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sun should find you resolved to give Ayer's Sarsaparilla a thorough trial. It will cleanse and invigorate your blood, and restore the vital organs to their natural functions. Mrs. J. D. Upham, 231 Shawmut avenue, Boston, Mass., writes: "For a number of years I was troubled with Indigestion, and unable, without distress, to take solid food. After using Ayer's Sarsaparilla one month I was

Entirely Cured."

Mrs. H. M. Thayer, Milton, Mass., writes: "I have been very much troubled with torpidity of the liver, and Dyspepsia. Ayer's Sarsaparilla has cured me." Mrs. J. W. Bradlee, Hyde Park, Mass., writes: "I was greatly reduced by Dyspepsia, and was advised to take Ayer's Sarsaparilla, which entirely cured me." Mrs. M. F. Hamblett, 25 Lawrence street, Lowell, Mass., writes: "I was sick two years with stomach and liver troubles, and obtained no relief until I took

Ayer's Sarsaparilla

saparilla. Since that time I have enjoyed excellent health."

follows generation, transmitting a legacy of good or ill, according to well-known physical laws. To the unfortunate sufferer from hereditary Scrofula, nothing can be more cheering than the assurance that in Ayer's Compound Extract of Sarsaparilla is found a constitutional remedy, which eliminates the poisonous taint, and restores to the blood the elements necessary to

Life and Health.

Alarie Mercier, 3 Harrison avenue, Lowell, Mass., writes: "My son was weak and debilitated, troubled with sore eyes and Scrofulous humors. Ayer's Sarsaparilla restored him to perfect health." Irving H. Edwards, Ithaca, N. Y., writes: "From the time I was four years old, until eighteen, I was subject to Scrofulous sore throat. Many a time my neck has been a raw sore, from poultices put on to draw out the inflammation. I took four bottles of Ayer's Sar-

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and have never had the disease since, in sixteen years."

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4. Its columns are filled with interesting reading matter, valuable alike to the land owner, manufacturer or dealer.
5. It costs only $2.00 per year to have it sent, post-paid, to any address in Canada, and no land owner, lumber dealer, manufacturer or individual in any way connected with timber industries, can afford to do without it.

☞TO ADVERTISERS.

It has a circulation among saw mill owners, manufacturers, lumber and timber dealers and all classes connected with the timber business.

Examine the field, count the cost, and you will at once decide that the CANADA LUMBERMAN is the

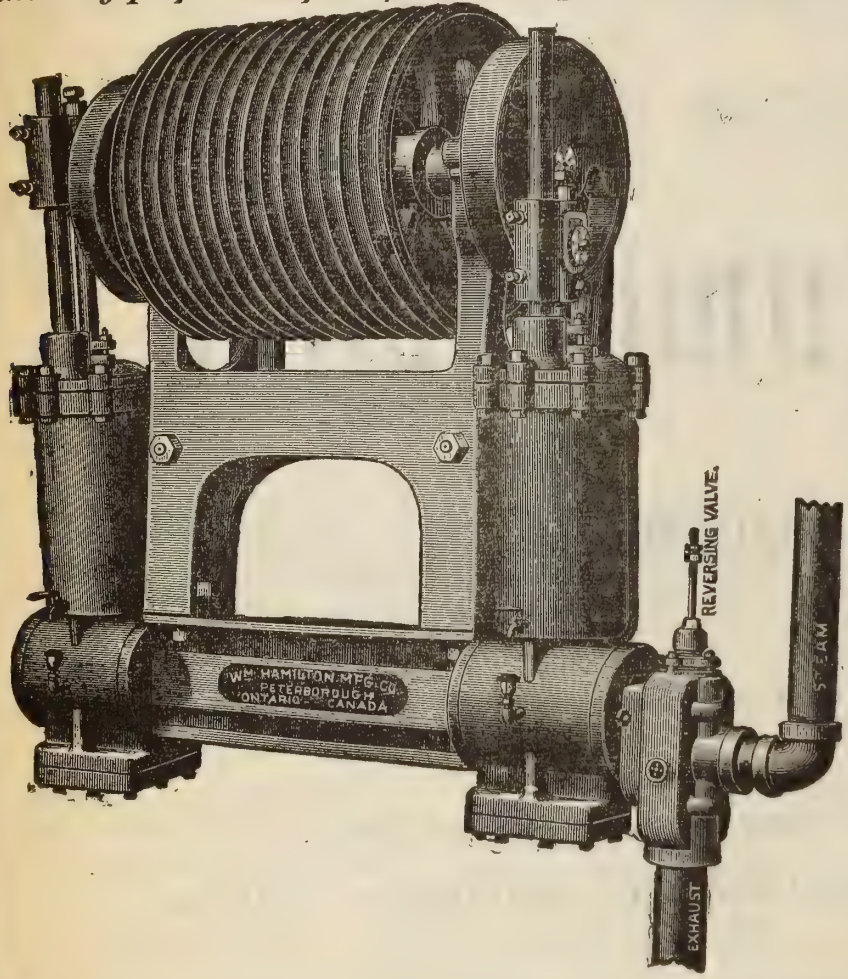
———CHEAPEST, BEST, MOST RELIABLE and ONLY TRUE MEDIUM———

for placing your goods or wares before the saw-mill men and lumber and timber dealers of the Dominion.

CUNNINGHAM'S
PATENT OSCILLATING TWIN ENGINE

FOR STEAM FEED IN CIRCULAR MILLS WITH RACK OR ROPE.

This Engine has practically but two moving parts, aside from cranks and shafts. The whole array of eccentrics, valves, valve rods, connecting rods, cross heads, slides, levers, rock shafts, bell cranks, etc., is done away with, and the very perfection of simplicity, compactness, durability and cheapness attained.



The above engraving illustrates the Twin Engine, 10x16, for Rope Feed, for Saw Mill Carriages. The spool is 27 in. diameter, 30 in. face, is grooved 2 in. pitch for 1½ in. rope. The shaft is steel, 4½ in. diameter, with disk cranks. No connecting rods, eccentrics or valve rods to get loose and out of order. The ports are in the trunions, and worked by an oscilliation of the cylinders, and are held in their place in the downward motion by a steam cushion below. The sawyer's valve is a perfect balance, and by moving this valve the engine can be reversed, stopped or started almost instantaneously if necessary, as the sawyer has perfect control of it by his lever either to go fast or slow. Should the sawyer let go of his lever either by mistake or any other cause, it is balanced so that the valve will come to the centre and cut the steam off both cylinders and stop the feed. When standing, the lever is locked or fastended, so that is is impossible for it to start off itself. The engine stands upright below the carriage, and bolted to two upright beams, placed on the mill for the purpose. When a rack is preferred in place of the rope, we put on a steel wheel 30 in. in diameter, and the engine placed high enough to work into the rack on carriage bar, or if the beams come in the way, an idler wheel can be used between engine and rack segs; or, the engine can be placed at a distance and have a shaft from it to the carriage; or it can be placed in the engine room, where it is under the control of the engineer for oiling, thence by shaft and pinion to carriage rack bars. These engines are well adapted for cutting long logs, or where the logs are mixed, the advantage of this feed will be apparent to mill men. When the carriages are used in two or more sections, the couplin and uncoup ling of each section is quick and simple.

There were two of these feeds working this summer and giving the best of satisfaction, one with rope feed at James Playfair & Co's Mill, Sturgeon Bay, near Waubaushene, and one at the new mill furnished by us to Francis Carswell & Co., at Calabogie Lake, on the Kingston and Pembroke R. R. This mill is working with the Rack and Pinion feed, and drops from fifteen to seventeen stock boards per minute. We have also sent one to the Rathbun Company, Deseronto, to put in to feed their heavy Circular Mills. They will also commend themselves for various other cases, especially for running Elevators, hoisting Engines, and wherever a simple and easily reversible motion is required.

We would also call attention to our Improved Hand Saw-Mill for cutting logs

☞ ***We guarantee this to be the best Mill of its kind got up, and would ask any one wanting a good Band Saw-Mill to communicate with us. We would also call the attention of Mill Men to our new IRON GANGS, CIRCULAR MILLS and MILL MACHINERY. For further information, prices, &c., address the Manufacturers,***

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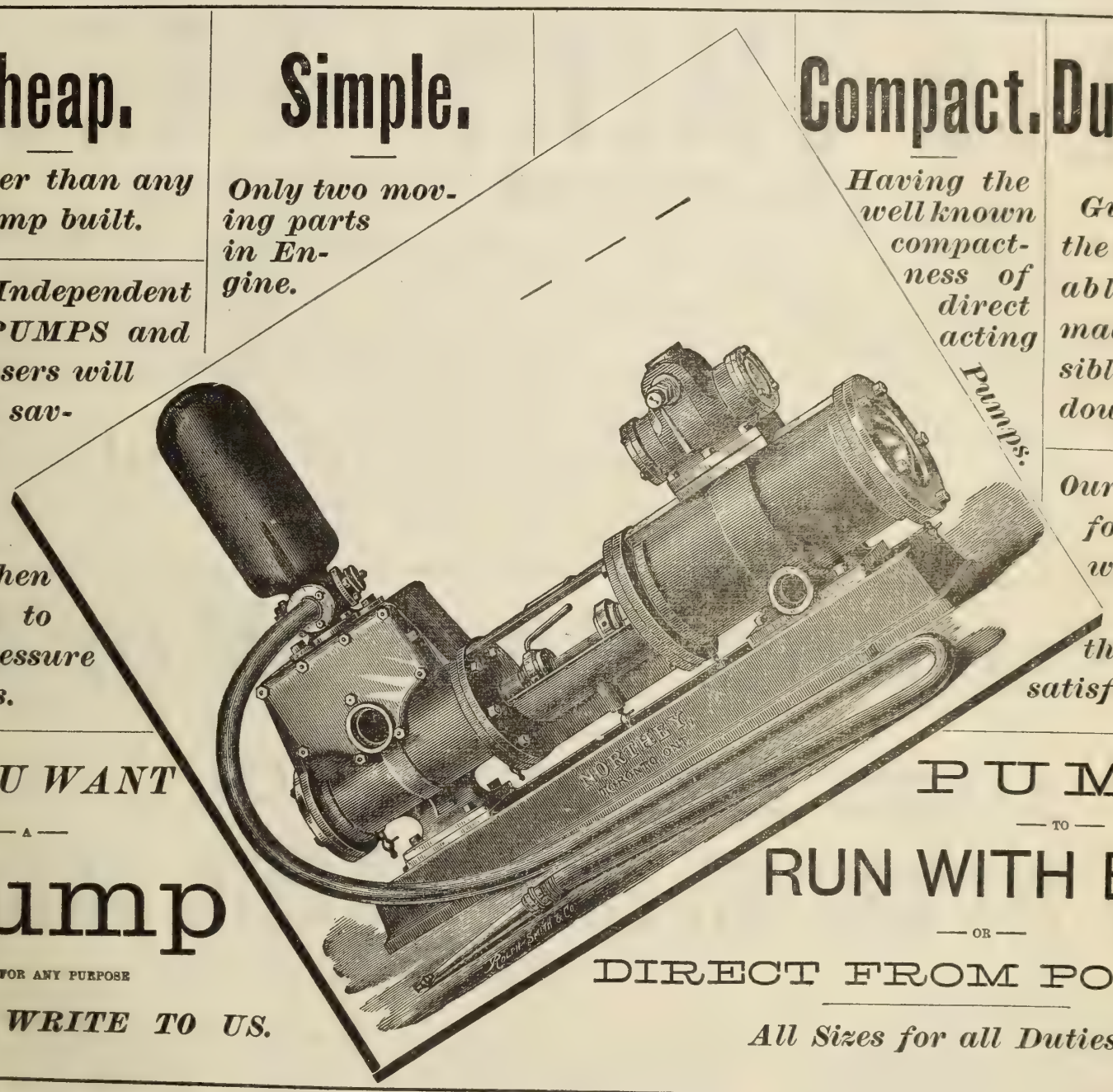

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SOLID EMERY WHEELS

AND SHARPENING MACHINERY.

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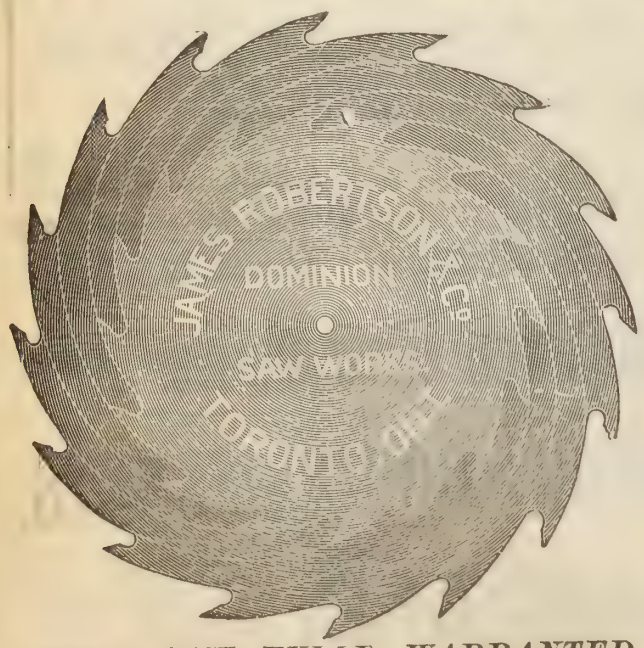

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SUBSCRIPTION $2.00 PER ANNUM

VOL. 6. **PETERBOROUGH, ONT., MAY 1, 1886.** **NO. 9.**

A SHORT line of railway from Broad street, Ottawa, to the Chaudiere lumber yards, is to be constructed at once by the Canada Atlantic Railway Company.

IT is said that the Ontario Lumber Company have sold their last year's stock, about 6,000,000 feet, cut at G. W. Taylor & Co.'s mill, for $13 a thousand.

THE schooner Jessie Drummond, loaded with lumber, and bound from Toronto, Ont., to Oswego, New York, was caught in the storm of April 6th, and lost 50,000 feet of her cargo.

GEORGE M. BROWN and S. S. Wilhelm are said to have purchased 320 acres of pine land in town 18-5 west Michigan, estimated to cut 8,000,000 feet of logs. Consideration $35,000.

THE schooner Lynx, of St. John, N. B., fo New York, lumber laden, was wrecked off Milk island, Mass., April 8th. The crew was saved. The vessel and cargo were partly insured.

IT is reported that Judd & Goddard, of East Saginaw, Mich., have sold to the Eddys and Averys of Bay City, 2,000 acres of pine land on Tequamenon river, upper Michigan, estimated to cut 30,000,000 feet of logs, for $76,000.

THE Berlin Mills Lumber Company, at Berlin Mills, Me., will save the sawdust at their mills the coming season, for use in the pulp furnaces of the Glenn Manufacturing Company and the Forest Fibre Company. That is one way of working sawdust into paper.

THE new dock and flour warehouse, at West Superior, opposite Duluth, will have a total length of 1,800 feet. Timber will be sunk 18 feet under water, dredging for that purpose to begin as soon as the ice goes out. The Manitoba railroad is behind the enterprise.

MR. J. WHITESIDE, in addition to the 700,000 taken out for the Muskoka Mill & Lumber Co., reported a few weeks ago, has also taken out for himself, in Chaffey township, 1,000 000 feet which he has arranged to have manufactured at Gravenhurst.

A MAN named George Southerland was recently engaged at Noxon Bros'. establishment, Ingersoll, in operating a circular saw, when the piece of wood which he was sawing was thrown from the saw and struck him upon the face with such fearful violence as to cleave it open from forehead to chin.

MR. ISAAC SCOTT is taking out a second cargo, 200 cords, of poplar, at Point Aux Pin for an eastern paper mill. Eastern paper manufacturers would do well to turn their attention in this direction, where their are immense forests of soft woods suitable for their purposes.—*Algoma Pioneer.*

THOMAS MCCORMACK, of Deep River, lost a valuable team of horses in Deep river, on April 14th. They were drawing in Masson's shanty, and one of the concern teams broke through the ice. Mr. McCormack's team was near then and was going to the assistance of the other team when he broke through. The team was worth $300.

AN employee in Walker's saw mill, Calgary N. W. T., named John Monahan, was caught by a belt and hurled directly on one of the saws. His left arm was terribly lacerated, and the saw penetrated the left breast almost through the ribs. The arm was amputated above the elbow and he may recover.

THE Eastern Lumber Company has been incorporated by Jacob Reidler, F. Ferguson and Francis Beidler, all of ıicago, and connected with the South Branch umber Co. The object of the new company is arry on a lumber business at the East with ard and headquarters at Tonawanda, N. Y. Capital stock, $100,000.

ONE of the schooners engaged in the lumber trade of the lakes is the Harriet Ross, an old craft that was in "Perry's victory" naval engagement on Lake Erie. She is now in dry dock, Chicago, undergoing repairs. It is claimed that shot have been dug out of some of the old timbers of the vessel, and this is adduced as evidence that she was really in the famous fight of 1813.

FROM recent observations, Captain Pillsbury finds that the strength of current of the Gulf Stream is invariably on the Florida, instead of the Bahama, side of the stream. He has found the temperature of the stream to range from 42 to 81 degrees. The greatest velocity of the stream at the surface is about four and a half knots, but the fluctuations are frequent and great.

THE Belleville *Ontario* of a recent date says: Mr. James Buck has been rafting timber here for the Quebec market. A large gang of men are employed getting the timber in shape for the rafts. Two train loads have already arrived. The timber is loaded along the line at Hastings, Sterling, Hoard's and Birdsall. The load this time came from Hoard's station. One tram load a day will be brought in for a couple of weeks.

THE Yukon, the great river of Alaska, stands seventh among the rivers of the world. It takes its water from an area of 200,000 square miles, and its total length is 2,044. For 1,000 miles it flows through a country very little known; an expedition under the direction of Lieutenant Schwatka set out from San Francisco in 1883, and thus much valuable information about the geography of the country through which the Yukon flows has been obtained. The severity of the extreme north latitude in many parts of Alaska, as in British Columbia, is greatly modified by the warm ocean currents coming from the China Sea.

The Thorncliff correspondent of the Pembroke *Observer* says:—There has been a considerable amount of square timber taken out in this district during the past winter, and it may not be uninteresting to your readers to give them the following statement received from an official source:

	Cubic ft.
Fraser & Sereny, Chelmsford	125,000
" South River	250,000
Wm. Allen, "	100,000
David Moore, Sturgeon River	500,000
Barnet & Mackie, "	500,000
R. H. Klock, Veuve River	200,000
Timmins & Gorman, Wahnapitai	175,000
McArthur Bros., "	200,000
Hugh Coburn, Sudbury	100,000
	2150,000

These are about the figures they will amount to in Quebec. Besides this amount of square timber there was taken on about 260,000 saw logs. All the saw logs excepting Klock's will be carried over Mr. J. R. Booth's railroad. Besides this about 50,000 saw logs go to Bay City, Mich, belonging to the Emery Lumber-iug Co.

EDINBURGH INTERNATIONAL EXHIBITION.

Visitors to Scotland this year will find an additional attraction in the International Exhibition, which will shortly be opened in Edinburgh, the ancient and historic capital of the country. While the exhibition is open to the products and industries of all nations, and of these there will be a large display, the most prominent feature will naturally be illustrations of the industrial, scientific and artistic pursuits which occupy the time and energies of the Scottish people. Every industry throughout the length and breadth of the country will be adequately represented, and there will be many exhibits illustrative of the social life and habits of Scotsmen in their own homes. The exhibition has the patronage as well as the active support of Her Majesty Queen Victoria and selections from the treasures in the royal palaces will be included in the exhibition. Special arrangements are being made with various tourist agencies, for the cheap conveyance of visitors to Scotland from nearly all parts of the world, and, doubtless, a large number of our countrymen will take advantage of this opportunity of visiting a country abounding in romantic scenery and full of historic associations. The exhibition grounds, which belong to the municipality, are in the centre of the city and extend over an area of twenty-nine acres. The buildings cover about eight acres and are divided into large courts illuminated by electric light. The length of the central corridor alone is 750 feet. In consequence of the great demand for space the exhibition authorities had to greatly increase the area for allotment. Four principal divisions have been made in the arrangement of the exhibits, namely, the General, the Fine Art, Artizan and Women's Industries,

IMPORTANT DECISION.

The Court of Appeal delivered judgment on April 20th in the case of the Queen v. The St. Catharines Milling and Lumber Company, dismissing the defendants' appeal from the judgment of Chancellor Boyd. The action is one brought by the Queen on the information of the Attorney-General of the Province of Ontario against the St. Catharines Milling and Lumber Company to have it declared that the Province of Ontario is entitled to 2,000,000 feet of pine timber cut by the defendants on property situate in the district of Algoma south of Wabiroon lake and between Lake Eagle and Lake Superior, and for an injunction to restrain the defendants from trespassing on that property. The company claim title to the timber, setting up leave and license from the Dominion Government. They deny title in the Province, and contend that the land in question was formerly the property of the Indians, and was by them ceded to the Dominion in consideration of large payments of money to the tribes, and that the Indian title passed to the Dominion by purchase as well as by inherent right. Chancellor Boyd heard the case in the first instance, and found in favor of the Province, and the defendants appealed to the Court of Appeal. The four judges are now unanimous in dismissing the appeal maintaining the right of the Province to the property in question. Messrs. McCarthy, Q. C., A. R Creelman and W. Creelman appeared for the Company, and the Attorney-General of Ontario and Mr. Walter Cassels, Q. C., for the Province.

THE Canadian patent office record for March announces the issuance of the following patent of interest to lumbermen: No. 23,301, to Geo A. Haggart, Millbrook, Mich., for a drag saw No. 23,302, to T. W. Smirle, Norwood and James Chapman, Rockland, Ont., for a saw swage; No. 23,465, to T. S. Disston, Philadelphia, Pa., for a shingle planing machine; No 23,473, to S. P. Dresser, Pleasant Mount, Me., for a wood sawing machine.

Chips.

ALBERNI, B. C., wants a saw mill to provide lumber for the settlers.

EXTENSIVE forest fires are raging in the vicinity of Tamaqua, Pa.

HALL & Co's barges will take about 5,000,000 feet of lumber this season between Toronto and Ogdensburg.

MESSRS GILMOUR & Co. have commenced the season's operations at their Gatineau mills. Most of the Ottawa mills started on Monday.

AN order for boxes to go to Honduras, Central America, is being filled by Hunter, Tilloston & Co,, Muskegon, Michigan.

THERE was 42,000,000 feet of lumber shipped by rail from Saginaw valley between January 20 and March 31, of this year.

THE imput of logs on the Menominee and its tributaries, in Michigan and Wisconsin, this season, is 435,000,000 feet.

Messrs. Thompson and Baker have sold out the Brydon shingle mill at West Gravenhurst, to Mr. Joseph Tuer of Barrie, for $2,300.

THE Petrie Lumber Company, of Saginaw, has bought 13 500,000 feet of standing pine in Roscommon and Crawford counties, Mich., from Louis Huldebach, for $33,000.

Mr. MEBRON HARRIS will fill a contract to supply 200,000 ties to an Americon railroad this summer and will buy up all along the Rideau and Ottawa rivers.

PREPARATIONS are being made, says the Muskoka *Herald*, by various lumber companies throughout the District, to start their drives. The high water will make running a comparatively easy task this season.

THE Manitoba Government has designated May 12 as a public holiday, to be known as Arbor day, and the Lieut.-Governor of the Northwest territories has designated May 1 for a similar purpose.

THE body of Mr. Charles Sereney, the Ottawa lumberman who was supposed to have fallen through a hole in the ice near Nippissing last December, has been found and taken to Portage du Fort for burial.

THE first four masted schooner ever built on on the Pacific coast was recently launched at San Francisco to go into the lumber trade. Her name is Novelty, and she will carry 800,000 feet of lumber.

PINE land to the amount of 21,587 acres in Bayfield, county, Wis., was lately sold by the Omaha railroad company to the St. Croix Lumber Company and J. E. Glover for $135-900.

THE planing mill of Mr. Thos. Orr, at Stratford, Ont., was totally destroyed by fire on April 12th. The fire broke out about 4 o'clock and originated in the drying kiln. Loss about $10,000; no insurance.

THE log imput on the Winconsin and its tributaries for the season now closed, it is said, was 166,787,000 feet. Of this amount Wausau parties claim that 137,000,000 will go to that place for sawing.

BIG piles of white poplar wood, said to be largely used in the manufacture of paper, were drawn out in the winter, and deposited along side the Central Ontario railway track in many places, but the piles are very conspicuous in the vicinity of Big Springs and Central Ontario Junction.

DANIEL TAYLOR, over 80 years old, of Schroon Eake, N. Y., a year or two ago had his hand mangled by a circular saw. He got well of that and last winter he had his skull fractured while at work in his mill. He has fully recovered from that also, and is again ready to tackle a buzz saw or stand a crack on the head.

WILLIAM CARSON, president of the Valley Lumber Company, of Eau Claire, Wis., went up the Wisconsin Central to intercept the loggers as they came out of the woods, and distribute among them tracts, showing the folly of spending their wages in saloons and low resorts, and urging them to attend the meeting of the Y. M. C. A. at Eau Claire.

CANADIAN LOGS TO MAKE MICHIGAN LUMBER.

The following letter appears in the Montreal *Gazette*:

SIR,—If a doubt ever existed in the mind of any one, as to the propriety of our government adopting the suggestion of the Hon. Mr. Joly to increase the export duty on saw logs, it would be removed by knowing in what light existing arrangements are viewed by Michigan lumbermen. In the last issue of the *Lumberman's Gazette*, of Bay City, Michigan, Col. M. Jeffers, of East Saginaw. says:—"I have bought from parties in Canada 500,000 acres or twenty townships, of standing white pine on the Serpent, Spanish and Musassaga rivers, Georgian Bay." This tract contains 2,-000,000,000 feet of pine timber with a saw mill at the mouth of Serpent river that cuts 40,000,-000 feet a year, with an iron steamer and a tow of barges. The whole plant costing $400,-000." And after stating that Governor Alger of Michigan, and Col. Bliss, of Saginaw, are interested in the same region, he says: "We propose to bring the logs over and saw them in Michigan. We are Michigan men and hope to make our purchases inure to the benefit of our people here. Notwithstanding our investments in Canada, we still stand by protection for Michigan lumber."

In another part of the same paper the Hon. Isaac M. Weston, when criticising the Morrison Tariff bill, says:—"We now admit Canadian logs free of duty. On the north shore of Lake Erie Canadian saw mills are in ruins, but the mills at Tonawanda, N. Y., are employing thousands of American workmen, manufacturing Canadian logs towed from the Erie north shore. The Saginaw mills are running out of American stock and already they are looking to Georgian Bay for Canadian logs to cross the Huron lake and keep their mills and men at work."

So that the advantages Canada is to derive from sales of her timber lands to Col. Jeffers, the Governor of Michigan, Col. Bliss and others, is to have "her saw mills in ruins. her workmen out of employment and her timber towed over to Michigan, to be there made into lumber to compete with lumber manufactured in Canada, at a disadvantage of $2 per thousand U. S. duty—all in the interests of these gentlemen, who, not satisfied with their good investments in Canadian timber, boast of their hostility to Canadian interests. No, gentlemen, not quite so fast, as Canadians we are slightly interested in this matter and will try to have "our timber inure to our people here," and "still stand by the protection of Canadian lumber." We have no special desire that Canadian saw mills should be in ruins," in order that "New York (or Michigan) saw mills may employ thousands of American workmen manufacturing Canadian logs." If we cannot have free trade in lumber with you, let us have fair trade, cast in your lot with us, manufacture the lumber here, and enjoy equally with ourselves the privilege of contributing $2 per M to the revenues of your country on any lumber sent there. It is bad enough to have our timber pass into the possession of strangers at a tithe of its value, but the country should at least be entitled to what little benefit it might derive from having the timber manufactured here. We have not such a superabundance of pine timber left that we can afford to part with it entirely in the interest of our cousins across the line, however much we may admire their disinterestedness in relieving us of it now that they acknowledge they have about used up their own.

The United States tariff on Canadian lumber is $2 per M. The Canadian export duty on saw logs is $1 per M. And since the United States Government admit logs free, there is a clear advantage of $1 per M in favor of manufacturing Canadian logs in the United States. This discrimination against ourselves the Michigan lumbermen, who control the action of Congress by preventing the removal of duties from lumber, flatter themselves will be quietly submitted to by us, but it is well to let them know at once and distinctly that while we are now, and have at all times been, ready to remove the export duty on saw logs when the United States lumbermen permit their servants in Congress to remove duties from Canadian lumber, yet we are disposed to favor in any way by fiscal arrangements, the closing of Canadian saw mills in order that labor that should be employed in Canada should find employment in United States.

The question then is as to what would be a fair rate to fix for the export duty on saw logs? In order to foster Canadian manufactures it would, of course, be best to have a rate almost prohibitory, but I should not propose this, and think that $4 per M would be reasonable. That is, $2 to counterbalance the United States duty on lumber and $2 more for national protection, a sum claimed to be very moderate for this purpose by all United States lumbermen.

Trusting that our Government may grant us, as our United States friends are so fond of saying, this moderate measure of protection,

I am, dear sir,

Your ob't servant,

WILLIAM LITTLE.

GLASGOW.

The *Timber Trades Journal* of April 17th says:—The principal arrivals to note for the past week are a cargo of pitch pine and one of teak timber at Greenock. The arrivals of pitch pine since the beginning of this year are represented by a carrying tonnage of 11,000 tons; same period 1885, 5,178 tons, and 1884, 9,023 tons. In view of the ample stock of pitch pine on hand and moderate consumption, owing to quietness in shipbuilding, a light import will suffice for the wants of this market.

The arrivals of teak to Clyde this year have been by a carrying tonnage amounting to 3,927 tons. as against 4,376 tons corresponding date 1885, and 4,148 tons in 1884.

The yards at Yorkhill, Glasgow, for storage of deals have now a very bare appearance. The stock of deals they at present contain is about 800 St. Petersburg standards under that of a year ago, the decrease this year being principally in lower port pine deals.

There has been one arrival at Grangemouth within the past week, a cargo of battens from Drontheim, consigned to Messrs. Brownlee & Co. The imports there up to this time of the year are never a large amount, but for the current year, so far, they have been unusually light.

No auction sales of timber or deals have been held by brokers at Clyde ports during the past week.

Some vessels forming a portion of the Quebec fleet left the Tail-of-the-Bank for the outport this week. They carry coal at a freight, it is stated, of 2s. 9d. a ton, which will just pay for the loading and discharging. The fleet is later this year in leaving the Clyde. Freights, Quebec to Clyde, about 18s. per load.

On the 8th inst. there was lauched from the shipyard of Messrs. J. & G. Thomson, Clydebank, H. M. S. Brisk, the third of the Scout class of cruisers contracted for last year. The Brisk, which resembles her predecessor in every particular, is expected by her builders to attain a speed of close upon eighteen knots an hour.

It is a fact that can be verified everywhere that West's Cough Syrup is the only compound known to science, that can eradicate the seeds of consumption in its early stages, and completely cure Coughs, Colds, Asthma, Bronchitis, and all Throat and Lung difficulties. Sold by J. D. Tully, druggist. Price 25 cents, and 50 cents, and $1.00 per bottle.

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(LIMITED.)
OFFICE AND YARD, Foot West 21st Street, New York City.

REGULAR SALES will be held during the year 1886, as follows:

Tuesday,	*April 6th,*	*Tuesday,*	*August 10th,*
do	*May 11th,*	*do*	*September 7th,*
do	*June 8th,*	*do*	*October 5th,*
do	*July 13th,*	*do*	*November 2nd,*

and Tuesday, December 7th.

Sales commence promptly at 10.30 a.m. Wm. Easton, Auction'r

At each of these sales we shall offer a full and complete assortment of the best grades of
HARDWOODS AND PINE LUMBER.
Dealers and consumers will find it to their profit and advantage to attend. Catalogues giving the inspection of each lot offered can be had at the yard on the day of sale, or will be mailed on application. Address

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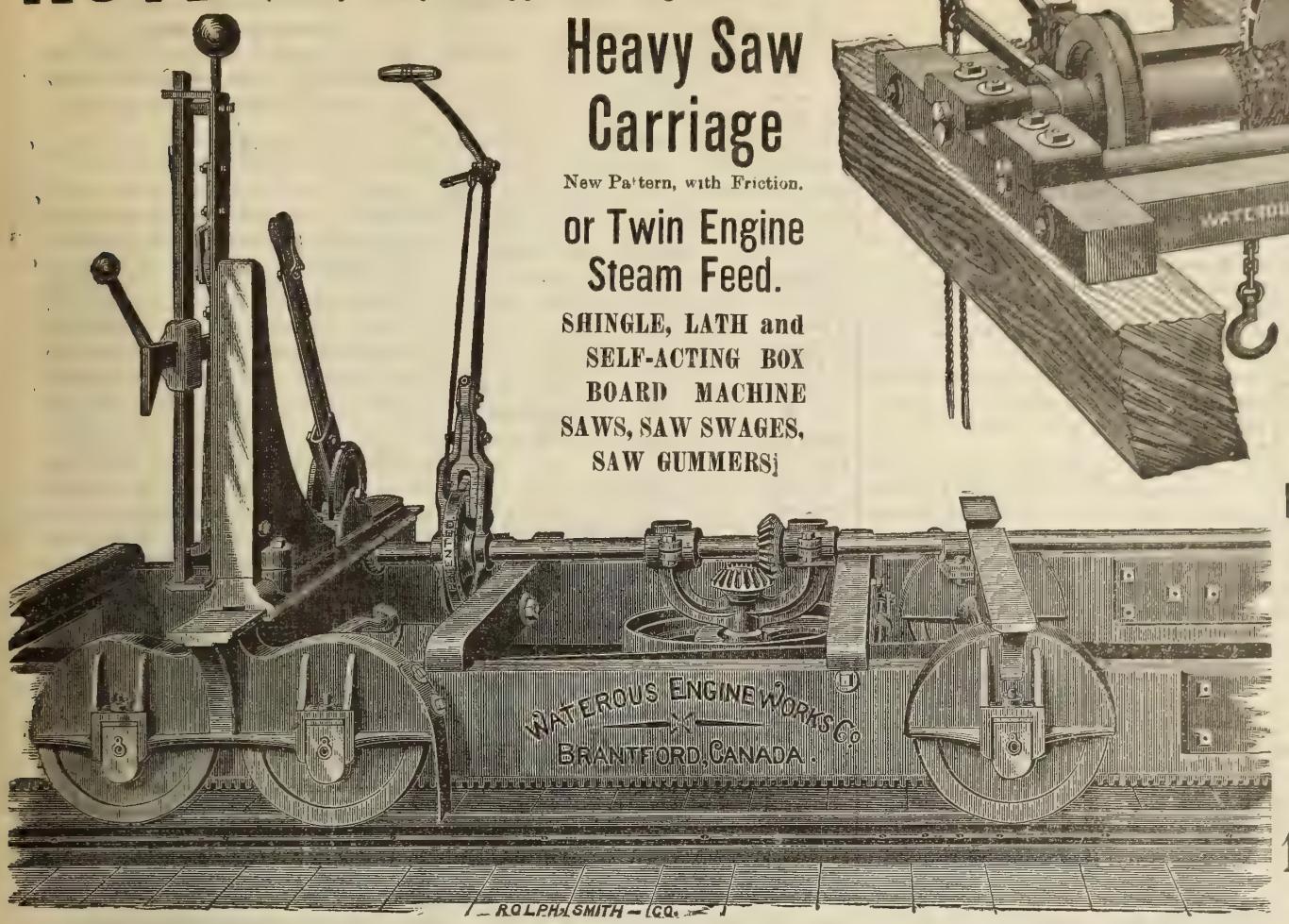

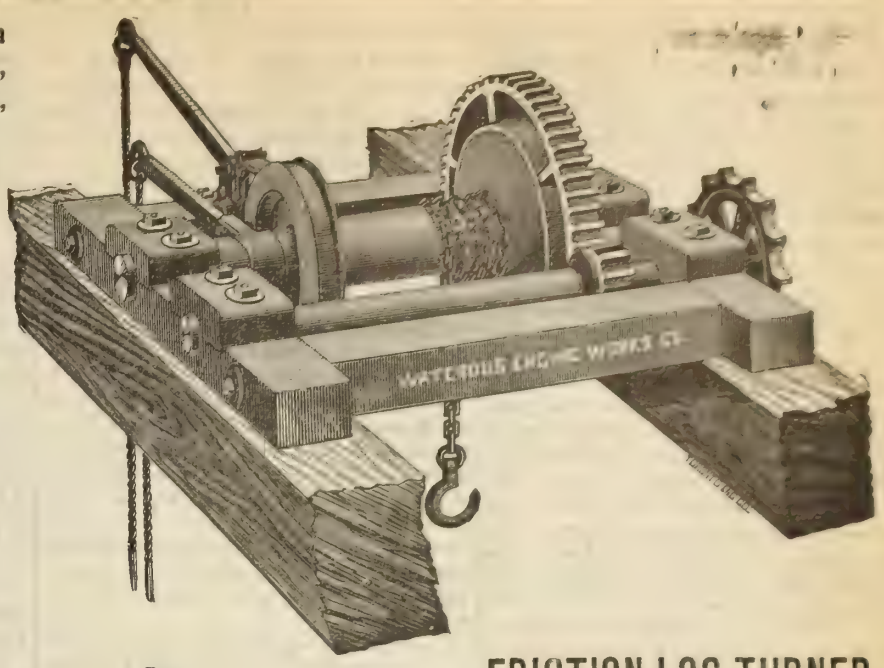

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THE CANADIAN PACIFIC RAILWAY.

It may be, and is, undoubtedly true that the primary objects of the road have been to connect the various Provinces of the Dominion, and open up her vast and fertile tracts of country to settlement and production; but if Canada had only these objects to depend on it would be questionable whether the enormous expense of so vast an undertaking would be ever remunerative or warrantable under the most exaggerated ideas of prospective growth either in population or trade. When, however, in addition to these considerations, which are the chief, if not the only ones, the other various American Pacific lines of railway can rely upon, there comes to be added the grand national and Imperial idea for a continuous all-British line of transportation around the world, of which the Canada Pacific railway is to form the main connecting link, then all doubts as to the warrant for its creation, and as to the unquestionable guarantees for its almost incal cuable prospective remuneration, will kick the beam in the scale of pure financial reasoning or vanish like the mist of a midnight dream of apprehension in the morning.

It is an axiom in science that a chain is no stronger than its weakest link. The truth of the same principle holds good as to the connecting links that hold a nation together. If England should rely solely upon the Suez Canal, which the sinking of a single ship therein could effectually blockade, the tenure of her Asiatic and other eastern Colonial possessions would be held by a slendor thread, and the vast sources for her wealth of commerce, both present and prospective, would be liable to evaporation, It is not for that end that she has girded the globe with guns, the sea with ships, and the whole world with the products of her labor. The Canadian Pacific railway not only completes but connects her national chain of communication which almost any human combination would find it difficult, if not impossible, to sever. The attempt, however, would prove like the terrible shock of the most highly-charged galvanic battery to the reckless grasp of an uncalculating hand.

But these may not, without justice, be said to be mere ideas. Give us facts.

It is a well-known fact, as has been authoritively announced, that it is the intention of the directors of the Canadian Pacific Railway to place a line of fast steamers to ply between those countries and various ports of India, Australia and New Zealand. The early direct connection by steamers between British Columbia and those last named islands of the Pacific is also part of the Canadian Pacific Railway's programme.

Up till very recently the site for the western terminus on the Pacific has not been made publicly known. Within the past week, however, it is announced that the Canadian Pacific road has definitely selected the head of Burrard Inlet as the site for the western terminus. The port will be called Vancouver, and the construction of wharves and railway stations commenced forthwith. The track will be extended by the end of June next, twenty miles from Port Moody to Vancouver—the terminal port.

By or before that time it is expected that their line of steamers to Japan and China will be placed on the ocean route.

A recent despatch from Ottawa, by the correspondent of a leading Chicago journal, states that "The reason why the Pacific Mail Steamship Company, of San Francisco, manifested so much anxiety to conclude an arrangement with the Canadian Pacific railway for connecting the lines of the latter with San Francisco has leaked out, and, in consequence, ex-Governor Perkins' recent visit to Vice-President Van Horne, of the Canadian Pa ific Railway, at Montreal, has a wider significance.

"It turns out that the Pacific Mail Steamship Company, which Mr. Perkins represents, receives a very large share of its earnings from the British Government for carrying the English mails; and that the company was notified a few months ago that such subsidy would cease in July next. This notification was sent out in pursuance of arrangements entered into between the English and Dominion Governments and the Canadian Pacific Railway for the transport of all English mail matter, now sent by way of San Francisco to Japan, China, and the New Zealand and the Australian Colonies, to go by the all-British route."

The same correspondent learned from a leading member of the House of Commons at Ottawa—Hon. J. J. C. Abbott—who is the chief solictor of the Canadian Pacific Railway, that one of the most important measures to be submitted to the present session of the Dominion Parliament is the scheme settled upon by British and Dominion Governments and the Canadian Pacific Railway for a continuous all-British line of transportation from Great Britian via Montreal and Vancouver to Japan, China, New Zealand, Australia and the East Indies—a measure which must greatly change the course of trans-Pacific and trans-Continental trade. He adds:—

"Latest reports from San Francisco indicate that the mercantile community are greatly agitated over the possible results of the new arrangements."

I referred previously to the advantage which the more northerly position of the Canadian Pacific Railway gave it in a shorter distance from ocean to ocean over other and more southerly lines; but this land distance, so saved, is nothing as compared with the ocean distance saved by the water portion of the route of communication between Europe and Asia via the Canadian road over that between those continents via New York and San Francisco.

Vancouver, the Pacific terminus in British Columbia of the Canadian line, is 800 or 900 miles nearer Japan than is San Francisco; and the Atlantic terminus (as yet unfixed upon, but which must necessarily be in Nova Scotia,) will be about the same distance nearer England than is New York, as Vancouver is nearer Asia than San Francisco; so that we have nearly two thousand miles of ocean voyage saved in favor of the Canadian route. This in the transportation of cargoes of teas means a great deal more than the mere saving of time and expense, for, as every one knows, the ocean voyage is more or less destructive of the fine flavor and quality of teas—the chief reason why they are so carefully encased in tin to keep out the sali e effects of the sea water. The overland transport of teas from China into Russia is the chief reason for the superior quality of the tea drunk in the latter country over every other out of China. Hence from both these causes—the great shortening of the sea distance in transportation, and consequent lessening of expense, with the additional superiority preserved in the commodity—the Canadian ocean and land line may yet carry all the importations of tea for the United States and America as well as for Great Britain and Europe.

While treating of the probable through international traffic over the Canadian route, I would by no means undervalue the great local traffic which its opening will necessarily and naturally create. To say nothing of the vast agricultural products, lumber, coal and other minerals, the, as yet, almost unavailed wealth with which the Canadian Pacific coast now teem—a wealth not generally known—will add a source of riches in their fisheries as great, if not greater, than that which the Dominion now possesses on her Atlantic shores. The inlets of the Pacific coast of British Columbia abound withe salmon, cod of several species, anchovy, sardines, dog-fish, sturgeon, that sometimes weigh 1,000 pounds, herring, whiting, trout, oysters, clams, and halibut. Whales are plentiful off the coast, and on the islands that fringe

There is a very general belief, especially in that city itself, that Halifax, Nova Scotia, will become the Atlantic terminus of this gigantic railway. But the tendency of the age is to select the nearest available points in all rail or steamship connections. For this ostensible reason, at least, the Canadian Government is pushing on its Intercolonial Railway to Louisburgh, in the Island of Cape Brenton. To reach it, however, a very wide and dangerous strait of the sea, from currents and ice in winter, has to be crossed by ferry—for the expense of a bridge would be as colossal as the structure itself—and even when reached, Louisburgh, as a winter port, is for many weeks (sometimes months) of that season closed to navigation by fields of packed and drift ice extending for miles around the entrance to its harbour, which itself is often solidly frozen up.

On the north-easterly point of Nova Scotia it fur seals are found in abundance.

I have stated that the port for the Atlantic terminus of the Canadian Pacific Railway has not yet been publicly announced. And I may add that, although its present arrangements with the International Railway, form Quebec to Halifax, connect it with the Atlantic at that port, its own shorter and more direct line from Montreal to such seaboard is not yet completed. When finished, as it soon will be, the distance between the two oceans, by rail, will be very considerably diminished. The great project now in hand by the Canadian Pacific Railway is the new gigantic railway bridge, across the St. Lawrence, which the company are building at Lachine—a work of equal magnitude with the Victoria bridge, of the Grand Trunk Railway, at Montreal. It is expected that the entire work will be completed in the spring of 1887.

It is stated that the bridge proper will be composed of three 80-feet deck-plate girders, eight spans of 243 feet each, two flanking spans of 279 feet each, four channel spans of 408 feet each, making the total length of the river portion of the bridge 3,550 feet. The steel for the superstructure is being imported from Scotland, and the bridge, when completed, will be one of the finest in the world. The trains of the Canadian Pacific will pass over it to the seaboard, and its traffic thus be rendered independent of the Grand Trunk.

is, however, a harbour as if created by Nature herself especially for this purpose, which is the nearest available port on the continent of America to that of Europe. It is the harbour of Whitehaven, pronounced by Admiral Bayfield, R. N., "to be the best harbour on the whole Atlantic American coast," as it is, so he says, "the nearest available one to Europe."

Admiral, then Captain, Bayfield—the author of the famous Admiralty charts—was commissioned by the British Government, many years ago, to survey the harbours of Halifax and Whitehaven, and report on their respective merits. He did so, and gave to Whitehaven the most unqualified perference. It is nearer Europe by 160 miles than Halifax is, thus saving that distance of dangerous coast navigation. It has the boldest and deepest f water in its three magnificent entrances, and is immediately accessible from the sea, requiring but a mile or two of pilotage, while Halifax requires over twenty, and is surrounded by many dangerous sunken rocks and ledges, as its many ales of wrecks can testify. Whitehaven has never been known to be obstructed by ice, while Halifax harbour has been often frozen over, and the fogs about its entrance are so proverbial as to make it dreaded by mariners. For facilities in coaling, Whitehaven lies almost in the midst of the coal-fields of Nova Scotia and Cape Breton, and its expenses in other respects as a great ocean *entrepot* would be nearly *nil*.

However fast and magnificent are many of those ocean floating palaces for merchandise that now cross the sea, there are some respects in which, I believe, the ocean passenger traffic will, before many years, undergo a complete change—that is, in separating the passenger and mail traffic from the freight. The colossal hulks of 8,000 or 10,000 tons must be filled with freight or they eat their heads off, besides the danger any loss of speed from being to heavily handicapped. Pleasure or business passengers do not generally now take a cargo ship from Dover to Calais, or Folkestone to Boulogne, or Holyhead to Kingstown, nor do they prefer a heavy-laden freight train, by railway, to the Flying Dutchman or Lightning Express; and when a fast line of ocean steamers, built to carry only the mails and passengers, is put between Milford Haven, in Wales, and White haven, in Nova Scotia, the directors of all other Atlantic lines of steamers which hope to carry passengers will discover the truth of these assertions about cargo ships and freight trains and passengers may reasonable expect to make an average journey and voyage between the great centres of business or pleasure in Europe and America of but little over, if not even inside of, five or six days, with more comfort and far less apprehension of danger or disaster than they can at present.

QUEBEC FOREST.

The annual report of the Hon. W. W. Lynch, Commissioner of Crown Lands and Forests of the Province of Quebec has been presented to the Legislature.

A correspondent of the Montreal *Gazette* thus summarizes a portion of it:—

In the course of the year the Government decided, in view of the repeated applications which have been made to that effect, to offer to public competition a certain number of timber limits on the Ottawa river, north of Lake Tamiscamingue, in a tract designated as block A, previously granted to the North Shore Railway Company. After publication of the proper notices, the sale took place on the 25th February, 1885. Twenty-three limits comprised within the tract in question, and containing a series of 1,044 square miles, were put put up to auction at upset prices varying from $70 to $365 per square mile. A number of those present thought fit to refrain from offering any advance upon these prices. Consequently only four limits, comprising 204 miles, were disposed of for the sum of $58,128, equivalent to an average bonus of $282.95 per square mile. In regard to the prevention of forest fires, it is a matter for regret, at least in respect of this Province, that the project which was conceived some years ago has been allowed to be first carried out by Ontario. The success obtained there is such as to induce reflection on the part of our large limit holders, and the Minister is inclined to believe that after having taken communication of the remarks of the honorable Commissioner of Ontario, these gentlemen will not lend a deaf ear, as they have done hitherto, to the propositions which it is his intention shortly to address to them. The total cost of the service for 1885 was $7,911, of which sum one-half has been refunded by licensees, leaving the net cost of this service to the department to be $3,955.50. It has been disparagingly said, in certain circles especially devoted to the consideration of important questions connected with forestry, that the information we possess respecting the extent and character of those lands of our Province which still remain covered with timber, is very uncertain and almost useless. In order to meet this deficiency, it is proposed shortly to have all the information which can be collected upon this subject exhibited upon certain regional maps soon to be published. The careful explorations which have lately been undertaken and successfully carried out in the Gaspe territory, and in that comprising the counties of Rimouski and Temiscouata, will enable the work to be begun with those regions. It is proposed to have similar explorations made in other parts of the Province during the coming summer, so that we shall before long be in possession of a sufficient amount of detailed and precise information to enable us to form a correct idea of the forest resources remaining at our disposal.

The depressed condition of the lumber trade and the general uneasiness manifested in business circles during the fiscal year ended on the 30th of June last, as well as during that immediately preceding it, had, as was to be expected, a most unfavorable influence upon the revenue of my department. This stagnation seems to have reached its extreme limits, and from the signs of activity now everywhere apparent the Minister looks with confidence for the return of more prosperous years. The cut of timber during the winter of 1884-5 was a little larger than that of the preceding winter, and from information received from the different agencies of the Province he is led to believe that the number of logs made during the present season will exceed that of last year by at least 10 per cent. The manufacture of square timber will be small, which, from a certain point of view is not be regretted; but that of other timber will be more than sufficient to make up for the deficiency. The statement of the receipts of the department shows a more favorable result than was expected, the total collections exceeding the estimates by $21,

633.66. The Minister regrets to state that, notwithstanding the frequent appeals made to purchasers and the liberal offers of remission of interest, the receipts from Crown Lands were much less than they should have been. A considerable number, however, completed their payments, and the number of perfect titles granted in the form of letters patent during the twelve months ended on 30th June last was very little less than that of those issued during the similar period preceding.

ORIGIN OF WOOD TURNING LATHE.

The date of the invention of the wood saw and the turning lathe cannot be given, as they are older than our so-called civilization, or even the chronicling of years by man. The saw is undoubtedly older than the lathe, the latter being a mechanical appliance denoting a considerable advance on the path of civilization. In the "Flint age" of the archæologist, the earliest acquaintance we have with man, flint saws are found along with knives, scrapers, hammers, axes and arrow heads, the teeth of which are in some cases alternately chipped from contrary sides to give set to the teeth. Instruments with jagged edges for cutting wood would be amongst the first productions of man when the use of metals was discovered. Connected with the sawing of wood it is interesting to note that we have the old personal names of sager, jager, and jagger, from the Scandinavian or Teutonic sag, a saw. The wood turning lathe down to a century ago was a very different thing from the lathe of to-day. In its old form it represented a high antiquity; this was the pole or dead centre lathe. In this lathe the piece of wood required to be turned was secured in two centres fixed in two movable pieces of wood known as puppets, or poppets. The puppets were fastened at the distance from each other required by the size of the work in hand. When the piece of wood to be turned was fixed between the centres a cord was passed around it twice or thrice; one end of the cord was secured to the treadle, and the other to a spring pole affixed to the ceiling. By pressing the treadle a rotary motion was imparted by the cord to the wood it was desired to turn. When the pressure on the treadle was released the spring pole caused the wood to revolve in a contrary direction. Hence it was only possible to use the cutting tools half the time. This is the reason this form of lathe has dropped out of use except at High, Wycombe and other chair-making places where it is used along with the rotary lathe. An illustration of such an original lathe is given in the *Encyclopædia Britannica*, nineth edition, xiv. 323.—*Timber Trades Journal.*

A PEEP AT A PORTION OF THE OTTAWA VALLEY.

As the traveller proceeds on the C.P.R., from Mattawa westward, traversing the township of Papineau, Calvin, and Bonfield, he will not be very favorably impressed with the appearance of the land contiguous to the track. The railway in passing through these townships, runs for a distance of 25 miles quite near the Mattawa River, whose banks are very rocky and rough, and if he should base his judgment of the quality of the land in the townships named, on the appearance of such parts as are visibible from the train, he would carry away very erroneous opinions concerning its value. The south half of Papineau presents some good land, where, with ordinary industry, a large number of families could obtain an ample subsistence. A very good road runs from Mattawa to the western boundry of this township, along which are located already a considerable number of families who appear to be doing well. At the terminus of this road will be found a large farm in a high state of cultivation, on which is situated the depot of Messrs. Hurdman & Lloyd, lumbermen. Should the travellers alight at Mackey's mills and follow the Amable du Fond river and its tributaries westward and southward, through the townships of Calvin and Bonfield, he will discover a large tract of excellent land. The soil is generally composed of yellow loam of a very rich quality, which, when first sown, imparts to all kinds of grain a growth of straw so heavy as to fall by its own weight. The second crop is generally regarded by the farmer as better than the first on this account. There are about 400 families settled in those two townships, and they generally express their entire satisfaction with the product of their farms. Clearing is comparatively easy in many parts of there townships, because the primitive forest has been destroyed by fire, but it is a question open to discussion, whether or not the bush fires which swept away the forest, leaving the land ready for seed at a trifling cost to the farmer, did not at the same time greatly reduce the fertility of the soil. On arriving at Calendar, a station on the C. P. R., situated not far from Nosbonsing lake, he may, on ascending a neighboring promontory command a magnificent view of that body of water, which is about twelve miles long and two wide, and which abounds in the finest quality of fish. The lands drained by Nosbonsing and its tributaries are embraced in three townships, Bonfield, Ferris and Chisholm. No finer land can be found in the district of Nipissing than that portion of those townships which surrounds the lake to a distance of several miles in the interior. A few farmers are located here and they are doing well. The soil is generally of a yellow loam with clay bottom in this locality. There is a large amount of land not located yet in the territory described, especially in the township of Chisholm and along the Wisawasa river, which rises twenty or thirty miles south of Lake Nosbonsing and falls into South East Bay on Lake Nipissing, where J. R. Booth's mills are located. This territory is regarded as most favorably situated for settlement on account of the fact that the Northern railway bounds it on the west and the C. P. R. on the north.—*Nipissing Times.*

INVESTING IN CANADA.

Col. M. Jeffers, of East Saginaw, was in the city yesterday, having just returned from an extended visit to Canada. Discussing business affairs in that country he said:—

"I have bought from parties in Canada 500,000 acres, or 20 townships of standing white pine. The land is situated on Georgian Bay, and upon the Serpent, Spanish and Mississaque rivers. There is upwards of 2,000,000 of feet of timber upon the tract. It is all white pine. There is no Norway pine in that region. I have paid a large sum upon the purchase, and would not sell out for a big advance. I have been engaged in the business of buying pine lands for the most of my life and think that nothing outside of the Saginaw valley was ever seen like this whole Georgian Bay country, full of good pine. It is far superior to the Wisconsin or Lake Superior pine. I think this is the biggest transaction that has taken place in pine lands in Canada. Upon the property at the mouth of the Serpent river there is a saw mill that cuts 40 000,000 a year; it costs $250,000, has gang saws and every convenience, including an iron steamer and a tow of barges. There is a good harbor at the mouth of the Serpent river, with wharves, etc. The barges take the lumber to Chicago, Buffalo or any other port on the chain of great lakes. It is delivered precisely as cheap as if from the mouth of the Saginaw river. The whole plant cost the former proprietors nearly $400,000.

"The Canadian Pacific railroad is on the northern boundary of the tract. A spur runs down through it, built to afford rail shipping facilities from the mill itself. I think no land could lay better both for rail and water transportation. It is well cut up by lumbering streams. Gov. Alger has a large amount of timber in the middle of these limits south of us. Col. Bliss, of Saginaw, is also interested in the same region. We propose to bring the logs over and saw them in Michigan. We are Michigan men, and hope to make our purchases inure to the benefit of our people here. Notwithstanding our investments in Canada we still hold by protection for Michigan lumber, unless we have reciprocity or free trade applied to all articles of commerce between the two countries."—*Detroit Free Press.*

WOOD PRODUCTS IN CHEMISTRY

I appears from the experiment of M. Senff, that the yield of crude pyroligneous acid, tar, charcoal, and gas is almost the same with the most different woods. But the richness of the acid waters in acetic acid, and consequently the yield of dehydrated acid, vary greatly. In this reepect the wood of coniferous trees is the least valuable. The wood of the trunk furnishes more acid than that of the branches. The wood yields more acid than the bark, and sound wood more than dead wood. Rapid calcination yields more gas at the expense of the condensed products and of the charcoal; it yields also the weakest acid waters, and the charcoal is more hygroscopic than that furnished by a gradual action.—*Timber.*

Gold in the Rocky Mountains.

Reports from the Selkirk range of the Rocky Mountains in British Columbia state that gold has been found in the beds of all the streams running from the eastern slope of the Selkirks into the Columbia river. On Canyon Creek, lying a few miles south of junction of the Kicking Horse and Columbia rivers, several parties were to be seen washing gold from the bed of the creek, and making good wages. Further down the river were three mining camps, with men in each, preparing new flumes for placer mining. They acknowledged that two of their party had a few days previously washed out $25 worth of the precious yellow metal in one day. Mineral prospects there, both placer and quartz, are said to be superior to anything seen before in these parts.

MAIL CONTRACT.

SEALED TENDERS, addressed to the Postmaster General, will be received at Ottawa until noon, on FRIDAY, 14th MAY, for the conveyance of Her Majesty's Mails, on a proposed contract for four years, six times per week each way, between

BOBCAYGEON & PETERBORO'

from the 1st JULY next.

The conveyance to be made in a Waggon or Steamboat, via Bridgenorth and Ennismore.

The Mails to leave Boycaygeon daily, Sundays excepted, at such an hour as will ensure arrival at Peterborough in time for the despatch of the mails by the afternoon train to Port Hope.

Leave Peterborough as soon as possible after the arrival of the morning train from Port Hope and to arrive at Bobcaygeon in four and a half hours afterwards.

Printed notices containing further information as to conditions of proposed contract may be seen, and blank forms of tender may be obtained, at the Post Offices of Boccaygeon, Bridgenorth, Ennismore and Peterborough, and at this office.

DAVID SPRY,
Post Office Inspector.

Post Office Inspector's Office, Barrie, 8th April, 1886.

NOTICE.

SEALED TENDERS, addressed to the undersigned, and endorsed "Tender for Indian Supplies," will be received at this office up to noon on TUESDAY, 20th APRIL, 1886, for the delivery of Indian Supplies during the fiscal year ending 30th June, 1887, consisting of Flour, Bacon, Beef, Groceries, Ammunition, Twine Oxen, Cows, Bulls, Agricultural Implements, Tools, &c. duty paid, at various points in Manitoba and the North West Territories.

Forms of tender, giving full particulars relative to the supplies required, dates of delivery, &c., may be had by applying to the undersigned, or to the Indian Commissioner at Regina, or to the Indian Office, Winnipeg.

Parties may tender for each description of goods (or for any portion of each discription of goods) separately or for all the goods called for in the Schedules.

Each tender must be accompanied by an accepted Cheque in favor of the Superintendent General of Indian Affairs on a Canadian Bank for at least five per cent of the amount of the tenders for Manitoba and the North-West Territories, which will be forfeited if the party tendering declines to enter into a contract when called upon to do so, or if he fails to complete the work contracted for. If the tender be not accepted the cheque will be returned.

Tenderers must make up in the Money columns in the Schedule the total money value of the goods they offer to supply, or their tender will not be entertained.

Each tender must in addition to the signature of the tenderer be signed by two sureties acceptable to to the Department, for the proper performance of the contract.

In all cases where transportation may be only partial by rail, contractors must make proper arrangements for supplies to be forwarded at once from railway stations to their destination in the Government Warehouse at the point of delivery.

The lowest, or any tender, not necessarily accepted.

L. VANKOUGHNET,
Deputy of the Supeintendent-General of Indian Affairs.

Department of Indian Affairs.
Ottawa, 3rd March, 1886. 6d5

Perhaps the most extraordinary that success has been achieved in modern science has been attained by the Dixon treatment for Catarrh Out of 2,000 patients treated during the past six months, fully ninety per cent. have been cured of this stubborn malady. This is none the less startling when it is remembered that not five per cent. of the patients presenting themselves to the regular practitioner are benefitted, while the patent medicines and other advertised cures never record a cure at all. Starting with the claim now generally believed by the most scientific men that the disease is due to the presence of living parasites in the tissues, Mr. Dixon at once adapted his cure to their extermination; this accomplished the Catarrh is practically cured, and the permanency is unquestioned, as cures effected by him four years ago are cures still. No one else has ever attempted to cure Catarrh in this manner, and no other treatment has ever cured Catarrh. The application of the remedy is simple and can be done at home, and the present season of the year is the most favorable for a speedy and permanent cure, the majority of cases being cured at one treatment. Sufferers should correspond with Messrs. A. H. DIXON & SON, 305 King street west, Toronto, Canada, and enclose a stamp for their treatise on Catarrh.—*Montreal Star* 1y122.

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THE CANADA

LUMBERMAN

DEVOTED TO THE LUMBER AND TIMBER INTERESTS OF THE DOMINION.

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The CANADA LUMBERMAN is filed at the Offices of MESSRS SAMUEL DEACON & CO., 154 Leadenhall Street, London, England, who also receive advertisements and subscriptions for this paper.

PETERBOROUGH, Ont, MAY 1, 1886.

SCIENTIFIC FORESTRY.

IN the report by Prof. Wm. Saunders, F.R.S.C., to the Dominion Minister of Agriculture, on agricultural colleges and experimental farms it is satisfactory to find that the important subject of forestry has not been neglected. In fact in the letter of instructions directing Prof. Saunders to make the investigations on which he founds his report he was especially required to pay attention to the subject of forestry, particularly in regard to tree-planting in the Western States.

As the result of his investigation Prof. Saunders has to report that in many of the States particular attention is given to practical and theoretical forestry in some cases with very beneficial results. The central government at Washington is also evidently alive to the importance of this matter, and makes a not unsubstantial provision for it. Very briefly he records, too, what different European countries are doing in this respect. Especially valuable is the communication which he embodies from Mr. B. E. Fernon.

In the suggestion which Prof. Saunders also makes as part of his duty, he utilizes the information thus obtained. Though the primary object in view is the promotion of scientific agriculture, he shows himself not unmindful of the forest wealth of Canada, or of the necessity for conserving it. In his suggestion for the staff of the proposed colleges and experimental stations he includes a Superintendent of Forestry with appropriate duties. At the stations in the Northwest especially he advices the reservation of blocks of land for forestry purposes.

It is to be hoped that these and other suggestions which have not been particularized, will be adopted, for they cannot fail to be useful. The Dominion Administration, not only as the central authority of our country, but also as having control of important timber tracts and of extensive prairies, part of which might well be devoted to forest, can very appropriately undertake this work.

UPPER END OF OTTAWA VALLEY.

In a second article on the upper end of the Ottawa valley the Nipissing *Times* says:—Twenty-four miles west of Northbay by the C. P. R., you approach the Sturgeon river. A large and turbulent stream which flows into Lake Nippissing, and whose banks, until recently, have been untrodden by the lumbermen. At a point situated four miles above its mouth that river presents some very picturesque scenery. There are the celebrated Sturgeon Cascades, which are an object of interest to both pleasure seekers and capitalists. There also is the singular gorge cut in the rock, as if done by art, through which the waters of a great river rush with terrific velocity, in a volume only thirty five feet wide. It is at the latter that the C.P. R. crosses the Sturgeon by means of an iron bridge, which, owing to the peculiar conformation of the river's banks, was erected at a comparatively trifling cost. There, likewise, is the basin below the last fall where the river spreads out into a lake surrounded by high banks and covering an area of a mile in circumference. An intelligent travellor will linger here to enjoy the pleasure arising from gazing on one of the loveliest scenes found on the shores of the Nipissing. This is the site of the village of Sturgeon Falls, whose commencement dates back to 1882. It possesses about three hundred inhabitants and is favored with the usual number of stores and public houses in a village of this size. There is erected on the basin described a steam saw mill owned by Mr. Clark, which is daily turning out a considerable quantity of sawed lumber; and there is also a water power saw mill built on the upper rapids and owned by Mr. Martin Russel, which is supplying a large amount of shingles and sawed lumber for the use of settlers; and we are informed that Mr. Thomas Mackey is preparing to build a large steam saw mill on McLeod's Bay, a short distance from the village, where are annually shipped, by the C. P. R., large quantities of square timber and saw logs for the lower Ottawa. The township of Springer in which Sturgeon Falls is situated and the township of Caldwell, lying immediately west of the former, which is being rapidly located. Those townships are traversed by two other streams besides the Sturgeon, viz., ; Widow river and Cache creek, in the valleys of which lands of superior quality are found. On ascending the Sturgeon river ten miles, you reach the township of Field which, although reported to be one of the best townships in the district of Nipising, has not a settler located at the present time.

THE MISSION TO LUMBERNAN

An important though unostentatious form of mission work to lumbermen has been carried on for several years by the Presbyterian Church. In order to make it as efficient as possible it has been trusted to the care and oversight of the Synod of Montreal and Ottawa, within whose bounds this field of effort chiefly lie. The importance of the work among those engaged in the lumber woods is at once apparent when their peculiar circumstances are taken into account. A large number of the men employed in lumbering shanties come from all parts of the Province of Quebec and others from Eastern Ontario. They are freed from all restraint of home influence. There are the long evenings when time hanges heavily on their hands. Sabbath is not a working day in the lumber camp, neither are its sacred hours devoted exclusively to religious worship. Much miscellaneous work is done on that day. It is almost inevitable that the moral atmosphere of the camps is not of any elevating kind, and those who while at home have been trained to detter things receive evil impressions that linger in memory.

The committee having charge of the lumbermen's mission, as they have opportunity, send ministers and catechists to the shanties in winter. The missionaries are provided with religious and instructive literature, which is gratefully received and carefully read by all who receive it. At the recent meeting of the Synod of Montreal and Ottawa it was stated that in many cases the illustrated and other periodicals had passed from hand to hand and had been carried to distant regions where they continued to be read by many who could not have been reached otherwise

Another encouraging feature connected with the mission is the kind and cordial welcome accorded the missionaries. They have to undergo arduous and sometimes dangerous journeys in travelling from camp to camp. They have literally to endure hardship as good soldiers of Jesus Chsist, yet in few instances indeed do they meet with anything approaching rude treatment from those they visit. The Old, Old Story is generally listened to with respectful interest. The door stands wide open to the missionary, and great good may confidently be expected from his labour of love among this too much neglected class.

Hitherto the work has to a large extent been sustained by members of the congregations in Ottawa, though others have given liberally to its maidtenance. Under the judicious management of the Convener, the Rev. Dr. Moore, of the Bank Street Church, Ottawa, whose resignation of the office was unanimously regretted, the mission has prospered; but all who spoke in the Synod appeared to be impressed with the conviction that still more vigoroug egort on the part of the Synod is required to make the mission what it ought to be.

It was resolved to apply both to the Home Mission Committee and the Board of French Evangelization for grants to aid in extending the operations carried on by the mission lumbermen, and also to appeal to the congregations with the bounds of the Synod for collections to help forward the work. There is no doubt that finacially and in other respects the new Convener, the Rev. W. D. Armstrong, of Ottawa, will be able to present a still more encouraging report to the Synod next year.—*Canada Presbyterian.*

CHIMNEY DRAUGHTS.

In order to support the combustion means must be provided for supplying the furnace with a continuous supply of air and for removing the products of combustion. Both of these objects are usually accomplished by the chimney, the products of combustion in their heated state being lighter than the external air tend to rise through the flue, and drawing air through the furnace, supply the required oxygen, the remainder, with the products of combustion, passing off in their turn, and, by reason of their lightness, to maintain the draught.

It frequently happens that a draught which has been sufficient becomes impaired and unable to do what is required of it. The first and most natural cause which is looked to in this dilemma is obstruction, by the accumulation of soot in the flues and passages. If this soot is also deposited in the tubes and upon the heating surfaces of the boiler it diminishes the efficiency of the coal which is burned by interposing itself as a non-conducting coating between the fire and the water which it is designed to heat, rendering necessary the consumption of more coal requiring a stronger draught, which the passages in their choked condition are unable to supply.

Leaks in the chimney and masonry about the boiler have a decided and prejudical effect upon the draught, not only from the fact that air enters at those places which would otherwise come through the grates, but the air so entering is cold and heavy, and increases the weight of the column of air in the chimney instead of reducing it as it would in is rarified condition after passing through the fire.

Care should be taken in making more than one connection to a flue, first to have the leading flues so conducted that one may not have a decided advantage over the other, and second, that they do not enter the stack in such a manner as to interfere with each other. When flues enter a stack directly opposite to each other, deflecting plates should be provided in order that the entering currents may not oppose each other. In large stacks with flues entering upon all sides a cone is sometimes built in the centre of sufficient height to serve as a deflector.

The draught of a chimney is, of course, affected by the character of a boiler which is attached to it, and of the flues or passages through which the heated gases are conveyed to in. A return tubular boiler of equal area of cross section in the tubes will require a stronger draught than a vertical tubular, and the vertical will require a stronger draught than a plain cylinder boiler. In cases where, as it is frequently happens in city blocks, the boilers are situated in front and the chimney in the rear, a long and tortuous flue, sometimes decending, is used, allowance must be made not only for the increased friction of the flue itself, but for the heat which will be radicated from it, and which would otherwise assist in sustaining the chimney draught.

We have heard the statement made that the draught of a chimney was decreased by the sun shinning upon it, and we have read the most profound arguments to the effect that it was retarded in some way by the actinic rays acting down upon it. If any such effect is produced by this circumstance we should be inclined to lay it to the lightening of the external column of air rather than any direct retardrtion of the inner one.—*Boston Journal of Commerce.*

RAISING OAK TREES.

During the last few years large quantities of acorns have been taken from this country for the purpose of planting. White oak acorns are preferred and they have been chiefly obtained in the State of Missouri. They are generally planted on sandy or broken land that is intended for pasturing sheep. In Great Britian sheep are accustomed to eat acorns, and it is considered profitable to raise them for sheep food. No variety of oak has received much attention at the hands of the planters of fruit trees. They state that the trees make a very low growth and for this reason they prefer to plant trees that grow rapidly and furnish fuel and timber in a shorter time. A foreign writer suggests the oaks may be raised to excellent advantage in connection with other varieties of trees that grow rapidly. He admits that oaks grow slowly while they are young, but states that they increase in size rapidly when they are fifteen or twenty years old. He, therefore, recomends planting a row of oaks between rows of quick growing trees. The latter will be large enough to use for various purposes when they are from fifteen to twenty years old. If care is exercised they may be cut down so as not to injure the young oaks. These trees being removed, the young oaks will grow rapidly and completely occupy the ground. Oaks are easy to propagate as the acorns can be obtained at small cost and are almost certain to germinate. Acorns are much easier to manage than large nuts like those produced on the hicory or pecan tree. They can be planted where it is desired to have them grow, or in nursery rows, from which the small trees may be taken up when they are at a suitable size to de transplanted. The wood is excellent for fuel, timber and post.—*N.O. Times Democrat.*

Seasoning Green Wood.

Green wood cannot be properly seasoned or dried in five days, any more than green cheese can be ripened in that time, yet each of the nine lumber-drying kilns at the Pullman Car Works has a capacity to turn out 300,000 feet supposed to be fit for car-building, in the above time. It is pretty generally acknowledged that kiln-dried timber must be injured in fibre, and so roasted on the outsides as to be brittle and unfit for many purposes. At least this is what a Chicago carriage journal thinks.

A NEW department, says the Deseronto *Tribune*, was added to the ship yard during the past winter, viz. the manufacture of railway cars. Besides building a number of flat cars, Mr. Evans has repaired several passenger cars, and is now building a smoking and express car for the N., T. & Q. Railway. It is now well advanced towards completion and experts pronounce the workmanship in every respects superior both in strength and finish. A passenger coach will be next attempted and the work of building cars will then become one of the industries of Deseronto, and give additional employment to many workmen. Mr. Evans intends proceeding with the erection of a car shop which will be 85 feet long and 36 feet wide. There will be two tracks, one for framing, &c., and the other for painting &c.

A DISASTEROUS bush fire is now progressing in Canterbury, N. H. Five hundred acres have been burned over. Some of the land had some valuable standing timber, and the loss will be heavy. A large force of men is fighting the fire.

SEASONING TIMBER.

Though air drying is the best and most certain way of promoting durability in wood without impairinng its strength, the time it takes is often a great draw back; hence the immersion of the newly-felled timber is resorted to in order to arrest any tendency to change, by washing out of the pores of the wood all sap and other substances which tend to promote fermentation, and hence decay. Moreover, the soaking in water makes the wood less liable to twist and warp in subsequent drying, and when it is cut up into scantlings for use, be ides rendering it more proof against the attacks of worms, though its strength is supposed to be slightly diminished thereby, which seems to be borne out by the fact that the loss of weight is greater in waterseasoned wood than when it has been merely air seasoned. If placed in water it is better that it should be completely submerged, as nothing is so injurious to timber as being exposed to alternate wet and dry. The generally received opinion is, that for ordinary purposes a fortnight's immersion in runnig water is sufficient, though much must depend on the size of the bulks so treated. T. de Lapparent, one of the Government inspectors of timber in France, recommends for timber used in shipbuilding one year's immersion in river water, two years in fresh, or three in brackish water, constantly being changed, to be followed by two years of air-seasoning. The gradual processes of air and water seasoning are the only ones which can be safely applied to timber in large scantlings; still, artifical drying may often be successfully employed in the case of smaller scantlings, more especially in the preparation of timber for joinery, for which purpose it should be quite dry and free from any tendency to shrink.

Amongst such systems we may mention drying in ovens or hot chambers, exposed to currents of air raging from 90° for hard woods and large sections, to 200° for soft woods in thin boards, the process being carried on until the wood has lost from one-fifth to one-third of its original weight, according to the purpose for which it is required to be used. Boiling and steaming wood for three or four hours are often resorted to, as the subsequent drying is thereby rendered very rapid, and the tendency to shrink and twist is reduced to a minimum, whilst the wood becomes so pliable that ribs and planks can be bent to any required curve, and, if confined until dry, will readily retain the form so given them. Smoke-drying may also be employed at times with advantage; but carbonising or charring the outer surfaces of the wood, though very effectual in preserving it from the destructive influence of alternate wet and dry, such as the ends of posts let into the ground are so much exposed to, must never be regarded as a substitute for seasoning; for though keeping out external moisture, it effectu ally imprisons that which is in the pores of the wood, and so hastens internal decay. While on this subject it may be as well to observe that paint, tar, and all similar waterproof coatings are only preservatives so long as the timber is already seasoned and free from moisture, as then they keep it dry; but if not, they become the most certain agents of destruction. For imperfectly seasoned timber the best preservative against the weather is a rough-swan face, which forms a shield against both sun and rain, and at the same time offers no check to the evaporation of the moisture from the poers of the wood.—*Timber.*

A Remeni-ence.

A strange tragedy, that took place twelve years ago in the lonely woods of the North Shore of Lake Huron, is told in the Manitoulin *Expositor* of April 10. Seven men in employ of Williams & Murray, lumbermen, of Blind River, while taking up a load of oats and provisions in a boat to an inland station camped one raw night in Spring on the banks of the river. To shelter them from the wind they piled the bags of oats in a dyke, behind which they lay down to sleep. The dyke topled over during the night smothering them all. Mr. Murray found their dead bodies on the fatal spot three days after

THE length of the short line to be construct ed by the C. P. R. from Smith's Falls east is 121 miles.

NEW YORK.

The following is the official list of the prices obtained at the New York Lumber Auction Company's sale at New York on April 13th :—

Lot 1—White pine shelving, ⅞ inch, 12,829 ft. $18.

Lot 2—Ash, 1¼ and 1½ inch, firsts, 3,401 ft; seconds, 5,247 feet; culls, 434 feet, $27.

Lot 3—Hemlock joists, 2½x4x13, 924 pieces, 13 cents each.

Lot 4—Walnut and cherry, 1 inch, walnut firsts, 291 ft.; seconds, 2,113 ft.; culls, 4,617 ft.; cherry, 69 ft. $47.

Lot 5—White pine shelving, ⅞ inch s 2 s 3,615 ft. $18.50.

Lot 6—Chestnut, 1 inch, firsts 101 ft.; seconds, 3,160 ft.; culls, 982 ft. $14.

Lot 7—Chestnut, 1 inch, firsts, 389 ft.; seconds, 2,-791 ft.; culls, 913. $15

Lot 8—Chestnut, 1 inch, firsts, 340 ft.; seconds, 2,710 ft.; culls, 325 ft. $15

Lot A—Chestnut, 1 inch, culls, 10,785 ft.; $9.50.

Lot 9—Whitewood, 1¼ and 1½ inch, firsts 5,177 ft.; seconds, 3,541 ft.; culls, 250 ft. $29.

Lot 10—Hemlock joist 2½x4xI3, 937 pieces. 13½ cents each.

Lot 11—Whitewood squares, firsts, 569 ft.; seconds, 1,072 ft.; culls, 978 ft. $17.50.

Lot 12—Cherry, 1¼ in., Ash, 1½, 2 and 3 in., Walnut 5x5 and 6x6 inch. Cherry culls 69 ft. Ash, firsts and seconds 114 ft., culls 31 ft. Walnut, firsts 111 ft.; seconds, 33 ft.; culls 64. $33.

Lot 13—Whitewood, ⅜, ⅝ inch; firsts 145 ft.; seconds (planed) 1,607 ft.; culls (planed) 1,949 ft. $11.

Lot 14—Whitewood, 1 inch, firsts 2,593 ft., seconds, 7,064 ft.; culls 935 ft. $25.

Lot 15—White pine, 2 inch, box pine 7,526 ft. $15.50.

Lot 15½—White pine, 1½ inch W.P. cutting up stock, 4,224 ft. $23.

Lot 16—Whitewood, 1 inch; firsts, 173 ft.; seconds, 1,413 ft.; culls, 4,503 ft. $16.50.

Lot 17—Whitewood, 2 in.; firsts, 5,208 ft.; seconds, 3,796 ft.; culls, 437 ft. $29.

Lot 18—Whitewood, 3 inch; firsts, 1,596 ft.; seconds, 1,852 ft.; culls, 205 ft. $28.

Lot 19—Whitewood, 1 inch, culls, 13,084 ft. $16

Lot 20—Walnut squares, 794 ft. $51.

Lot 21—Whitewood, 1¼ and 1½ inch; firsts, 3,858 ft.; seconds, 2,528 ft.; culls, 80. $28.

Lot 22—Whitewood, 2 in., firsts, 3,405 ft.; seconds, 2,755 ft.; culls 52 ft. $22.50

Lot 23—Hemlock boards, 1x12x13, 644 pieces. 13½ cents each.

Lot 24—Box pine, 2 inch, 8,182 ft. $15.

Lot 25—Ash flooring, 1 inch, T. & G. planed one side. ⅞ inch No. 1 ash flooring, 11,133 ft. $23.50.

Lot 26—Hemlock boards, 1x10x13, 924 pieces. 12½ cents each.

Lot 27—Walnut, 1 and 2 in., firsts, 45 ft; seconds 844 ft.; culls, 4,866. $38.

Lot 28—White pine 1 in. W. P. No. 2 cutting up stock, 13,208 ft. $24.

Lot 29—Whitewood, 4 in., firsts, 4,118 ft.; seconds, 2,494 ft.; culls, 275 ft. $32.50.

Lot 30—Hemlock boards, 1x10x13, 800 pieces. 13 cents each.

Lot 31—Walnut, 1 inch, firsts 144 ft.; seconds, 1,333; culls, 1,855 ft. $44.

Lot 32—Walnut 1 in., firsts, 195 ft.; seconds, 1,757; culls, 2,363 ft. $43

Lot 33—Whitewood, 2 in., firsts, 1,609 ft.; seconds, 2,638 ft.; culls, 996 ft. $22.

Lot B—Walnut Planks, 2, 2½, 3, 3½, 4 and 4½ inch, firsts, 1,056 ft.; seconds, 1,802 ft.; culls, 785 ft. $90.

Lot C—Walnut squares, 4x4, 5x5, 6x6, 7x7 and 8x8 inch, firsts, 1,002 ft.; seconds, 1,227 ft.; culls, 1,240 ft. $75.

Lot 34—Whitewood, 1½ in., firsts, 2,029 ft.; seconds, 655 ft.; culls, 30 ft. $30.50.

Lot 35—Whitewood, 3 in., firsts, 3,508 ft.; seconds, 2,764 ft. $30.50.

Lot 36—Whitewood, 1¼ and 1½ in., firsts 3,965 ft.; seconds, 3,582 ft.; culls, 649 ft. $28.50

Lot 37—Whitewood, 1 inch, culls, 15,478 ft. $14.50.

Lot 38—W. P. Shelving, extra wide, planed 2 sides, ⅞ W. P. Shelving pl 2 S— 16,751 ft. $18

Lot 39—Walnut, 1 inch, seconds, 959 ft.; culls, 1,-928 ft. $44.50.

Lot 40—Walnut, 1 inch, seconds, 1,042 ft.; culls, 2,-092 ft. $46.

Lot 41—Walnut, 1 inch, seconds, 1,498 ft.; culls, 1,-666 ft. $50.50.

Lot 42—Whitewood, 1 inch, culls, 4,151 ft. $14.50.

Lot 43—Whitewood, 1 inch, culls, 4,243 ft. $14.50.

Lot 44—Whitewood, 1 inch, culls, 4,106 ft. $14.50.

Lot 45—Whitewood, 1 inch, firsts, 1,283 ft.; seconds, 3,580 ft.; culls, 2,687 ft. $26.

Lot D—White pine shelving, extra wide, planed 2 sides, ⅞ inch, 18,159 ft. 2 M $21.50, 2 M $21.50, 1 M $20, 5 M $19.50 and 8,159 at $19.00.

Lot 46—Whitewood, 2 inch, firsts, 1,086 ft.; seconds, 1,744 ft.; culls, 684 ft. $25.50.

Lot 47—Whitewood, 3 inch firsts, 5,453 ft.; seconds, 1,909 ft.; culls, 315 ft. $30.50.

Lot 48—Walnut, ½ to 4 inch, culls, 2,313 ft. $26.

Lot E—Whitewood, 1 and 1½ inch, seconds, 566 ft.; culls, 1,415 ft. $23.

Lot 49—Whitewood, 1¼, 1½ inch, firsts, 1,121 ft.; seconds, 2,088 ft.; culls, 1,050 ft. $24.

Lot 50—Walnut, 1, 1¼ and 1½ inch, firsts, 32 ft.; seconds, 738 ft.; culls, 2,532 ft. $40.

Lot 51—Walnut, ⅝ inch, firsts, 693 ft.; seconds, 945 ft.; culls, 1,638 ft. $27.50.

Lot 52—Whitewood squares, firsts, 2,651 ft.; seconds, 978 ft.; culls, 628 ft. $25.

Lot 53—White pine shelving, planed two sides, ⅞ inch. 17,175 ft. $17.

Lot 54—Walnut, 1 and 2 inch, firsts, 2,082 ft.; seconds, 4,285 ft.; culls, 524 ft. $75.50.

Lot 55—White pine flooring, T. & G. planed one side, ⅞ inch, 14,466 ft. $16.

Lot 56—Hemlock joist, 2½x4x13, 660 pieces. 12½ cents each.

Lot 57—Whitewood, 1 inch, seconds, 792 ft.; culls, 3,233 ft. $18.50.

Lot 58—Whitewood, 1¼ and 1½ inch, firsts, 2,228 ft.; seconds, 1,930 ft.; culls, 144 ft. $27.50.

Lot F—White ash, 1 inch, firsts, 5,190 ft.; seconds, 2,595 ft.; culls, 56 ft. $34.50.

Lot 59—Whitewood, 1½, 2, 2½ inches, firsts, 6,815 ft.; seconds, 1,518 ft.; culls, 184 ft. $31.

Lot 60—Whitewood squares, firsts, 2,647 ft.; seconds, 531 ft.; culls, 72 ft. $29.50.

Lot 61—Whitewood, 1 to 2 inch, firsts, 3,060 ft.; seconds, 2,218 ft.; culls, 189 ft. $26.

Lot 62—Walnut, 1 and 2 inch, culls, 8,655 ft. $38.50.

Lot 63—Wide pine shelving, planed two sides, ⅞ inch, 16,905 ft. $14.50.

Lot 64—Quartered sycamore, 1, 1¼, 1½ inch, firsts, 1,214 ft.; seconds, 627 ft.; culls, 152 ft. $34.75.

Lot 65—Whitewood, 1 inch, firsts, 2,381 ft.; seconds, 4,606 ft.; culls, 1,628 ft. $26.

Lot 65½—Whitewood, 1, 1¼ and 1½ inch, firsts, 5,058 ft.; seconds, 3,337 ft.; culls, 729 ft. $27.75.

Lot 66—Whitewood, 1½ in., firsts, 9,747 ft.; seconds, 1,600 ft.; culls, 49 ft. $31.

Lot 67—Walnut, 1, 1½ and 2 in., seconds, 261 ft.; culls, 1,173 ft. $32.

Lot 68—Whitewood, ⅜ inch, firsts, 2,871 ft.; seconds, 4,244 ft.; culls, 5,103 ft. $17.50.

Lot 60—Hemlock boards, 1x12x13, 624 pieces. 14 cents each.

Lot 70—White pine, 1 inch, W. P. No. 2, cutting up stocks, 12,251 ft. $18.50.

Lot 71—Oak timber, 5x12 inch, firsts, 5,627 ft.; seconds, 2,745 ft.; culls, 665. $27.50.

Lot 72—Whitewood, 1 inch, culls, 14,499 ft. $14.25.

Lot 73—Roofing boards, 1x10 D. & M. 14,107 ft. $16.50.

Lot 74—Basswood, ½ inch, culls, 9,612 ft. $7.00.

Lot 75—Ash Balusters, 4 295 pieces 2x2, clear, and 1,323 do., 2½x2½, clear. 4¼ cents each.

Lot G—Cherry Balusters, 831 pieces, 2x2, and 189 do, 2½x2½, clear. 5 cents each.

Lot 76—Ash, 1½ inch, firsts, 1,285 ft.; seconds, 3,766; culls, 351. $26.

Lot 77—Whitewood, 1, 1¼ and 1½ inch, firsts, 1,594 ft.; seconds, 2,194 ft.; culls, 964 ft. $21.50

Lot 78—Whitewood, 1, 1¼ and 1½ inch, firsts, 1,459 ft.; seconds, 2,001 ft.; culls, 770 ft. $20.50.

Lot 79—Whitewood 1½ inch, firsts, 4,790 ft.; seconds, 3,479 ft.; culls, 500 ft. $26.

Lot 80—Ash strips, 1 inch, clear, 2,648 ft. $23.

Lot 81—Ash strips, 1 inch, clear, 3,139 ft. $23.50.

Lot 82—Ash strips, 1 inch, clear, 4,187 ft. $23.

Lot 83—Walnut, 1 inch, firsts, 63 ft.; seconds, 813 ft.; culls, 697 ft. $51.

Lot 84—Cherry, 1 and 1½ inch, seconds, 174 ft.; culls, 214 1½ in., and 7,299 ft. 1 in. $19.

Lot H—Whitewood culls, 1 inch, 11,007 ft. $14.25.

Lot 85—White ash, 1 inch, firsts, 2,934 ft.; seconds, 1,629 ft.; culls, 165 ft. $34.

Lot 86—White ash, 1 inch, firsts, 2,197 ft.; seconds, 995 ft. $34.

Lot 87—Walnut, 1 inch, firsts, 2,400 ft.; seconds, 5,-459 ft.; culls, 223 ft. $73.50.

Lot 88—White ash, 2 inch, firsts, 6,752 ft.; seconds, 3,637 ft.; culls, 106 ft. $32.75.

Lot 89—Quartered white oak, 1 inch, firsts, 6,654 ft.; seconds, 2,407 ft.; culls, 483 ft. $44.

Lot 90—Basswood, 1½ inch, firsts, 378 ft.; seconds, 1,692 ft.; culls, 1,630 ft. $13.

Lot 91—Basswood, 1¼ inch, firsts, 688 ft.; seconds, 1,425 ft.; culls, 982 ft. $13.

Lot 92—Basswood, ½ in., firsts, 780 ft.; seconds 1,-820 ft.; culls 982 ft. $13.

Lot 93—Whitewood, 1 inch, firsts 6,319 ft.; seconds, 2,642 ft. $13.50.

Lot 94—Whitewood, 1 inch, firsts, 3,779 ft.; seconds, 1,122 ft. $32.

Lot 95—Whitewood, 1 inch, firsts, 6,788 ft.; seconds, 2,834 ft.; culls, 343 ft. $34.50.

Lot 96—White pine 1½ inch cutting up stock, 12,-836 ft. $17.

Lot 97—Whitewood, 2 in., firsts, 4,433 ft.; seconds, 4,216 ft.; culls, 1,858 ft. $26.

Lot 98—Whitewood, 1 in., firsts, 1,567 ft.; seconds, 5,954 ft.; culls, 3,250 ft. $22.50.

Lot 99—Hemlock boards, 1x10x13, 740 pieces. 12¾ cents each.

Lot 100—White pine flooring, ⅞ in., T. & G. planed one side, 14,378 ft. $16.

Lot 101—Whitewood, ⅝ in., firsts, 1,942 ft.; seconds, 8,930 ft.; culls, 6,345 ft. $15.

Lot 103—Whitewood, ⅝ in., firsts, 2,986 ft.; seconds, 4,496 ft.; culls, 282 ft. $20.

Lot 104 Walnut, 1, 1½, 2 and 2½, firsts, 2,585 ft.; seconds, 4,525 ft. culls, 394 ft. $70.50.

Lot 105—Hemlock boards, 1x12x13, 600 pieces. 13 cents each.

Lot 106—Ash, 1 inch, firsts, 5,168 ft.; seconds, 3,-870 ft.; culls, 256 ft. $34.50.

TUG FOR SALE

Now on Georgian Bay. Gross tons, 55.99; Length, 70 feet; Breadth, 15 feet; Depth, 8 feet. Was Re-built last Summer. Apply to

Ontario Lumber Company

2t9 TORONTO.

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VALUABLE

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50,000 SAW LOGS

ON SEVERN RIVER

The undersigned being desirous of confining their operations to their Lakefield Mills on the Trent waters, offer for sale the following Limits :—

Township of Hindou, 70 square miles.
" Oakley, 45 " "
" Redout, 22 " "

An area of 137 square miles.

These limits are estimated to contain 180 million feet of Logs, well watered, and afford means of short hauling from all points, and quick and cheap driving to Georgian Bay. Are offered for sale together with plant, depots farms, 1,200 acres deeded lands and 50,-000 logs, nearly all of which are on the main river, a large proportion of which are 16 feet long. Apply to

R. & G. Strickland,

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TORONTO

A CANADIAN SCHOOL OF FORESTRY.

The Toronto *Globe's* London correspondent says :—Some renewed discussion has taken place here recently of Prof. Fream's suggestion to the effect that an Anglo-Canadian Forest School might be established with advantage. Professor Fream's proposition, it may be remembered, was that with aid from the Imperial treasury the Canadian Government might establish a Forest School, which would not only be a great benefit in promoting forest preservation in Canada, but would also prove extremely serviceable as a means of training for English students in forestry. Several communications on the subject have appeared in *The Canada Gozette*, and these have now been supplemented by editorial reference in *Forestry*, the medium for the consideration of such matters in this country. The present time is in ways specially opportune for action on the part of the Dominion Government. The Select Committee, nominated last year by the House of Commons, to report upon the desirability of establishing Imperial schools of forestry, will very shortly be re-appointed, and the whole subject will before long be brought prominently under the notice of the Imperial authorities. Prof. Fream proposes that the Canadian Government should take the matter in hand at once by securing the services of one or two thoroughly trained practical foresters who might acts as inspectors in the suggested school, and to whose care the management of large areas of forest land might be entrusted. In this way the valuable efforts of the Ontario Government to promote forest preservation would be most usefully and fittingly supplemented, and Canada presents such exceptional advantages over the old country for sylviculture that a very strong case could unquestionably be made out for Imperial support. *Forestry* commends the proposal, and expresses the hope that some action in this direction may shortly be taken. Cannot the matter be effectively brought under the notice of the Dominion authorities during the present session of Parliament? If their views were ascertained, and were found to be in any degree favorable to the suggestion, reports could then be made to the Imperial Government.

TIMBER FOR CAR BUIDING.

The effect of the increased activity in car building upon the prices of lumber used for sills, says an exchange, is significant as an indication of a future scarcity and a permanent advance in prices. It is true that during the past three years railroads have, as a matter of economy, made their old car equipments last as long as possible without incurring the expense of renewals. The time, however, has come when the old stock must be replenished to meet the requirements of existing traffic, to say nothing of any prospective increase of traffic which is likely to attend a general revival in business. The simultaneous demand for new cars for a large number of roads that have been starving their stock may give a stimulus to the lumber market that may turn out to be merely temporary, to be followed by easier prices as soon as the stock at the yards shall be increased to meet the demands.

This, however, remains to be seen. Certain it is that the sources of supply of the most desirable timber in the construction of cars are not becoming more abundant or nearer of consumption. White oak was once considered indispensable for sills, truck frames, any part of a car exposed to severe strains, but its growing scarcity and the demand for it and other lines of construction have led to the use of Norway southern yellow pine, of which there is a more abundant supply at less cost. These timbers have of late been extensively used for freight car sills of every kind, especially at the south, and stand the test for service, except for end sills, practically as well as oak. Southern pine that has not had its strength and solidity impaired by tapping, is very stiff and durable. The further south it grows the more resinous, heavy and serviceable it is, and along with Norway pine is likely to be a staple material for car sills as long as the supply lasts and prices are not prohibitive. But even should the increase cost exceed the limits of economy, as it probably will in the course of time, there are other woods as yet but little used in car work that will become available. Spruce has already been tried, and if the testimony in its favor is reliable it makes excellent sills. Hickory is also spoken of by those who have used it, and there may be other woods, as yet untried, that may be found equally well adapted to the purpose.

Furthermore, there is no telling to what extent timber preserving processes may be developed under the spur of economy. Chemical treatment, it is true, might not add very much to the strength of a sill to resist strains, but moisture might be excluded and decay and rot prevented, which would, of course, prolong the service. Paint is now relied upon to do this and would do it more effectually than it does if it was applied more frequently and thoroughly.

As a last resource, when the forest shall be thinned to the point of extinction, we shall have the ore beds and smelting furnaces to fall back upon, and iron cars will at least become a necessity, their cheapness and durability will be recognized, and the weary waiting of their many sanguine advocates abundantly rewarded. But, we are sorry to say, both cars and advocates must bide their time, which is not yet.

MICHIGAN LUMBERMEN AND OUR FORESTS.

Canadians are not generally aware of the extent to which the Michigan lumbermen are securing the best timber limits in the Georgian Bay district. We reprint to-day from the Detroit *Free Press* an interview with Col. Jeffers, a Michigan lumber merchant, in which that gentleman mentions that he has purchased 500,000 acres of timber land in Canada. Col. Jeffers is only one of many Michigan lumbermen who are buying up as rapidly as possible our western forests in order to replace the disappearing Michigan ones.

Of course of Michigan lumbermen choose to pay the necessary price, they cannot be kept from acquiring our lands; but the Government has in its own hands the power of preventing the constant loss to Canada which accrues from the possession of these limits by the Michigan lumber merchants. They all have mills at Saginaw, and as the United States Government does not impose a tax on saw logs, they raft them across Lake Huron, and saw them in Michigan, thus giving to foreigners that employment which should in justice go to our own workingmen. Col. Jeffers in his interview said :—

"We propose to bring the logs over and saw them in Michigan. We are Michigan men, and hope to make our purchases inure to the benefit of our people here."

We, in turn, propose that the Canadian Government should spoil the little game of Col. Jeffers and his compatriots by placing heavier export duties on logs. They would then be obliged to either utilize the present Canadian saw mills, or erect new ones. In either case they would have to expend in this country thousands of dollars which at present go towards building up Saginaw. Of course it would be rash to take any action pending the consideration by Congress of the Hewitt Bill, which provides for the removal of the present American duty on sawn lumber, but if that measure should be rejected, the Canadian Parliament should not for a moment hesitate about increasing the export duty on logs. Self-preservation is the first law of nature.—*Ottawa Journal.*

THE OTTAWA RIVER FLEET.

The first barge of the season to be loaded is one which commenced receiving a cargo of match blocks at Pattee & Perley's dock yesterday morning for Prince's splint factory at Buckingham Basin. The barge is the John Neville, commanded by Capt. Beaton.

Steamer Allen Gilmour, Capt. Bangs, and tow of six barges will likely load laths at the end of the week at Bronson and Weston's docks.

Steamer George A. Harris and tow of seven barges will take on a cargo of lumber early next week for American ports, at Eddy's, Booth's and Perley & Pattee's.

Steamer E. B. Eddy, Capt. Williamson, and tow of six barges will start to load at the end of the week at E. B Eddy's wharf.

Messrs. D. Murphy & Co.'s large fleet of 67 barges will begin loading next week for Montreal, Quebec, Whitehall, N. Y., and Burlington.

Steamer Thousand Island Rambler is now being put in readiness and will start ferrying between Hull and Ottawa next Monday.

Steamer Gatineau, of the Merchants' Despatch Line, will load for Montreal at the beginning of next week on the Ottawa river, and proceed to Montreal, returning with a cargo of merchandise destined for this port.

Steamer Ida, Capt. Garrett, which has been improved to a large extent, will be launched from Miller's shipyard early next week, and will go through to Mentreal, returning with merchandise and passengers for Ottawa and intermediate ports on the canal between this and Kingston.

Steamer Express, Capt. Mansfield, will recommence the ferry service for the season between New Edinburgh and Gatineau Point early next week.

On Monday or Tuesday next the tug Sir John and tow of five barges will load lumber for Oswego.

Steamers Hiram Easton and Resolute, and steam barges Welshman, Water Lily, and Col. By, with their respective tows of barges, will be ready to lock down light from the canal into tne Ottawa river about the 5th of May.

The repairs to the Rideau Canal here are being rapidly pushed forward under the able supervision of Mr. Carrol. It is calculated that it will be ready for traffic the first week in May.—*Journal April 21st.*

A SAW MILL IN A QUEER PLACE

Among the old jokes that called in question (very absurdly) Mr. Jefferson's practical sense was one to the effect that he built a sawmill on the top of a mountain, and had finished it before he thought where the power was to come from or how the logs were to be got to it. One is reminded of this when, in passing westward over the Chesapeake and Ohio Railway, just below Sewel, he casts his eye to the top of the mountain opposite, towering up five or six hundred feet, and sees a sawmill perched up there, like an eagle upon its eyrie. As of the fly in the amber, he will ask, "how the devil did he get there?" Mr. A. M. Donelson, a Scotchman, conceived the idea. He moved a thirty or more horse power engine on the road to Cotton Hill, and thence around through Fayette, to its wonderful perch. With one or two other engines of less power he is sawing up a large quantity of fine oak and poplar, and transporting it to the Chesapeake and Ohio road. But in what way, is the funny part of it? Shouid your attention be called to it, otherwise you eye would hardly catch sight of an immense wire cable fastened at or near the mill, and the other end close to the Chesapeake and Ohio road, spanning the awful chasm. Then the timber enclosed in an iron frame is suspended by a swivel to the cable, with a big rope or cable fastened to one end of it and so played out as to regulate the decent, is somewhat the description an intelligent young man on the cars gave me. I should have deemed myself lucky to see a carload in transitu. It reminded me of the picture in my geography when an urchin, of a man in Peru or Chili suspended over one of the awful cliffs by a rope hunting for birds eggs.—*Ex.*

SEASONING TIMBER.

Though air drying is the best and most certain way of promoting durability in wood without impairinng its strength, the time it takes is often a great draw back; hence the immersion of the newly-felled timber is resorted to in order to arrest any tendency to change, by washing out of the pores of the wood all sap and other substances which tend to promote fermentation, and hence decay. Moreover, the soaking in water makes the wood less liable to twist and warp in subsequent drying, and when it is cut up into scantlings for use, besides rendering it more proof against the attacks of worms, though its strength is supposed to be slightly diminished thereby, which seems to be borne out by the fact that the loss of weight is greater in waterseasoned wood than when it has been merely air seasoned. If placed in water it is better that it should be completely submerged, as nothing is so injurious to timber as being exposed to alternate wet and dry. The generally received opinion is, that for ordinary purposes a fortnight's immersion in runnig water is sufficient, though much must depend on the size of the bulks so treated. T. de Lapparent, one of the Government inspectors of timber in France, recommends for timber used in shipbuilding one year's immersion in river water, two years in fresh, or three in brackish water, constantly being changed, to be followed by two years of air-seasoning. The gradual processes of air and water seasoning are the only ones which can be safely applied to timber in large scantlings; still, artifical drying may often be successfully employed in the case of smaller scantlings, more especially in the preparation of timber for joinery, for which purpose it should be quite dry and free from any tendency to shrink.

Amongst such systems we may mention drying in ovens or hot chambers, exposed to currents of air raging from 90° for hard woods and large sections, to 200° for soft woods in thin boards, the process being carried on until the wood has lost from one-fifth to one-third of its original weight, according to the purpose for which it is required to be used. Boiling and steaming wood for three or four hours are often resorted to, as the subsequent drying is thereby rendered very rapid, and the tendency to shrink and twist is reduced to a minimum, whilst the wood becomes so pliable that ribs and planks can be bent to any required curve, and, if confined until dry, will readily retain the form so given them. Smoke-drying may also be employed at times with advantage; but carbonising or charring the outer surfaces of the wood, though very effectual in preserving it from the destructive influence of alternate wet and dry, such as the ends of posts let into the ground are so much exposed to, must never be regarded as a substitute for seasoning; for though keeping out external moisture, it effectually imprisons that which is in the pores of the wood, and so hastens internal decay. While on this subject it may be as well to observe that paint, tar, and all similar waterproof coatings are only preservatives so long as the timber is already seasoned and free from moisture, as then they keep it dry; but if not, they become the most certain agents of destruction. For imperfectly seasoned timber the best preservative against the weather is a rough-swan face, which forms a shield against both sun and rain, and at the same time offers no check to the evaporation of the moisture from the poers of the wood.—*Timber.*

How to Skeletonize Leaves.

First dissolve four ounces of common washing soda in a quart of boiling water, then add two ounces of slaked lime, and boil about fifteen minutes.. Allow this solution to cool; afterwards pour off all the clear liquid into a clean saucepan. When the solution is at a boiling point, place the leaves carefully into the pan and boil the whole for an hour. Boiling water ought to be added occasionally, but sufficient only to replace that lose by evaporation. The epidermis and parenchyma of some leaves will more readily separate than others. A good test is to try the leaves after they have been gently boiling for about an hour, and if the cellular matter does not easily rub off betwixt the finger and thumb beneath cold water, boil them again for a short time. When the matter is found to be sufficiently softened, rub them separately, but very gently, beneath cold water until the perfect skeleton is exposed. The skeletons are at first of a dirty white color; to make them of a pure white, and, therefore, more beautiful, all that is necessary is to bleach them in a week solution of chloride of lime.—*Timber Trades Journal.*

CHINA offers about as attractive a field for the work of professional explorers as any other country on the globe. It has recently been ascertained that the Chinese coal-fields occupy an area of four hundred thousand square miles.

POWER TRANSMISSION.

One of the most deplorable circumstances connected with practical mechanics, says the St. Louis *Miller*, is the wanton carelessness in the adjustment of shafting, gearing, belts and all means of transmitting power. As has been repeatedly stated in these columns but a mere fraction of the heat unites represented in a ton of coal is utilized, by far the larger portion consumed in overcoming friction (some of which is more than useless), supplying the deffciency caused by petty leaks and the like. These of themselves appear to be and really are small matters of themselves, but taken in aggregate they amount to more, by a large majority, in the consumption of power than is represented by the force really utilized. The first practical idea to be impressed on an apprentice is the saving of patience, time, labor and profits by a neat adjustment of the minor parts of machinery, and more especially all knuckles, joints, cogs, belts and the like. If we take a new belt so cut and joined that it runs evenly over both pullies, we will find that, so far as these two wheels are concerned, all the friction to be overcome is by the adhension on the arc of the surface contract. Now if we unlace the belt and cut off a tapering, wedgeshaped piece from one end and draw together, we will find that the belt is of unequal lengths on each side, and, of course, it bears harder on one side of the pullies than the other, so that one side has all the work to do, and, in accordance with the law governing this motion, the belt is attempting to adapt itself to these applied unequal forces, a side motion is introduced, begetting another, and the hardest kind of friction to come, viz., a sliding motion across the pulleys when in motion. This motion not only occurs on one pulley, but on both, and every inch of the belt, however long and wide, partakes of this motion, the friction of which in some cases amounts to nearly if not quite as much as that needed to propel the machine. As a consequence the boilers is put to extra work, the engine labors fearfully in doing half its estimated work, and the entire machinery drags, the belt shows early evidences rapidly, and innocent parties are blamed, when, in reality, the fault lies with the carelessness of the one who sewed the belt.

Again, a system of belt tighteners and idlers are rapidly coming into use, that not only increase the work demanded of the machinery, but of themselves are fearful consumers of power by being improperly hung, so that they augment the evil intended to be overcome. A tightener or idler should be so adjusted that the point of contract, friction and motion is as perfect for the service required as the drum pulley; but very often it is thought that any appliance, however crude and ungainly, will do for a tightener, and that they are placed in position with no regard to the proper distance from the drum or pulley, and with still less reference to the difference in size of the two. There is a wrong as well as right way of doing this, but we see the former oftener than the latter.

PROTECTION OF FORESTS.

The Forestry Commission, of New York, at a recent meeting in Albany, adopted some rules and regulations for the protection of the forests from destruction from fire. They are as follows:—

FIRST.—All persons having occasion to burn a fallow or start a fire in any old chopping, wind slash, bush or berry lot, swamp, "viale," or beaver meadow, for the purpose of clearing or improving, shall give five days' notice of such intention to the nearest Fire Warden, Forester, or agent of the Forest Commission. He shall also give notice to any neighbors who may have fields or woodlands adjacent, and liable to injury, at least one day previous to the setting of such fires. Such fires will be permitted only when the wind is favorable, and competent persons must remain on guard until the fire is completely extinguished on the surface and in the "duff."

SECOND.—All hunters, fishermen, loggers, guides, tourists and others lighting fires, in or near the forest for cooking, warmth, insect smudges, or other purposes, must clear away all combustible material from within six feet of the place where the fire is to be kindled, and must thoroughly stamp out, drench, or otherwise extinguish any such fire upon leaving it either temporarily or permanently; and hunters using firearms with inflammable wadding are hereby cautioned against allowing fires to start from such causes.

THIRD.—Smokers are cautioned in regard to fires arising from any carelessness of theirs, and their attention is called to the penalty for negligence in causing fires. Parents and teachers are respectfully requested to instruct children to avoid lighting fires in the forests or exposed places.

FOURTH.—Peeling standing trees of their bark for covering camps or shanties is hereby prohibited. For such purposes the tree must be felled, and all the available bark removed therefrom before another tree is cut down. The trees thus cut down must be utilized for firewood, and such fallen timber as lies in the vicinity of the camp must also be used for fire wood before any green standing timber is cut for that purpose.

THE COAL FIELDS OF NEW SOUTH WALES.

The coal-beds of New South Wales are of enormous extent. The mineral has been traced for hundreds of miles along the coast, and has been worked at various levels from 450 feet below to 1,500 feet above the sea. The lower beds are geographically older than any that have been yet worked in Europe, and the quality of the coal which is taken from these inferior strata is therefore unsurpassed. Not only so, but in certain districts immense seams of this mineral are found in immediate juxtaposition with an abundance of iron ores, limestone and fireclay. Hence nature seems to have indicated New South Wales as the great manufacturing colony of the Australian group. Up to the present time, coal has been ascertained to exist over an area of something like 25,000 square miles of country; and it is almost everywhere within easy reach of water and railway communication. Now, when it is remembered that the coal-fields of Britain only cover one-twentieth part of the area of the country, or about 4,000 miles, and that nevertheless the output of this mineral in the mother country is upwards of 120,000,000 tons per annum, it would be difficult to overestimate the magnitude of the proportions to which the coal trade of New South Wales may be expected to grow hereafter.

IMPERIAL FEDERATION,

A circular has been recived at this office from the London, England, Chamber of Commerce, giving the conditions prescribed in connection with a prize of £50 offered for the best essay on Imperial Federation and how it can be practically carried into effect. The essay should treat only with practical suggestions, may be written by any British subject, should not exceed in length twenty-five pages of foolscap and have a margin of two inches on the left and be written on only one side of the paper, must be in the hands of the secretary of the chamber, at 84-85 King William street, London, E. C., by August 31st, 1886, and must have a motto or a distinctive character attached, and a sealed envelope must be sent having a similar motto on the exterior, but having the writer's name inside. "Imperial Federation Essay" should be marked in the left hand corner of each envelope. The judges are Sir Alex. Galt, G. C. M. G., Prof. J. R. Seeley, M. A., and Mr. James Anthony Froude, and their decision will be final. All essays will become the property of the Chamber and the writer of the best one will receive a prize of £50.

THE South antagonizes the proposition to put lumber upon the free list because that section is now the possessor of the only great forests remaining in the Union. So long as the West had its forests, argue the Southerners, Canadian lumber was kept out, and it is only fair that the South should be similarly treated now. Canadians who look to the future do not covet an increased consumption of our lumber by our neighbors.—*Toronto World.*

LAST year the Rathbun agency at Ottawa shipped 6,000,000 feet of lumber to Oswego.

LUMBER DRIVERS' CALKS

FOR USE IN STREAM DRIVING.

Made from the Best Refined Tool Steel and Forged. The method used in tempering leaves every one of the same temper rendering them stronger and more durable than any other Calks made Samples and prices free on application to the undersigned.

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Orono Cant Dog

Strongest and Lightest in the market. Made of Best Cast Steel by drop forging process. The Handles are made of best quality straight grained split and turned Rock Maple, 5 to 6 feet in length, bored specially to suit the pick. Prices on application.

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And every house and office requisite always kept in stock, and sold retail in BOTH SMALL OR LARGE QUANTITIES.

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Market Reports.

TORONTO.

From Our Own Correspondent.

APRIL 23.—Sales from the yards continue fair and stocks have been kept up to a fair average. The only grades, or kinds, at all hard to obtain are 1½ cuts and better, and bills cut to order. The latter will soon be easier to fill as most mills will be running as soon as May comes in, and the cut for 1886 will be larger than for some years past. The cut of hemlock also will exceed that of former years. This class of lumber is now coming into more general use, the prejudice existing in the past against this kind of lumber is fast dying out, and if the railway companies would only take a common sense view of the matter, and make a special tariff to to suit this class of lumber there could be a much larger amount placed on the local market, but as it stands now it is quite impossible to freight green cut hemlock by weight at 9 cents per hundred weight. There is large tracts of hemlock yet uncut in localities where the pine is all gone, which would find a ready market under an reduced rate of freight. It is to be hoped that the companies interested will shortly see their way clear to give their customers a reduction on this class of wood, of at least one-third, and they would still come out the gainers.

Vessels are rapidly moving away what dry lumber there was piled on docks here during the winter months. Messrs. Rathbun & Son, of Deseronto, held a large portion of the lumber on the docks, so that a nearly clean sweep will take place when they have shipped out. The firm of Donogh & Oliver have also a large stock on their docks. A large portion of their operations are confined to this market so that they generally fill up as fast as sales are made.

A number of timber vessels have been loading here this week, the constant repetition of their shrill whistles connected with the engines on board have made things seem quite lively. A large amount of elm and ash timber will go to Quebec from here, and some fine line board timber, and had the P. J. Railway started running in time for this season's work, a much larger quantity would have found its way here.

Lath and shingles are now both in fair demand; figures are not, however, as satisfactory as could be wished for. The best paying figures now going on this market is for 18 and 20 ft. bill stuffs, which rules $1.50 per M above 16 ft. lengths. Those prices will, doubtless, be modified when more mills start up.

Mill cull boards and scantling	$10 00
Shipping cull boards, promiscuous widths	12 00
" stocks	13 00
Scantling and joist, up to 16 ft	13 0
" " " 18 ft	14 00
" " " 20 ft	15 00
" " " 22 ft	16 00
" " 24 ft	17 00
" " " 26 ft	18 00
" " " 28 ft	19 00
" " " 30 ft	20 00
" " " 32 ft	21 00
" " " 34 ft	22 50@22 50
" " " 36 ft	24 00
" " " 38 ft	27 00
" " 40 to 44 ft	30 00
Cutting up planks to dry	20 00@25 00
" boards "	20 00
ound dressing stocks	16 00@18 00
Picks Am. inspection	30 00
Three uppers, Am. inspection	35 00@40 00

B. M.

1¼-inch flooring, dressed	25 00@30 00
1¼ " " rough	14 00@15 00
1¼ " " dressed	23 00@25 00
1¼ " " undressed	14 00
1½ " " dressed	16 00@20 00
1 " " undressed	12 00@14 00
⅞ Beaded Sheeting, dressed	18 00@20 00
Clapboarding, dressed	12 50
XXX sawn shingles, ₩ M	2 75@ 2 90
Sawn Lath	2 25
Red oak	20 00@25 00
White "	25 00@30 00
Basswood, No. 1 & 2	18 00@20 00
Cherry, No. 1 & 2	50 00@60 00
White ash 1 & 2	25 00@30 00
Black ash 1 & 2	20 00@25 00

OTTAWA.

From Our Own Correspondent.

APRIL 24.—The unprecedented warm weather has had the effect of opening up all the streams in this neighborhood, and now the driving of logs and timber is in full blast on nearly all the creeks and small rivers of the Upper Ottawa. In conversation with Mr. D. A. Martin, manager for Messrs. Bronson & Weston, he said that in his thirty years experience he never saw a more favorable season for getting the winter's cut to the market. He had been on an extensive tour through the firm's works on the Upper Ottawa, and while the small streams are all open and the driving is in full progress, yet in the green bush there is fully three feet of snow, and a very heavy coating of ice, so that a most bountiful supply of water is assured. This state of things is shared in all the vast territory of the Upper Ottawa over which the lumbermen have been operating for the past winter, so that the probability is that more logs will be brought to the Chaudiere booms this year than ever before, because all cut will be got safely down, and more left by low water, as is case in the average year past.

On the 26th the mills in this locality all open for the season, which is many days in advance of last year. The most ample preparations have been made for the event and nearly all the mills will run day and night to supply the large orders already booked. For the past few days barges have been loading up with their freights for the south and east, and the hum of the great lumber industry is once more a moving living factor in our midst.

The preliminary survey of the extension of the Canada Atlantic railway to the different lumber yards has been completed and now workmen are busily employed in the work of construction. When the road is completed it will be a great boon to the lumbermen, affording as it will the readiest means of shipment, and will greatly lessen the expense attendant on the handling of the lumber. It is expected that in about two months time the extension will be finished and in working order.

It is feared that our Government is altogether too apathetic in the matter of protecting our forests against the encroachments of the Michigan men, who are quietly getting possession of some of our best lands on the north shore of Lake Superior, as well as in the Nipissing district. They do not seem to realize that the pine growth of that vast region is its chief wealth, and should be protected by an increased export duty on logs. The argument that it is difficult to collect an export duty on logs does not apply to this region at all, for it would be utterly impossible to evade the duty, owing to the means the Americans will employ in transporting their logs to their Michigan mills. As I stated some months ago immense barges are to be employed for the purpose, and as the points at which logs can be shipped in this manner are limited in number the difficulty of appraising the export duty would be confined to the *minimum*, so that but a few Dominion officials would be necessary to carry out the instructions of the Government satisfactorily. There can be no question but if the Government took the precautions which they should take in the matter of protecting our forests for the benefit of our own people, there would be a revolution in things and instead of those logs being sawed by Michigan saws the limit holders would find it advantageous to erect mills on this side of the boundary.

MONTREAL.

From Our Own Correspondent.

APRIL 26.—The lumber market since our last report, and especially during the past week, has been very quiet. It, in common with every other branch of trade, has felt the effects of our unprecedented spring flood. The water began to rise on Friday the 16th inst., and reached its greatest height on Monday; many of the streets in the lower part of the city being covered to a depth of from five to seven feet, some even eight feet. On Tuesday a shove took place, and after that the water quickly lowered.

The demand at the yards has been slight, but a good improvement is expected this week. Car load business, however, has been very fair. The total business done this month was much less than that of March.

Prices remain unchanged.

The following are the quotations at the yards:—

Pine, 1st quality, ₩ M	$35 00@40 00
Pine 2nd " "	25 00@30 00
Pine, shipping culls, ₩ M	14 00@16 00
Pine 4th quality deals ₩ M	10 00@12 00
Pine, mill culls, ₩ M	7 00@ 9 00
Spruce, ₩ M	10 00@13 00
Hemlock, ₩ M	9 00@10 00
Ash, run of log culls out, ₩ M	20 00@25 00
Bass, " " ₩ M	18 00@20 00
Oak, ₩ M	40 00@50 00
Walnut ₩ M	60 00 100 00
Cherry, ₩ M	80 00 100 00
Butternut, ₩ M	35 00@40 00
Birch, ₩ M	20 00@25 00
Hard Maple, ₩ M	25 00@30 00
Lath, ₩ M	1 60@ 0 00
Shingles, 1st, ₩ M	2 00@ 3 00
Shingles, 2nd, ₩ M	2 50@ 0 00

CORDWOOD.

The following are the quotations at the yards:—

Long Maple, per cord	$ 6 00@6 50
Long Birch "	6 00@0 00
Long Beech "	5 00@5 50
Tamarack "	5 00@0 00

OSWEGO, N.Y.

From Our Own Correspondent.

No change can be made in quotations. The demand has very materially slackened since the labor troubles commenced. We are not free from the evil of the operations of the K. of L. here, one of the M. W.'s appeared here last Sunday and organized a branch, initiated the longshoremen and sailors unions, put three to four hundred dollars in his pocket and left on Monday. This K. of L. business is supporting a few of the leaders in good style at the expense of the poor people from whom the money must come.

Three uppers	$42 00@46 00
Picking	32 00@35 00
Cutting up	24 00@26 00
Fine Common	22 00@25 00
Common	14 00@18 00
Culls	11 00@14 00
Mill run lots	16 00@22 00
Sidings, selected, 1 in	30 00@35 00
" 1½ in	32 00@36 00
Mill run, 1x10, 13 to 16 ft	16 00@21 00
Selected	21 00@24 00
Shippers	14 00@16 00
Mill run, 1½x10	17 00@20 00
Selected	21 00@30 00
Shippers	14 00@16 00
Mill run, 1 & 1½ in, stripe	15 00@18 00
Selected	22 00@30 00
Culls	11 00@13 00
1x6 selected for clapboards	25 00@35 00
Shingles, XXX, 18 in. pine	3 10@ 3 50
XXX Cedar	2 75@ 3 00
Lath 1½, No 1	1 85@ 2 00
No 2	1 00@ 1 25
Ash, 1st & 2nd 1 to 4 in	16 00@20 00
Basswood, 1st & 2nd, 1 & 1½ inch	18 00@20 00
" culls, " "	8 00@11 00

CHICAGO.

BY THE CARGO.

The *Northwestern Lumberman* of April 24th says:—During the six days ending with Wednesday, April 21st, 51 cargoes of lumber arrived in port. This showing is sharply in contrast with that of last year for a corresponding week, when there were not half a dozen arrivals all told. During a like week in 1884 there were 98 arrivals.

The lumber that has come by lake thus far has mostly gone direct to the yards. This week one commission house sold two cargoes of Manistee and White Lake green dimension, the ordinary length going at $9.75, and a quantity of 3x12-16 in each cargo selling for $11 and $11.50. A quantity of selects brought $26 a thousand, according to report. Mill culls have been sold on the market, to the extent of several jags, at $7.50 to $8. A load or two of cedar shingles, considerably off grade, were sold, but at private terms. Medium stock has been sold to arrive at prices reported to be $1 better than last year at the season's opening, $14.50 being the price named on some sales.

As yet there have not been enough cargo transactions to make a market. The disposition of the yard dealers is to buy little or nothing for the present. May 1st is the time for taking inventories in the yards. It is now so near that date that few want to take on more stock until the inventories are complete. Besides, it is plain that the jobbers and manufacturers are wide apart in their views. They usually are in the spring, but this year there seems to be less than the usual margin between cargo and yard prices. While this is the case, the yard men now have a strong motive for holding off about making purchases on account of the dubious condition of labor affairs. And, as a matter of fact, there is less dry lumber to be thrown on the market than there was last year. Green lumber will not come forward freely until the mills are all in full blast. Mills that have not already begun operations will not, in most instances, be started before May 1st.

Lake freight rates are on a basis of $1.25 a thousand on dry lumber from Muskegon, $1.37½ from Ludington, and $1 50 from Manistee.

AT THE YARDS.

Trade is but moderate. The urgency of demand that was a feature of March business has departed. The great yards that have to sell lumber or do worse are still sending out long trains, but the yards of smaller capacity are not now making any special effort to crowd sales. The present condition is peculiar. Stocks are so much broken, and values in the yard correspond so nearly with those at the mills that holders of medium sized stocks have no motive to urge business. When they undertake to scalp for assortments they have to pay about as much for lumber as they can sell it for. The outlook is also a little uncertain. Merchants are not sure as to how serious labor disturbances are to be. They also begin to figure on crop prospects, and future prices for farm products. They are simply in a condition of "don't know," and see no loss in waiting until their minds are clearer. At the same time business is moving along in a steady fashion, a large amount of lumber in the aggregate going into distribution. Dry stocks all over the country being broken in assortment, there is a demand, as a matter of necessity, for lumber held in this city. It is going in all directions—often north, right into the heart of producing districts, to patch up assortments.

Receipts of lumber and shingles for the week ending April 22nd, as reported by the Lumberman's Exchange:—

RECEIPTS.

	Lumber.	*Shingles.*
1886	28,814,000	2,847,000
1885	4,831,000	1,016,000

FROM JAN. 1, TO APRIL 22, INCLUSIVE.

RECEIPTS.

	Lumber.	*Shingles.*
1886	113,577,000	25,492,000
1885	55,513,000	16,093,000
Increase	58,064,000	9,599,000

STOCK ON HAND APRIL 1.

	1886.	1885.
Lumber & timber	396,147,654	438,442,084
Shingles	293,665,060	223,422,860
Lath	43,065,153	35,073,175
Pickets	1,824,840	1,965,742
Cedar posts	279,971	167,674

EASTERN FREIGHT RATES.

FROM CHICAGO AND COMMON POINTS ON CAR LOAD LOTS OF HARD AND SOFT LUMBER.

To New York	25c.
Boston	30c.
Philadelphia	23c.
Baltimore	23c.
Washington	23c.
Albany	23c.
Troy	23c.
Buffalo and Pittsburgh	15c.
Shenectady	23c.
Wheeling	15c.
Suspension Bridge	15c.
Salamanca	15c.
Black Rock	15c.
Dunkirk	15c.
Erie	15c.
Toronto	15c.

AUSTRALIA.

Messrs. Lord & Hughes' monthly circular, dated Melbourne, March 20th, says:—

Since our last, on 22nd ult., we have to advise the heaviest arrivals of every description of timber and building materials we have ever had in any one month, with the result of lower prices and greater difficulty of making sales, even at such lower prices; the fact is, the trade are so fully stocked that they purchase most reluctantly, their difficulty being enhanced by the inability of obtaining drayage and fire insurance. We can look for no improvement in prices until there is a great falling off in imports.

The trade from the timber yards continues good, with no evidence of any falling off. Builders are all actively employed, and with every prospect of continuing so for some time to come.

The Howard, from Sagueney, with cargo of Canadian lumber for this port, is stranded at Ringarooma Bay, N. E. coast of Tasmania.

RED DEALS.—Imports: 94,332 pieces from the Baltic, and 15,559 pieces from London. The arrivals have been Nanna, Jotun, and Aurora, from Gefle; Albert Ehrensvord, from Gothenburg; Ilos, from Arendal; Atlantic, from Skutskar (via Adelaide;) Lorelei, from Frederickstad; Maulesden, Bankfields, Eusemere, and Marsala, from London. The Albert Ehrensvord's cargo came to the order of one of the trade and has gone direct into stock. The Atlantic's cargo was sold privately, to arrive,

some time ago, prices not transpired. Sales of various shipments were made, prices ranging for thirds, 4⅜d. to 5d. ; fourths, 3d. to 4¼d. per foot 9x3.

SPRUCE DEALS.—Imports: 21,035 pieces. The arrivals have been Ilos and India, from the Baltic ; Sardomene, from New York ; and ex steamers, from Sydney. The Ilos comes to the order of one of the trade, and has gone direct into stock. Sales have been, ex Wave King," General Butler and India, at 3d to 3⅝d per foot 9x3.

OREGON TIMBER —Imports: 2,314,816 feet super. The arrivals have been City of Brooklyn and Lakefield, from Burrard's Inlet ; and Quickstep, from Tacoma. The City of Brook lyn and Quickstep's cargoes have been sold privately, prices withheld. The C. C. Funk's cargo was sold on 2nd inst., from £5 to £5 10s., average £5 3s 10d, per 1,000 feet super ; and on the same date the General Butler's, at from £4 17s 6d to £5 12s 6d, average £5 4s 6d.

LUMBER.—Imports: Clear pine, 89,373 feet super. The arrivals have been, Sardomene and Lucy A. Nickels, from New York ; and Albany, from Adelaide. Offerings by auction have been unusually heavy, and prices show a decline on last month's rates. We quote clear pine at £12 5s to £14 5s ; shelving, £8 to £11 2s 6d ; Canadian white pine, £6 7s 6d to £8 2s 6d.

REDWOOD.— Imports: 323,507 feet super. The only arrival during the month has been the Alice Muir, from San Francisco, which is now in course of landing. The parcel ex C.C. Funk, and balance ex Grace Roberts, were sold at £9 to £8 7s 6d.

FLOORING AND WEATHERBOARDS.—Imports: 12,670,698 feet lineal. The arrivals have been exceedingly heavy, and a considerable decline has to be recorded. We quote—Red, 6x1½, 9s 3d to 9s 9d ; 6x⅞, 7s 9d to 8s ; 6x¾, 6s 6d to 6s 9d ; 6x½, 4s 8d to 4s 9d ; 4-out red weatherboards, 4s 9d ; white, 6x1½, 9s 3d to 9s 6d ; 6x⅞, 7s 6d ; 6x¾, 6s 6d ; 6x4½, 4s 8d to 4s 10d ; 4-out weatherboards, 4s 10d to 5s

KAURI PINE.—Imports: 853,182 feet super. The arrivals have been— Ensign, Presto and Yolandi, from Kaipara. Sales by auction have been of shipments ex Noatun and Cabafeidh, prices showing a decline on last month's rates.

PITCH PINE.—Imports: Nil. A small parcel of 10 in. T. & G., ex Beaconsfield, was offered at auction on 9th inst., but bidding not being up to limits it was withdrawn.

CEDAR.—Imports: 131,900 feet super. This parcel arrived ex Sydney steamers. Special interest was manifested at the sale on the 2nd inst. of the first shipment of logs, ex Diamond, from New Guinea, which sold fairly well from 37s 6d to 11s according to size of logs.

DOORS.—Imports: 1,749. The arrivals have been the Ederside, from San Francisco, via Sydney, and Sardomene, from New York. Both parcels have been placed privately, at satisfactory prices,

LATHS AND PICKETS.—Imports: Laths, 17,983 bundles ; pickets, 5,890 bundles. Notwithstanding the heavy arrivals, prices show an advance on last month's rates.

SLATES.— Imports: 688,170. The arrivals have been — America, from Liverpool ; Wellington, from Launceston ; Sardomene and Lucy A. Nickels, from New York. Imports excessive, and prices have declined fully 10 per cent. on last month's rates.

PLASTER.—Imports: 2,260 barrels. This parcel arrived ex Sardomene and Lucy A. Nickels, and has been sold privately. We quote best brands 12s to 13s.

CEMENT.—Imports : 9,950 barrels. Favorite brands have been sold at up to 13s.

GALVANIZED IRON.— Imports: 537 tons. We report a sale privately of an invoice of Davis' 26 gauge 5-feet to 10-feet, at £16 10s. We quote Orb brand at £16 10s.

EXPLANATION—Red deals and spruce deals are sold at per foot of 9x3 ; T. and G. Flooring at per 100 feet running ; Oregon timber, redwood, clear pine, shelving, ceiling, per 1,000 ft. super ; Kauri pine and cedar logs at per 100 ft. super ; laths, pickets and slates at per 1,000 pieces. Shorts are all lengths under 12 feet.

BEARDEY, CHAMPAIGN & Co.'s mill, at Muskegon lake expect this spring to slice up a log.

LONDON.

The *Timber Trades Journal* of April 17th says :—Messrs. Churchill & Sim's catalogue on Wednesday hardly drew such a big room as we expected. There was a fair gathering, but no crowding, and the stimulus to bidding, which the late opening of the Baltic ports engendered, had been palpably damped by the information conveyed in our Swedish correspondent's letter, published last week, that the ice was thawing rapidly, and the ports were likely to be open a month earlier than anticipated. This is not very cheering news to those who have been acquiring stock at the public sales in the expectation that the month would pass off without any fresh arrivals, and the announcement made that some of the first-open-water steamers were already able to prosecute their voyage could hardly fail to operate unfavorably.

The cypress timber from Wilmington, ex Fidelio, with which Wednesday's sale was introduced, went apparently low. This timber is said to be in good repute in America, where, we understand, they use it, got a wonderful bargain.

The present lamentable cargo prices of pitch pine are partly due to the suicidal policy of Scandinavian shipowners in sending their vessels out seeking to the southern ports, when they must have known by past experience that the shippers would have them entirely at their mercy. Of course this was a great windfall to the shippers, who have no alternative but to look to the low freights to give them a chance of getting out at cost, and would, of course, take every adyantage of these seekers being on the spot to regulate the rates.

The market here is completely glutted on all sides, and, unless the supply is curtailed some way or another, a greater fall in prices will assuredly take place.

When the pine and spruce parcels came under offer, buyers did not betray any more anxiety, and the reputed scarcity of some of the sizes evidently has not been felt in the market yet. As a matter of fact, everybody is full of everything, and we look in vain for the advance so confidently predicted at the nativity of the present year.

The most noticeable feature of the first day's sale was the absence of Petersburg goods, only a little lot of white representing that important wood-shipping place. The interest of the sale seemed to centre around the pine and spruce parcels. The goods ex Kalliope, of the latter description went very low for Quebec stuff ; in fact all the 3rd appeared out of favor. The 9/10 ft. planks ex Betty falling at £5 15s. is a damper for those who are looking to see things improve. However the goods were not the best samples of the port they represented ; and, though we do not wish to convey any false impression to the actual state of values, we doubt not but that if really prime sorts came under offer the result would be less discouraging.

The fact of the market being so overdone with white spruce will remain an incurable evil as long as trade continues at its present dead level, and the big cargo of lower port stuff now discharging in the Surrey Commercial docks could hardly have come to a worse market, unless the great Mersey city had been selected.

The stereotyped phrase—things going very quiet—was applicable to Messrs Churchill & Sim's second day's doings, and it was apparent from the feebleness of prices that the demand had not yet shown signs of improving. The bidding was slow.

The Quebec lots were better appreciated, and the lot of second broads ex Ilos 12 feet, which opened at £11, but eventually fell at £18 (1884 cutting), were not dear. Spruce, like the day before, appeared to hang fire considerably, but, as a buyer remarked, how can it be otherwise when nobody wants any? £6 10s for 3rd Quebec 3x11 is a not very satisfactory record, but, as we did not see the stuff, cannot pronouce it either cheap or dear. Like the rest of the public sales lately, the seller had to hold the worst end of the stick. It is a satisfaction that, if prices are no better, they recede only to a very slight degree, which is an implication that with a genuine inquiry any upward movement will take a solid form.

Stocks at the outports are heavy, and the few sales yet effected to many places must leave a considerable quantity of unplaced stock yet to be dealt with. The leading brands are mostly placed, no doubt, and t› secure their specifications the outports, and probably some of the London trade as weli, have paid the full figures ; but, having suited themselves in this way, they are unlikely to do more till the position of the market is more assured.

LIVERPOOL.

The *Timber Trades Journal* of April 17th says :—Beyond the interest involved in the public sales held during the latter portion of last week, there has been very little animation shown in the market. In the retail trade consumers are evidently still pursuing the same line of business they have followed for months past, and will only take what they want for pressing and immediate wants. In the wholesale branch a similar line of policy seems to be pursued, and therefore the sellers of goods to arrive on contract are having an extremely hard time of it at present, as buyers still continue to exercise the greatest amount of caution in entering into any engagements for the future. They are fortified in adopting this course by the continued depression in the freight market, which still rules extremely low from the St. Lawrence, New Brunswick and Nova Scotian ports, and also from pitch pine ports.

From St. John, N. B , we see that charters to Liverpool have been effected at about 43s 9d per staudard for deals, and 18s and 19s per load for pine and birch timber, respectively, for London 40s. per standard, and the Bristol Channel 41s 3d to 42s 6d per std.

On Friday, thr 9th inst. Messrs. Price & Pierce offered by public auction the cargo of hewn pitch pine timber, just arrived per Cleveland, from Mobile. The inclemency of the weather, perhaps, militated against a large attendance, yet the local trade was fairly well represented, and we venture to think as much was obtained for the cargo as its quality and the present depressed condition of business could have led any one to anticipate.

The parcels per Maracas and Baron Anderson failed to elicit a bid, and consequently weee withdrawn.

Messrs. Farnworth & Jardine's sale of spruce deals on Thurday last was fairly attended by the local trade ; but, from the apathy displayed by those present, it was evident that the company present was attracted more by curiosity than from any desire to buy. This was shown by the fact that lot after lot was passed without eliciting any bid whatever ; the only sales made were :

St. John spruce deals, ex Nettie Murphy.

		Per Pet. std. £ s. d.
21 ft. & up	3x11	7 5 0
9 "	2½x7	7 2 5
9 to 23 ft. & up	3x8	5 12 6

Ex Countess of Yarmouth :

9 ft. & up	7 in. & up	£4 10 0 4 7 6

ALBANY.

Quotations at the yards are as follows :—

Pine, clear, ₩ M	$55 00@60 00
Pine, fourths	50 00@55 00
Pine, selects	42 00@47 00
Pine, good box	22 00@33 00
Pine, common box	13 00@15 00
Pine, 10-in. plank, each	00 45@00 47
Pine, 10-in. plank, culls, each	00 25@00 27
Pine boards, 10-in	00 30@00 32
Pine, 10-in. boards, culls	00 16@00 20
Pine, 10-in. boards, 16 ft., ₩ M	28 00@32 00
Pine, 12-in. boards, 16 ft	28 00@32 00
Pine, 12-in. boards, 13 ft	28 00@00 00
Pine, 1¼ in. siding, select	40 00@43 00
Pine, 1¼-in. siding, common	15 00@18 00
Pine, 1-in. siding, select	40 00@42 00
Pine, inch siding, common	13 00@15 00
Spruce, boards, each	00 00@00 16
Spruce, plank, 1¼-in., each	00 00@00 20
Spruce, plank, 2-in., each	00 00@00 30
Spruce, wall strips, each	00 12@00 12
Hemlock, boards, each	00 00@00 14
Hemlock, joist, 4x6, each	00 00@00 32
Hemlock, joist, 2½x4, each	00 00@00 14
Hemlock, wall strips, 2x4, each	00 00@00 11
Black walnut, gook, ₩ M	100 @120 00
Black waluut, ⅝ inch	80 00@90 00
Black walnut, ¾ inch	00 00@85 00
Scaymore, 1-inch	28 00@30 00
Scaymore, ⅝-inch	21 00@23 00
White wood, 1-inch and thicker	38 00@40 00
White wood, ⅝-inch	28 00@30 00
Ash, good, ₩ M	40 00@43 00
Ash, second quality, ₩ M	25 00@30 00
Cherry, good, ₩ M	60 00@85 00
Cherry, common, ₩ M	25 00@30 00
Oak, good, ₩ M	40 00@43 00
Oak, second quality, ₩ M	20 00@25 00
Basswood, ₩ M	25 00@30 00
Hickory, ₩ M	40 00@40 00
Maple, Canada, ₩ M	28 00@30 00
Maple, American, per M	26 00@25 00
Chestnut, ₩ M	35 00@40 00
Shingles, shaved, pine, ₩ M	0 00@ 6 50
" 2nd quality	0 00@ 5 00
" extra, sawed, pine	4 30@ 4 50
" clear, "	0 00@ 3 00
" cedar, mixed	0 00@ 3 25
" cedar, XXX	0 00@ 0 00
" hemlock	2 25@ 2 37
Lath, hemlock, ₩ M	0 00@ 2 13
Lath, spruce, " "	0 00@ 2 25

BUFFALO.

We quote cargo lots:—

Uppers	$45 00@46 00
Common	17 00@18 50
Culls	12 50@13 00

TONAWANDA.

CARGO LOTS—MICHIGAN INSPECTION.

Three uppers	$42 00@44 00
Common	18 00@24 00
Culls	10 00@13 00

WOOD-WORKING PATENTS.

The following list of patents relating to the wood-working interests, granted by the United States Patent Office, April 13th, 1886, is specially reported by Franklyn H. Hough, solicitor of American and Foreign patents, 925 F. Street, N. W., Washington, D. C.

339 864—Log turner— W. W. Coyle, Springfield, Ohio.

339,872—Plane, bench—J. P. Gage, Vineland, N. J.

339,877— Planing machine— W. H. Gray, Brooklyn, N. Y.

339,728— Saw, band— E. C. Atkins, Indianapolis, Ind.

339,797—Saw mill, band—J. W. Maxwell, Louisville, Ky.

340,016—Saw swage—A. Stevens, Wausau, Wis.

340,051—Saw tooth—A. Krieger, Columbus, Ohio.

339,808—Shingle machines, feed mechanism for—W. L. Purves, Waddington, N. Y.

PATENTS ISSUED APRIL 20.

340,207 — Lathe — A. Gordon, Hamilton, Ohio.

340,335 — Lathes, work supporter for — E. Zimmermann, New York, N. Y.

340.312—Log skidding and loading machine —H. N. Hewlett, Oscoda, Mich.

340,444— Resawing machine—I. R. Joslin, New York, N. Y.

340,491— Saw mill dog—N. J. Cushman, North Paris, Me.

340,097—Sawing machine, scroll—E. Collins, New York, N. Y.

New Zealand Fungus.

A curious trade has sprung up of late years in a peculiar kind of fungus that grows on the trees in the North Island of New Zealand, and which is exported exclusively to China. The uses to which it is applied do not seem to be well known. In 1837 the British authorities at Hong Kong said it was "much prized by the Chinese community as a medicine administered in the shape of a decoction to purify the blood, and was also used on fast days with a mixture of vermicelli and bean-cured instead of animal food." Subsequent information shows that it is used in soups as ordinary food, and it is also used as a dye. The exports during the past ten years have grown from £1927 to £18,939, but the increase has not been uniform. The gathering of the fungus is probably one of the vagabond industries ; if so the irregularity is easily accounted for. The exports in 4884 were 6387 cwt., valued at £11,079.

Wood Products in Chemistry.

I appears from the experiment of M. Senff, that the yield of crude pyroligneous acid, tar, charcoal, and gas is almost the same with the most different woods. But the richness of the acid waters in acetic acid, and consequently the yield of dehydrated acid, vary greatly. In this reepect the wood of coniferous trees is the least valuable. The wood of the trunk furnishes more acid than that of the branches. The wood yields more acid than the bark, and sound wood more than dead wood. Rapid calcination yields more gas at the expense of the condensed products and of the charcoal ; it yields also the weakest acid waters, and the charcoal is more hygroscopic than that furnished by a gradual action.—*Timber.*

THE HENDERSON LUMBER CO. Limited.

DAVID H. HENDERSON, *President*; NORMAN HENDERSON, *Vice-President*; CHAS. H. WALTERS, *Sec-Treas.*

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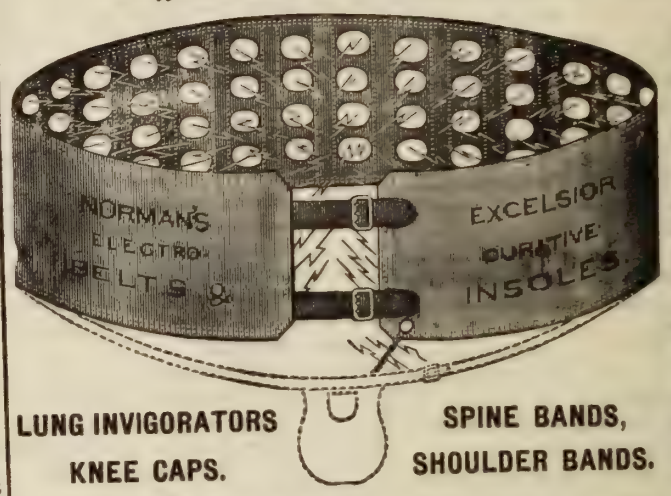

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saparilla." It instils new life into the blood, and imparts vitality and strength. Being highly concentrated, it is the most economical blood purifier.

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3. It furnishes complete and reliable quotations of prices of lumber in all the leading markets.
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It has a circulation among saw mill owners, manufacturers, lumber and timber dealers and all classes connected with the timber business.

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FOR STEAM FEED IN CIRCULAR MILLS WITH RACK OR ROPE.

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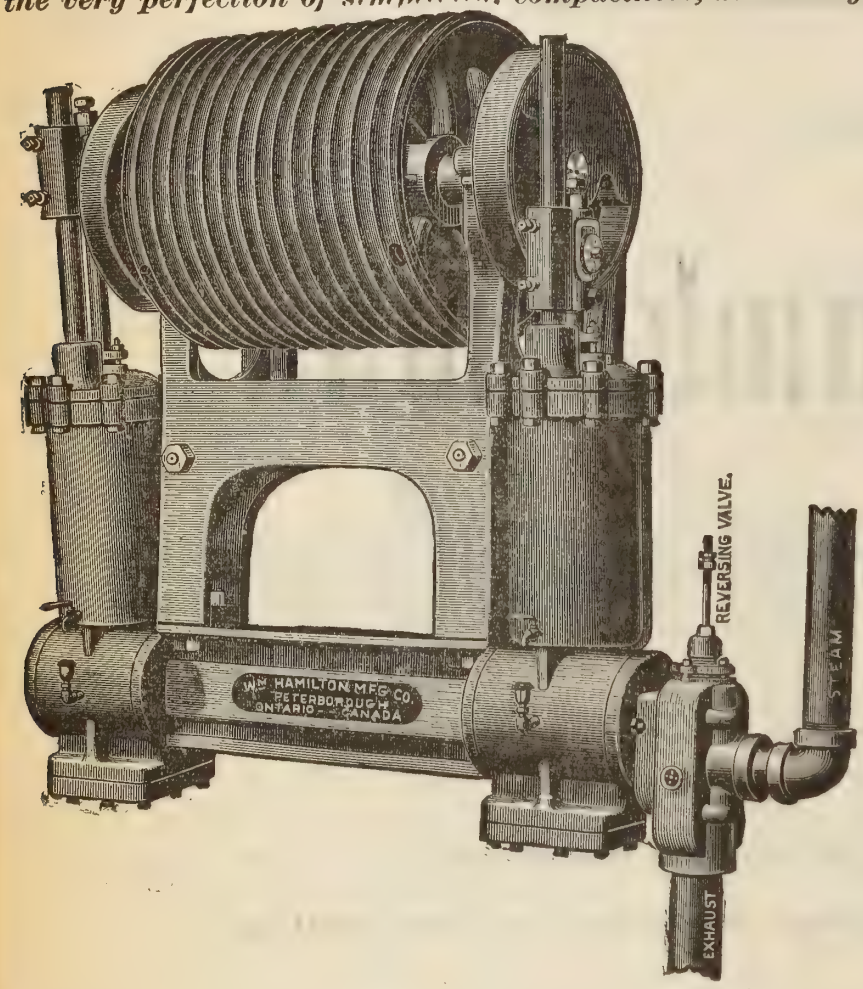

The above engraving illustrates the Twin Engine, 10x16, for Rope Feed, for Saw Mill Carriages. The spool is 27 in. diameter, 30 in. face, is grooved 2 in. pitch for 1½ in. rope. The shaft is steel, 4½ in. diameter, with disk cranks. No connecting rods, eccentrics or valve rods to get loose and out of order. The ports are in the trunions, and worked by an oscilliation of the cylinders, and are held in their place in the downward motion by a steam cushion below. The sawyer's valve is a perfect balance, and by moving this valve the engine can be reversed, stopped or started almost instantaneously if necessary, as the sawyer has perfect control of it by his lever either to go fast or slow. Should the sawyer let go of his lever either by mistake or any other cause, it is balanced so that the valve will come to the centre and cut the steam off both cylinders and stop the feed. When standing, the lever is locked or fastended, so that is is impossible for it to start off itself. The engine stands upright below the carriage, and bolted to two upright beams, placed on the mill for the purpose. When a rack is preferred in place of the rope, we put on a steel wheel 30 in. in diameter, and the engine placed high enough to work into the rack on carriage bar, or if the beams come in the way, an idler wheel can be used between engine and rack segs; or, the engine can be placed at a distance and have a shaft from it to the carriage; or it can be placed in the engine room, where it is under the control of the engineer for oiling, thence by shaft and pinion to carriage rack bars. These engines are well adapted for cutting long logs, or where the logs are mixed, the advantage of this feed will be apparent to mill men. When the carriages are used in two or more sections, the couplin and uncoup ling of each section is quick and simple.

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☞ ***We guarantee this to be the best Mill of its kind got up, and would ask any one wanting a good Band Saw-Mill to communicate with us. We would also call the attention of Mill Men to our new IRON GANGS, CIRCULAR MILLS and MILL MACHINERY. For further information, prices, &c., address the Manufacturers,***

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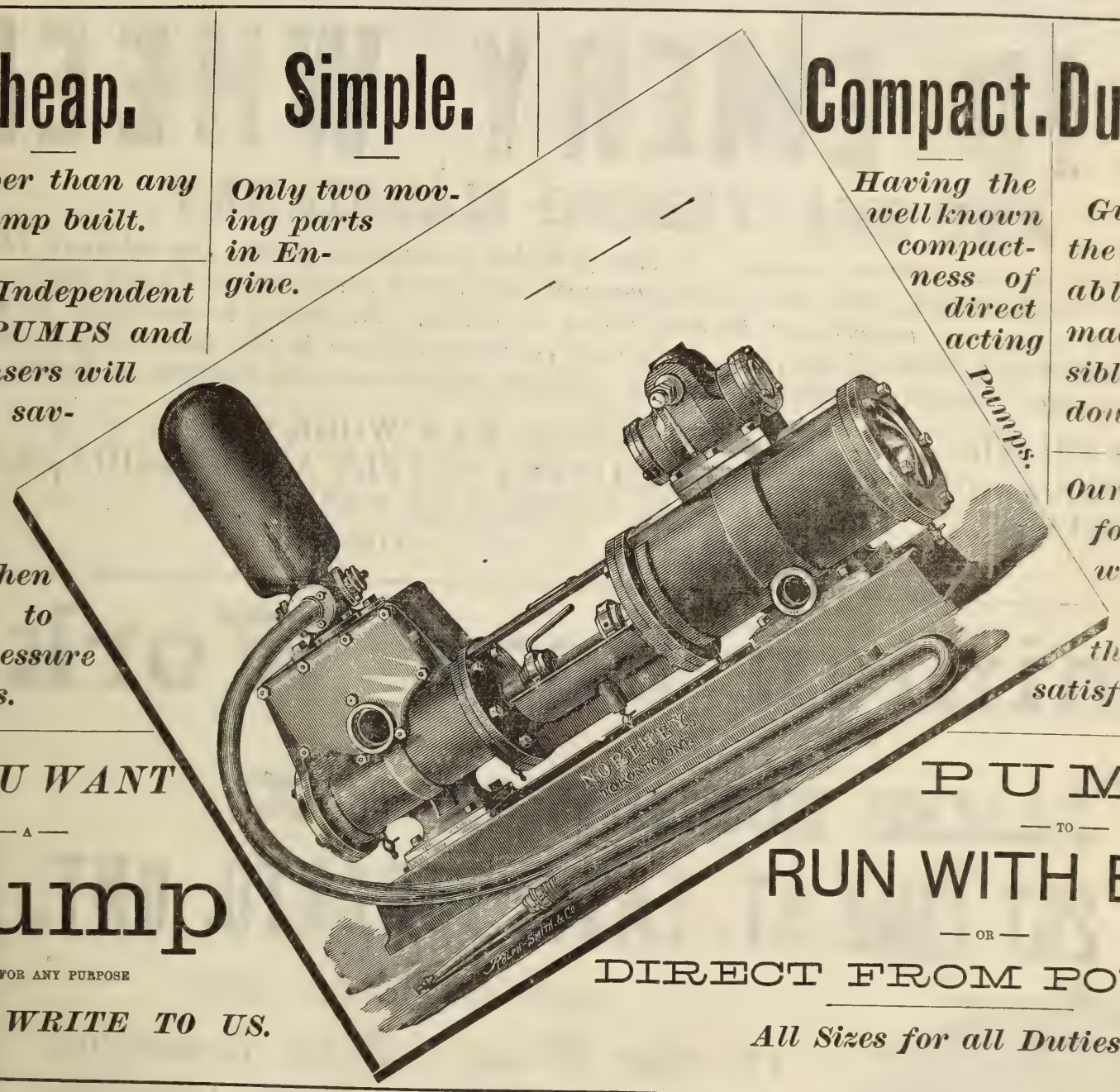

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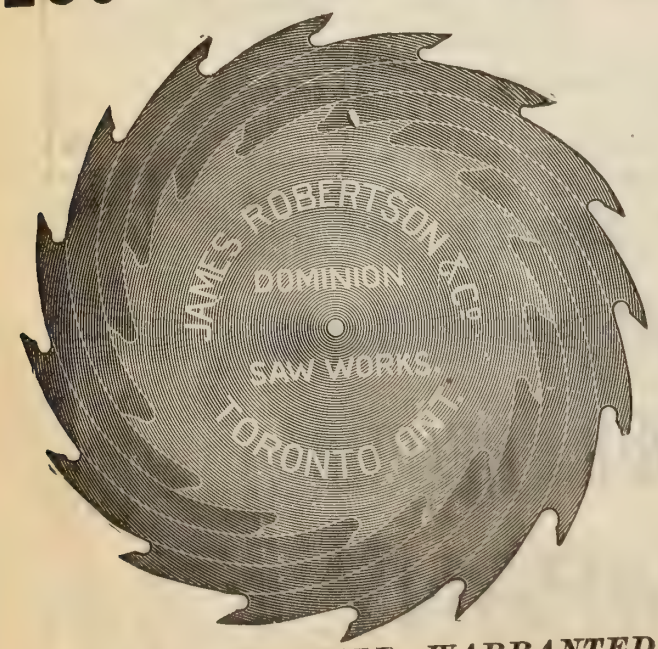

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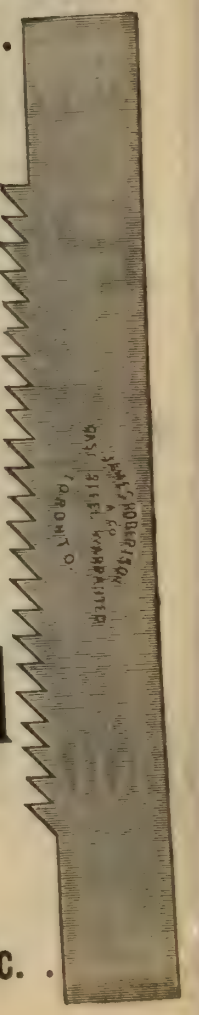

THE CANADA LUMBERMAN

AND MILLERS' MANUFACTURERS AND MINERS GAZETTE.

PUBLISHED SEMI-MONTHLY.

The only ewspaper devoted to the Lumber and Timber Industries published in Canada

SUBSCRIPTION $2.00 PER ANNUM

VOL. 6. PETERBOROUGH, ONT., MAY 15, 1886. NO. 10.

IMPROVEMENT ALL ALONG THE LINE.

Three years ago there was an oversupply of white pine lumber. The mill of the Northwest had been run to their greatest capacity, curtailing of the logs or lumber supply had not been seriously considered, and the result was loaded markets, both at primary and distributing points. Such a condition, in any line of trade, has but one result—unremunerative prices. Every dealer and manufacturer was anxious to dispose of his stock. There was competition as to who should get rid of the greatest amount of lumber in the shortest possible time. Drummers were accorded the liberty to sell as their judgment might dictate, and that invariably means a meeting of as low prices as other drummers make, and often cutting a little under them. There was complaint everywhere that the business of manufacturing lumber, on the whole, was not sufficiently profitable, and stock for the yards of the jobbers was sent out at low figures because it could be replaced at lower prices. The situation was one that, while it pleased the jobber and retail dealer, was discouraging to the men who owned stumpage and saw mills.

In the South little mills had gone in, which were operated by men of small means. These men, in many cases, did not regard their business as permanent, that is, they put their mills in for the time being to cut off small tracts of timber that was accessible to a railroad, and when that was accomplished intended to trust to luck and get possession of another small tract if possible. In such a business the incentive was to sell their lumber, about as fast as sawed, for what it would bring. They were unable to hold their lumber until it was fit for shipment. Necessity compelled them to get rid of the product of their mills as fast as possible, and while it is said that a nimble sixpence is better than a slow shilling, the sixpence in this case did not go to profit account. Many of these small mill operators had neither the means nor disposition to visit the leading markets, and consequently knew little of the market requirements. This was another fact that compelled them to sell cheaper than they would have been obliged to had their stock been properly manufactured. Such a state of affairs was a constant menace to manufacturers who understood their business, and who had the means to take advantage of the situation.

Such were the conditions three years ago, but now we find them materially different. The white pine men called a halt and changed their tactics. They rightly concluded that it was foolish, from a business standpoint, to crowd the market; that trade would be much healthier and profitable if lumber buyers were forced to seek the manufacturers instead of the manufacturers the buyers. As it is impossible to turn out a big stock of lumber from a small stock of logs, and as a large stock of logs had in the history of the lumber business almost invariably meant a large stock of lumber, they concluded that the proper way to begin curtailment was at the stump. It was believed by many that all talk about reduction was so much buncombe. Certain operators, however, meant what they said. There was such a lessening of the log cut in the seasons of 1883-84 and 1884-85, that at the end of the sawing season of 1885 nearly all the logs in some of the streams were made into lumber, with the further favorable exhibit that the output of lumber in 1885 showed a decrease of 11 per cent. as compared with that of the previous sawing season. This has been brought about by the stiffening of the backbone of the manufacturer. He has finally decided that his pine timber is good property; that at the most he has altogether too little, and that it will be better for him, and for his children who will inherit his possessions, if he does not rush business as he has been in the habit of doing for the past ten years.

During these three years a steady change has been going on in the South. The cutting away of the timber immediately on the railroads, or within an ox-haul of them, has inevitably placed the business in stronger hands financially. A man with little money can buy and operate a portable, but when it comes to erecting a first-class mill, securing enough timber to last for years and building a logging road from three to twenty miles long, it takes money, and considerable of it. And when the amount of money necessary to the establishment of a first-class plant is invested, the man who makes the investment is liable to go about his business intelligently in order that the returns may make the right kind of showing. The little mills in the South run by irresponsible wood butchers have been constantly going,—sold by the sheriff to the highest bidder in many cases,—and better mills have been put in. The indications of to-day are that the mill facilities of the South will continue to improve. Many of the choicest tracts of timber lands have passed into the hands of northern capitalists, nearly all of whom are also lumbermen, and if these men, after their white pine timber is exhausted turn their attention to the manufacture of lumber in the South, it will be on the same grand and thorough scale that marks their operations now.

Most of the southern lumbermen have come to realize what they must do to be saved from disappointment. They have learned that the northern and eastern markets want well-manufactured lumber; they know that if yellow pine lumber gains headway outside of the South proper it must take the place of white pine; and they know that it will take business push to give it this headway. Looking to this end the manufacturers have formed organizations, so that the members may be of mutual benefit to one another. Thus by advising and discussing,—in short, by informing themselves, they will be able to conduct their business in a more satisfactory, and we trust profitable, manner.

We find, also, that there has been an improvement in the redwood business of the Pacific coast. It is not until a recent date that redwood could be laid down in the east at prices which would tempt the buyer. There was but a limited field for its use at home. A market was sought in England, but, we believe, with but little success. Sample cargoes were forwarded, a good price for the lumber was at first obtained, but it was not long before it began to depreciate in value, and we were lately informed by a gentleman who had visited the English markets that now it does not sell at a much higher price than poplar. The cost of manufacture has been considerably reduced of late, owing to improved machinery and facilities for logging, and the redwood lumber manufacturers may feel a hope that borders closely on assurance, that their stock will be wanted in the middle and eastern states if it can be laid down in those states at prices at which it has been sold during the past month, and from this on it probably will be at nearly such prices.—*Northwestern Lumberman.*

THE MAGNOLIA AS LUMBER TREE.

The magnolia is one of the most universally and deservedly admired trees in all the southern forests. There are seven distinct species of this tree but the name, magnolia, is rarely applied to any of them except the magnolia grandiflora though the other six as justly entitled to it. In some sections of the south it is called big laurel and big bay tree. Its fragrant white flowers, six to eight inches broad, contrasting strongly with the dark green of its thick, leathery evergreen leaves, six to ten inches long, make it a universal favorite as a yard of lawn ornament. In addition to its beauty and grace it possesses other qualities that make it valuable as a lumber tree. It grows to a good size, ofter attains a height of ninety feet, and exists in sufficient quantities to constitute an important factor in the lumber trade whenever the scarcity of other woods or the evolution in pulic taste creates a demand for it. The sample of this lumber in this office—a four inch strip dressed on both sides to $\frac{3}{4}$ inch in thickness—weighs 31 ounces to the square foot, and appears to be well adapted to almost any purpose for which poplar, basswood or any light, soft wood is used. It is of a light cream color, easily worked and not liable to split, though very straight grained.

Although the tree known as the magnolia proper is confined to a limited area along the southern coasts, the family of which it is the head is quite widely distributed. One of the largest species, the magnolia accuminata, is universally known throughout the south as the cucumber tree, from the resemblance of the green fruit to that vegetable in its green state, and is found from the northern lakes to central Georgia, but more plentifully in the fertile and moist coves and declivities of the Cumberland and Allegheny mountains. The lumber of this tree is considerably used in some localities and is especially suitable for wooden pump material.

The most widely diffused, and also the smallest of the magnolias in the M. Glanca, Lin., and is, we believe, most generally known as sweet bay tree. It is common along the coast from Louisiana to New Jersey, and is found in at least one locality north of Boston, Mass. It rarely exceeds thirty-five in height and as it blooms at a height of five of six feet, it is a favorite ornament. Its flowers are pure white two inches broad and of a powerful but grateful odor.

The other species of magnolia are variously known as cucumber tree, umbrella tree, and Indian physic. Only one of them, the Magnolia Cordata, of Micheaux, called heart leaved cucumber, attains a diameter exceeding fifteen inches, and none of them are found in sufficient quantity to make them of importance to the umberman, as yet.—*Southern Lumberman.*

WOOD PRODUCTS OF CHEMISTRY

I appears from the experiment of M. Senff, that the yield of crude pyroligneous acid, tar, charcoal, and gas is almost the same with the most different woods. But the richness of the acid waters in acetic acid, and consequently the yield of dehydrated acid, vary greatly. In this reepect the wood of coniferous trees is the least valuable. The wood of the trunk furnishes more acid than that of the branches. The wood yields more acid than the bark, and sound wood more than dead wood. Rapid calcination yields more gas at the expense of the condensed products and of the charcoal; it yields also the weakest acid waters, and the charcoal is more hygroscopic than that furnished by a gradual action.—*Timber.*

MR. JOHN KILBURN, with about 160 men, has been at work since September last cutting logs in the Province of Quebec for Mr. W. H. Murray. The cut this year is about eight million feet. Mr. Kilburn went north last night with about 30 men from Fredericton to commence stream driving, which operations will last until about the first of June. He will have about 100 men at work with him.—*St. John, N. B., Globe.*

THE new Chicago, St. Paul, Minneapolis & Omaha dock, now under contract, with Winston Brothers, at Duluth, will be 1,100 feet long, and will require 1,250,000 feet of lumber and timber and will cost $100,000.

Chips.

On Arbor Day 50,000 trees were planted in Berks County, Pa.

Calvin & Son's first square timber raft of the season has left Garden Island for Quebec.

Large shipments of dressed lumber are being made from Deseronto by the Rathburn Company to neighboring towns and cities.

J. R. Booth and G. W. Perley, well known lumbermen, have subscribed $1,000 each towards the relief of the sufferers by the fire at Hull.

The Canadian Pacific snow sheds, in the Selkirk Range and the Rockies, will be 12 miles in length and will contain 14,000,000 fee of timber.

Gow, Mayo & Co., of Muskegon, Mich., have sold their entire season's product of sawdust for shipment to the terra cotta works at Pullman, near Chicago.

Indications and actual figures point to the probability that $80,000,000 will be spent within two years in the constructions of new railroads in the United States.

The Emery Lumber Company last winter but 53,000 logs, scaling 12,500,000 feet, into Wahnapatie river, Canada, which will be driven o the mouth of French river, and thence shipped by lakes to Tawas and East Saginaw.

The following vessels are said to have been chartered by Messrs. Price Bros., Quebec, to carry lumber to St. John's, Newfoundland, at $4.50:—Schrs. J. Savard, Marie Erzelie, Ste. Anne, Marie Vigilante, C. Berner. and Marie Anne.

The Stroudsbury, Pa., *Jeffersonian* says that among the recent orders received at the Tanite Factory was one from Peru, South America. It calls for two dozen Tanite Emery Wheels to be used in smoothing the blanks from which silver dollars were to be coined.

The first ocean steamer came into Montreal harbor on April 30th. There have been several other arrivals from sea and the harbor is fast assuming its usual busy summer aspect. The Lachine Canal opened on May 3rd, and navigation on both the St. Lawrence and the Ottawa is now fully open..

The *Timber Trades Journal* of April 17th says:—Some vessels forming a portion of the Quebec fleet left the Tail-of-the-Bank for the outport this week. They carry coal at a freight it is stated of 2s. 9d. a ton which will just pay for the loading and discharging. The fleet is later this year in leaving the Clyde. Freights, Quebec to Clyde, about 18s. per load.

It is proposed to incorporate at Ottawa Messrs. E. B. Eddy, G. H. Millen and S. S. Cushman, of Hull; R. R. Dobell and Thomas Beckett, of Quebec, and others, as the E. B. Eddy Manfacturing Company, with power to do lumbering, make matches, sashes, doors and woodenware pulp, etc., as well as to own vessels and do forwarding thereby. The bill passed with amendments.

The American Paper Manufacturers' Association embraces all the factories in the country numbering probably 1,000 representing a capital of $75,000,000, employing between 40,000 and 50,000 hands at the cost of $12,000,000 annually. These factories pay $50,000,000 per annum for raw material alone. and they can turn out 1,200,000 tons of manufactured product.

An illustration of the advantage of trees to a country, says the Montreal *Star*, is to be found in Siberia. The Russian Government has been planting trees for half a century, and in one province has seventy plantations, ranging in size from eighteen thousand to to twenty-one thousand acres each. The result is that many sections, once to arid for agriculture, now have abundant rain falls. Why cannot Canada profit in this matter by the experience of other nations?

A discovery has been made at Brigg, Eng., which has arroused considirable interest among antiquarians. While engaged in excavating at the Brigg Gasworks some working men came upon a large boat bedded in the clay some three or four feet below the surface. On the boat being bared yesterday it was found to be 48ft. long, 4ft. 4in. wide and 2ft. 9in. deep. It is undoubtedly ot very ancient construction, being cut out of a solid piece of oak. Great care is being taken in order to get the boat out of its bed with as little damage as possible.

The warm weather of April, says the Belleville *Ontario* of May 8th, by suddenly melting the snow, is likely to interfere with the driving operations on the streams, great quantities of logs are said to be already hung up for want of water. Over 100,000 logs belonging to Gilmours are said to be stuck on the Moira river alone, and other operators will find themselves in the same case. On the Salmon river the drives are getting on very well. A large boom of logs was broken on Cross Lake. There is a great head of water on that inland sea, the water having risen at Newyton's dam two feet higher than during any former year.

THE WASTE OF FENCES.

In no branch of rural economy is there so much needless waste of forest products as in fencing. A great reform must needs be institut ed, as the expense of lumber grows greater year by year. A single square acre requires 50.6 rods of fencing to enclose. It has been stated that from one-quarter to one-eight of the present fence of the country would be amply sufficient to keep stock within proper limit. The amount thus saved in a year would aggregate million of dollars in some of the larger states. Estimates have been made showing the cost of fences in the United States to be $1,700,000,000, and the annual cost of maintenance at $168,900,000, including interest at six per cent, upon the original cost. The farm fences in the state of Maine are estimated at 41,052,000 rods, or 131,000 miles in length. The first cost cannot be reckoned at less than $42,000,000. Upwards of $8,000,000 are invested in farm fencing in the states of Connecticut. Total cost of fencing in New York State aggregates $228,844,611; Ohio, $155,580,693; Indiana, $100,750,415; Illinois. $128,856,513. These figures give some conceptions of the immence totals of lumber consumed for the single purpose of fencing.—*Ex.*

SETTLING DOWN IN CHICAGO.

Chicago, May 11.—No attempt has been made to resume operations in the Westside lumber districts this morning and eight to ten thousand men employed in the yards and planing mills are still idle. Lumbermen claim that the great majority of the men are overawed by the Bohemian Socialists who infest the region. In the north and south divisions and at South Chicago the yards and planing mills have all fully resumed on the old basis. The metal working establishments opened again this morning with larger working force than yesterday. The boot and shoe manufacturers who tried eight hours a day as an experiment, are considering the advisability of returning to 10 hours. Evidences of the presence of the great strikes are, therefore, rapidly disappearing in every portion of the city. The police are devotiug their energies to procuring evidence against the Anarchists, and it is claimed at the trial of the conspirators the evidence will be ample for the conviction of August Spies, Schwab, Parsons and Fischer.

Disastrous Fire at Hull.

Hull, Que., May 9.—A disastrous fire visited this place last night. All the buildings on the east side of Duke street and along one side of Philemon street are destroyed, as well as the handsome new post office on Main street. The real value of the buildings destroyed is estimated at about $125,000. There 110 buildings divided into 155 tenements, and in these probably 175 or 200 families resided. In the stores on Main street a lot of stock was detroyed. The total loss may safely be p laced at $175,000 or $200,000, on which there is very little insurance.

A battery of three boilers is being made by Thomas Bros., Eau Claire, Wis., for the Bow river, Alberta, Northwest Territories of Canada. The company expects to have its mill running this season. It will be the first large mill in that remote part of the Dominion.

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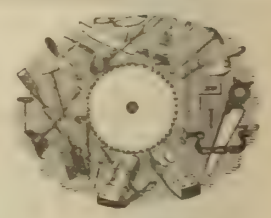

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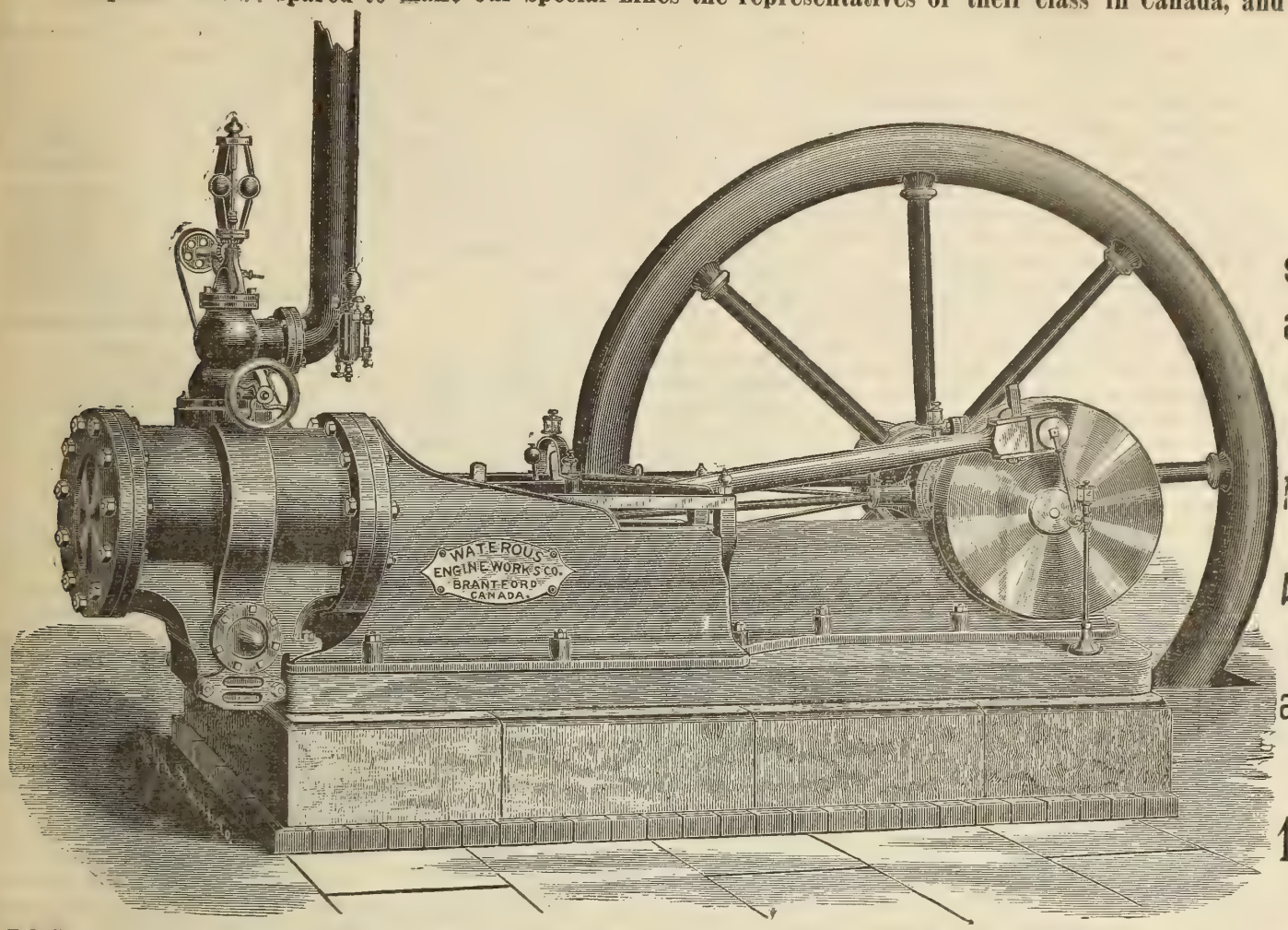

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PUBLIC OPINION.

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THE CANADIAN NORTHWEST.

A correspondent writes from Winnipeg, Man., to the *Northwestern Lumberman* as follows :—

Some attention has already been called in the *Lumberman* to the development of a new and distinctive lumber interest in the extreme northwest suggested by the building of mills at Crookston and Grand Forks by T. B. Walker. These enterprises of Mr. Walker are in fact, but a part of the transformation now going on in the lumber business of the Canadian Northwest, and which must have for all time their centre in this city. Prior to 1883 Mr. Walker and N. P. Clarke who were the owners of about all the stumpage in the Minnesota pine region on waters flowing north into the Red river of the north found a market for such quantity of timber as they saw fit to cut, at mills located in this city. There were five of these, and logs, during the years when the phenominal and disastrous boom was on, in 1882-83 sold in this market as high as $18 a thousand. This was not regarded as an exorbitant price, considering the fact that the logs had to be driven 1,500 miles, that it took three months to get them here and that the Red river offers no perfectly safe facilities for holding the logs once they are in the water.

Messrs. Clarke and Walker at that time virtually held a monoply of the lumber supply of this region, since they could bring into the Provinces logs free of duty while lumber was subjected to a duty of 20 per cent. At that time the Canadian Pacific had not penetrated to the east and had not made accessible the pine along and tributary to the Rainy Lake river, and Lake of the Woods. With the subsidence of the town came financial disaster, and almost without exception the manufacturers here found themselves practically bankrupt. The Winnipeg Lumber Company, which had been Mr. Walker's principal customer, had its affairs turned over to trustees, and Mr. Clarke, who had made arrangements to sell his logs to J. R. Sutherland, found it necessary to have them sawed on his own account, and is now of the firm of Sutherland & Clarke, engaged in disposing of the product of these logs. In the midst of the sawing, Mr. Sutherland's mill was burned. During last season the only mill operated was that owned by D. E. Sprague, who owns a small pine limit nearly exhausted on the Passeau river, a tributary to the Red river, entering the larger stream very near the boundary line. I am assured that the probabilities are that after this season, when the last of Mr. Sprague's stumpage will be cut off, that no more lumber will be cut in Winnipeg. There will remain to be supplied, however, this growing city of 25,000 population and a country rich in possibilities, stretching clear to the Rocky Mountains. The demand of this vast territory is being anticipated, and while Mr. Walker undoubtedly expects to find a market for a part of the annual cut of 40,000,000, he expects to make at his Minnesota mills, the greater portion of the supply is destined to be drawn from mills located on this side of the line.

The centre of operations is already, and promises to be for years to come, at Rat Portage, about 180 miles east of here, at the point where the Canadian Pacific strikes Lake of the Woods. There has been built at, or near this point, the past season, two new saw mills, equal to the best modern American mills, with a capecity of 100,000 feet in ten hours. One of these was put up by the Rainy Lake Lumber Company to take the place of a mill destroyed by fire, and the other by the Minnesota & Ontario Lumber Company, the heaviest stockholders in which are Dennis Ryan, the St. Paul capitalists, and W. J. Macauley, who has had exceptional opportunity to study the pine region on the northern waters in Minnesota, who has secured contract of a large part of it, and who is thoroughly posted. I met Messrs. Ryan and Macauley here recently, just returning from Rat Portage. Their mill was not completed until September, and after that date sawed 4,500,000 feet of lumber, 2,000 000 shingles and 1,000,000 lath. They had a stock of 15,000,000 feet of logs on hand, and they put in, during the winter, 3,000,000 n addition. Mr. Macauley estimates that there is on the Minnesota side, tributary to waters flowing north, about 1,000,000,000 feet of pine, principally white pine, of better quality, he says, than that further south. This lies on streams which are easily driven. At present his company is cutting on the Big fork of the Rainy river, floating their logs about 180 miles to the Lake of the Woods and then tow them to Rat Portage. Lake of the Woods is a beautiful body of water, dotted with thousands of islands, and the rafts are easily and safely taken across the lake.

The Rainy Lake Lumber Company's mill was not operated last season, and its future is dependent upon negotiations which are now pending looking to the accession of more capital. Hugh Sutherland, who is the principal stockholders in the company, and who is thoroughly conversant with the subject, tells me that the pine region on the Canadian side extends from Rat Portage on Lake of the Woods as far east as Lake Superior, and the northern line is pretty clearly marked by the line of the Canadian Pacific. In this area there is between 800,000,000 and 1,000,000,000 feet of pine, white and Norway, of which amount his company controls 350,000,000 feet, selected before the present Government requirement was imposed that the selection should be made in 50 mile limits.

In addition to the mills already mentioned, there is at Rat Portage the Bullmer mill with a daily capacity of 35,000 feet; a mill owned by Cameron & Co., with a capacity of 25,000 feet; a water mill owned by Dick Bonning & Co., capable of cutting 40,000 feet daily; and at Keewatin, three miles east, the plant of the Keewatin Lumber Company, which consists of a water mill of 75,000 feet capacity, a complete planing mill, etc. This latter company cut nearly 15,000,000 feet of lumber last season, and with ample capital has been up to this time the leading lumber concern of this section. Throughout this region there remains in addition to these mills a few small concerns cutting spruce, and it is estimated that of a total stock of 70,000,000 feet of sawed lumber on hand December 14th that fully 20 per cent. was spruce, the use of which the people have learned.

First common white pine in this market commands about $18 a thousand; red pine, which comprises a large part of the whole stock, is worth $16, while spruce can be bought for $12. It is largely used for dimension, siding, etc. Fully one-half of all the pine on the Canadian side is Norway or red pine, the abundance of the supply resulting in its very general use. I find in all the buildings here that it is freely used for flooring, wainscoting, ceiling and inside finish generally. None of the timber produces a larger proportion of clear lumber, but it is usually sound and the knots small and firm.

At Fort William and Port Artbur, 250 miles east of Rat Portage, there is springing up another lumber centre. At Fort William there are mills owned by W. H. Carpenter, Graham, Horne & Co., and the Neebing Lumber Limit Co, the latter recently established; and at Port Arthur the Port Arthur Lumber Company. The combined capacity of these mills is about 30,000,000 feet yearly. The Rat Portage manufacturers and the Winnipeg dealers do not anticipate that lumber manufactured at Port Arthur will ever enter into competition with their product, but the Canadian Pacific during all the past season has found it possible to bring lumber from Ashland across the lake to Port Arthur and ship it west. I think that time will develop that such lumber as may seek a market from the mills at Port Arthur and Fort Williams will ever figure in competition with that produced further west. Railroads are likely to still further develop the industry and afford another outlet.

Manitoba and the Northwest territories are rich in agricultural lands and it has been proven that more and better wheat can be raised than in Minnesota and Dakota. The development of the country is going on slowly, but it is going on all the same, and when it is considered that there is tributary to this city a territory as large and as fruitful as that tributary to St. Paul and Minneapolis, it can readily be expected that the future will witness a large development of this lumber interest, located on the northern waters and centered about Red Lake, Lake of the Woods and Rainy Lake. For the past two years all this country has suffered from the result of the collapse of the boom contest in Winnipeg, during which values for business property were run up beyond prices paid in Chicago. The upward turn has come, confidence is restored and prosperity is in sight.

I find no confidence that a great deal of money is to be made in the lumber business this season, but a healthy demand and fair profits are believed to be not far away by the men who have recently made investments. All the region west of Winnipeg must be supplied from the sources indicated, except so far as spruce in limited quantities, jack pine and hardwoods can afford a supply. No timber supply of any importance is encountered until the western slope of the mountains is reached, where there is an abundance of what is known as the Roberts pine, a coarse-grained white pine, growing in great plenty in very large trees.

FORESTRY.

Prof. William Saunders, in his report to the Canadian Department of Agriculture on Agricultural colleges and experimental farm stations, with suggestions relating to experimental agriculture in Canada, gives much information on forestry, including the following :—

There should be a competent forester in charge of this department, one who thoroughly understands what is needed and under whose direction all work connected with the forest industries of the Dominion should be carried on. Such would include experiments in reclothing denuded land, testing the comparative value of our native trees, also of those from all other parts of the world where similarity of climate or other circumstances render it probable that they will prove useful. It would also include the propagation of trees of economic value for general distribution.

On this important subject I have been favored with a communication from Mr. Bernhard E. Fernow, of New York, Secretary of the American Forestry Congress, one of the best authorities on this continent, a graduate of the Prussian Forest Acadamy at Munden, who served as chief forester under the Prussian Government for several years before removing to this country. His letter which was kindly written at my request contains so many valuable suggestions that I append it in full :—

"AMERICAN FORESTRY CONGRESS,
"OFFICE OF THE CORRESPONDING SECRETARY,
"12TH JANUARY, 1886.

"*Wm. Saunders, Esq.* :

"MY DEAR SIR,—In reply to your request for my opinion in regard to the needs of forestry in the Northwest Provinces of Canada, and to a plan for its introduction, allow me to say that a subject so important and complicated can hardly receive adequate treatment within the limits of a letter. Space, and my time for using it, being limited, my knowledge of the specific conditions of the region in question being only imperfect, and not derived from personal inspection, I shall content myself with giving you simply such general hints from the standpoint of a forester as may be useful in forming your own answer to the questions you ask.

"The subject of forestry in your country seems to me to have two distinct aspects. Forest conservation and the restoration of natural forests are required on the larger area, and mainly for economic purposes, while agricultural needs call for the creation of new forests in a more limited part of the Dominion, mainly, I believe, in the Provinces of which you speak.

"I assume that the climatic and hydrologic influences of forests in general are too well known to need discussion. That a permanently successful agriculture depends on a judicious distribution of forests is the natural consequence of those influences. As the improvident denudation of large forest areas in the old world and on this continent has rendered those districts barren and unproductive and of no value for agricultural purposes, there can be little doubt that reforestation will be the best aid for restoring favorable agricultural conditions.

"Aside from the economic value of the wood lot and the mechanical influence of the windbreak, retarding the velocity of surface winds, and lessening the severity of blizzards, the most important effect of forest areas properly distributed lies in their hydrologic significance.

"They are the cheapest, the most reliable, the best irrigators. This office is due rather to a negative influence upon passing rain clouds. The forest does not prevent rainfall, as does the open plain; for while the extensive, treeless plains present an air column, which, being dry and of high temperature, raises the point of saturation of a passing rain cloud, and allows it to pass without deriving the benefit of its moisture, the cooler air hovering over the forest tends rather to lower the point of saturation, induces rainfall on the neighboring territory, so that the most helpful agency of the forests on agriculture is attained by their distribution, in belts or clumps, over the agricultural lands.

"The co-relation of forests and atmospheric moisture is such, that while the latter, to a certain degree, is a *conditio sine qua non* for forest growth, at the same time the growing forest tends to increase the atmospheric moisture of its surroundings, creating the very condition which it requires for its development.

"I consider, therefore, that the reforestation of the treeless and arid plains, and thereby their recuperation for agricultural uses, is, beyond doubt, not a difficult task, if begun judiciously, starting from the outskirts of the present forest area and reaching forward gradually with those species, which, like the cottonwood, soft maples, birches and others, will vegetate in the arid soil and dry atmosphere of those plains. These species may not be the most desirable for timber growth, and should therefore be replaced as soon as sufficient increase of favorable conditions is attained, by undergrowing them with more valuable species, gradually removing the first crop, which had fulfilled its office by preparing the way for its betters.

"To accomplish the result—modification of climatic conditions—the extent of such forests must be commensurate with the vast area needing the change, and it is questionable whether the individual efforts of small settlers will not be too isolated, and the results too limited and too remote, to be appreciably beneficial.

"But if the Government does not undertake such forest planting on a large scale, as has been done in European countries, and is now practised in India and Australia, it would certainly be a wise policy to inaugurate and supervise systematic planting of forest belts or clumps as a condition of land grants from the public domain. But this would place the moral obligation upon the Government of providing at least all possible protection against failure, by gathering and disseminating the necessary information on forest growing. Cautious and judicious proceedings are in no enteprise more necessary than in forestry, if financial results are of account. While agricultural experiments are answered in a year's time, or at least in a few year, the results of forestal operations cannot be ascertained until many years are elapsed. Mistakes are apparent only after generations have passed, especially when timber value or financial results form the main object.

"A few examples may illustrate my meaning. Some eighty or ninety years ago the American white pine was highly extolled in Germany as a desirable immigrant and largely planted. To-day it is found that to attain the quality which we demand for building timber the white pine requires more than one-third longer time than the native Scotch pine. Whether the larger yield per acre will offset the amount of interest on the original outlay thus lost, is extremely questionable.

"Another mistake was the cultivation of birch in pure (unmixed) growth, which found its advocates some years ago. The results of this birch mania have been large areas impoverished under the thin foliage of the birch, which neither shades the ground nor enriches it with suitable humus, taxing the ingenuity of the forester to restore the soil to proper condition.

"The mistakes made in European forestry are frequent enough to serve as a warning to others to proceed more judiciously.

"I would not discourage the planters of walnut in our northern climes, who, from the rapid growth whibh the tree makes in the first

ten or twenty years, calculate the prospective of the work to which I was called for some time, namely, to ascertain the rate of growth of different species at different periods of their life, and the bearing of this upon the financial result of their cultivation.

"To show you what such a small item as the distance of planting may have upon the ultimate results, I copy from my note book the following figures of an experiment. Thirty acres planted with Scotch pine in different widths, actual measurement, after twenty-five years' growth revealed these results :—

Interval, between plants.	*Proportion of yield.*
3 feet	1.60
4.5 "	1.50
6 "	1.22
7.5 "	1.20
9 "	1.00

"Such examples may be used to show that forest experimentation cannot be expected to be undertaken by private individuals—at least, that systematic Government aid is necessary, if it is the interest of the Government to achieve results for the benefit of its constituents.

"No where, it seems to me, are measures of encouragement by Government called for more urgently than in establishing systematic forestry in your country. Part of Canada's wealth lies in Canada's forests; the nature of the soil and climate in the northern districts of the eastern and central provinces is, to a large extent, not fit for anything but forest growth. Yet Canada is utilizing the natural growth in such a manner as to deteriorate her forest capacity, and often even her agricultural possibilities. Timber growing will eventually become an economic necessity for Canada; few lumbermen under existing conditions can see any advantage in utilizing supplies with other views than those of immediate gain—a man's life seems too short to enter upon such extended enterprise as forestry—interest in future supplies can concern the State alone; at least, so it seems at present.

"The time for a wiser forest policy has come and the Government should lay now, while it still retains land and forest, the foundation of systematic forest management—at least, to set, as in Germany, the example after which private owners may form their forestry."

"There seems to be a misunderstanding as to the position which the different Governments of Germany hold in respect to their forests. Only one-third of the entire forest area is State forest, not quite one-fifth belonging to communities is under restrictive State supervision, and balance, very nearly one half (in Prussia 53 per cent.) is in private hands, to the unrestricted use of their owners, excepting a few cases, where the danger to neighboring agricultural lands from the indiscriminate removal of the forest makes its management under restrictive rules necessary. Yet the good example set by the management of the Government forests has largely induced a similar management of private forests by their owners, who frequently employ the neighboring Government officer at a small remuneration to make their working plans.

"In Germany, where empiric forestry has been practised for more than two centuries, the necessity of experimentation upon a scientific basis, though recognized long ago, has found practical expression only recently. France has followed, and we may say that with the year 1870, when the first experimental stations were established, one in Baden and another in connection with the forest school at Tharana, in Saxony, a new epoch in the art of forestry has been inaugurated.

"The other Governments soon followed, so that there are now eight central forest experiment stations, with a large number of secondary stations. All these, except the Austrain, have formed a union, called the Association of the German Forestal Experimental Stations, and work under a common plan harmoniously together, to furnish a scientific foundation for a rational management of forests, based upon exact experiments and careful investigation.

"Your Governmen may congratulate itself that it can build upon the expe ience of older nations. For although European administrative methods and local management may not be translated into Canadian practice, their study will be no small aid in divising a system for your own use. As for their methods of scientific research, and for the establishment of the general natural laws governing forest growth, we may not hesitate to adopt the former and apply the latter as well in forestry as we do in Agricultural.

"The natural laws being uniform all over the world, their practical application will depend only on sound judgement of local conditions. These we have to study here. What we no not know and cannot learn from the extensive European libraries of forestal literature is the capacity of our native species—not less than 95 in Canada (some 20 only in Germany); their rate of growth in different periods of life; their adaptability to conditions of soil and climate; the best mode of propagation and treatment in in the forest generally; the time of their maturity; their value as timber; their valve as conservers of forest capacity; their yielding capacities; their behaviour towards each other (a most important and, in this country, almost disregarded consideration for the forest grower), and many other points essential to a successful forestry. In the face of the utter ignorance on the forestry of our native species, I will not mention the subject of acclimatization of desirable foreigners.

"Close observations and scientific experi ment are needed to arrive at this faundamental knowledge.

"In this work one thing particularly should not be overlooked, namely, that observations on tree growth for use in forestry must be made under forest conditions. The nurseryman and gardner have very different objects in view. They work under different conditions; their experiences may often mislead the forester, and their methods, in most cases, he cannot adopt. If anything, therefore, is to be accomplished in forest experimentation, the experimenter must study forest conditions and employ them in his experiments.

"I see that the Dominion Lands Act, as amended, provides for reservations on the slopes and crests of the Rocky Mountains for the purpose of preserving an even water supply. Such reserves should be placed under the same direction as the eventual forest expertmental stations. Other reserves in the plain, giving the opportunity of studying different forest condition of applying conclusions for practical results, are not only an essential adjunct to forest experimentation, but may eventually form the nucleus for for systematic forest economy.

"Such reserves, while in the first designed to serve an experimental grounds, should be made large enough to establish and support a regular forest department, and, with a conservative policy, may be so managed as to demonstrate financial possibilities, and could in time be made to pay for the expenses of all forest experimental stations. Germany, with a forest area of 35,000,000 acres, of which only 23 per cent. are state forest, expends on experimental stations alone in the aggregate over $30-000, out of which only few salaries are paid, the experimenters being otherwise paid owners. Experimentation in forestry then, as in agriculture is of a double character, the nursury and forest garden in connection with the botanical laboratory corresponding to the laboratory of the agricultural chemist, while the model farm finds its counterpart in the natural forest and the plantation.

"It would take me too far to enter into the details of organization except to say that centralization is of the greatest necessity, and that the central station should be connected with agricultural colleges or experimental stations, where the aid of scientific apparatus can be most readily and cheaply secured. Forestry being based somewhat similarly to agriculture, upon a knowledge of natural sciences, the aid of the scientific staff of such institutions would be an advantage; specialists in botany, chemistry and technology, geology, &c., can be directed to give attention to their subjects as related to forestry, and occasional or regular lectures on forestry matters, by the forest director and his staff, will soon engage close attention from the students of agriculture and practical application in the management of their wood lots at home.

"I hope you will find, in the foregoing suggestions, something to aid you in deciding whether and how your Government should take steps to provide for the future, not only of Canadian forests, but also of successful agricultural settlements on the treeless plains.

"If I can aid you further, please indicate in what manner, and I will cheerfully do so.

"Yours very truly,

"BERNHARD E. FERNOW."

FLOODS AND FORESTS.

Attention has been drawn lately to the matter of floods, from a great calamiity which has overtaken Montreal. But it may be valuably pointed out that every spring floods more or less disastrous occur throughout Canada, and that the cause of this, to a very great extent, is the destruction and deterioration of such large portions of our original forest as are continually falling before the axe, or swept away by the devastation of accidental fires. On many of our higher lands, where formerly stood dense masses of woods which retained the spring rains and the waters of the melting snows, letting them gradually flow into the creeks and rivers, pursuing thence a calm and steady course towards the ocean, there are but vast stretches of bare and rocky soil, from which pour the descending waters of the spring in sudden floods towards our lakes, and occasion the evils we have alluded to. Then in summer, when these waters are needed for the refreshment of the thirsty lands, there exists no reservoirs to supply them—and the scarcity of moisture increases the injury which its superfluity commenced.

It is time that farmers and land-owners took thought in that direction—nor contenting themselves with taking thought, but take action likewise. The Ontario Government has lately very wisely applied itself to diffusing information on this important matter. But to act on this information in a free country like Ontario, where the land is very largely in the hands of private owners, must be the business of those owners themselves. If every farmer in Canada could give, for a few years, but one week in the year to planting and caring for trees, the country would soon have fewer floods, a far better climate, and every agriculturist (at least so the ablest scientists on the subject assure us) would obtain in crop, cattle and every article of produce a far better return for the outlay of labor he now yearly invests.—*Woodstock Standard.*

McGregor & Parke's Carbolic Cerate is invaluable for Wounds, Sores, Salt Rheum, Cuts Burns, Scalds and festers, as a healing and purifying dressing. Do not be imposed on with other useless preparations, recommended to be as good. Use only McGregor & Parke's Carbolic Cerate Sold by John McKee.

If you are afflicted with rheumatism call on J. D. Tully, druggist, immediately and procure a bottle of West's World's Wonder or Family Liniment, it is a certain and positive cure. It is infallible for sprains, cuts, bruises, burns, scalds and all diseases requiring external application. Price, 25 and 50 cents per bottle. Sold by J. D. Tully, druggist.

Perhaps the most extraordinary that success has been achieved in modern science has been attained by the Dixon treatment for Catarrh Out of 2,000 patients treated during the past six months, fully ninety per cent. have been cured of this stubborn malady. This is none the less startling when it is remembered that not five per cent. of the patients presenting themselves to the regular practitioner are benefitted, while the patent medicines and other advertised cures never record a cure at all. Starting with the claim now generally believed by the most scientific men that the disease is due to the presence of living parasites in the tissues, Mr. Dixon at once adapted his cure to their extermination; this accomplished the Catarrh is practically cured, and the permanency is unquestioned, as cures effected by him four years ago are cures still. No one else has ever attempted to cure Catarrh in this manner, and no other treatment has ever cured Catarrh. The application of the remedy is simple and can be done at home, and the present season of the year is the most favorable for a speedy and permanent cure. the majority of cases being cured at one treatment. Sufferers should correspond with Messrs. A. H. DIXON & SON, 305 King street west, Toronto, Canada, and enclose a stamp for their treatise on Catarrh.—*Montreal Star* 1y|22.

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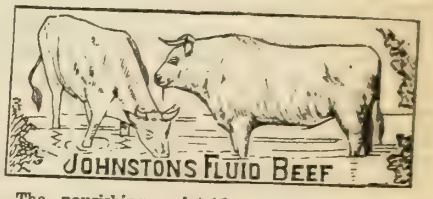

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SEALED TENDERS, addressed to the Postmaster General, will be received at Ottawa until noon, on FRIDAY, 14th MAY, for the conveyance of Her Majesty's Mails, on a proposed contract for four years, six times per week each way, between

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DAVID SPRY,
Post Office Inspector.
Post Office Inspector's Office, Barrie, 8th April, 1886.

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THE CANADA

LUMBERMAN

DEVOTED TO THE LUMBER AND TIMBER INTERESTS OF THE DOMINION.

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Communications intended for insertion in the CANADA LUMBERMAN, must be accompanied by the name of the writer, not necessarily for publication, but as a guarantee of good faith. Communications to insure insertion (if accepted) in the following number, should be in the hands of the publishers a week before the date of the next issue.

The CANADA LUMBERMAN is filed at the Offices of MESSRS SAMUEL DEACON & Co., 154 Leadenhall Street, London, England, who also receive advertisements and subscriptions for this paper.

PETERBOROUGH, Ont, MAY 15, 1886.

NEW BRUNSWICK FORESTS.

The New Brunswick Government has published an interesting work, written by Mr. Charles H. Lugrin, A. B., Secretary of the New Brunswick Board of Agriculture, on the resources, progress and advantages of that Province. The following is the chapter on the forest:—

Next to agricultuture the chief industry of New Brunswick is the manufacture and export of lumber. No country in the world is probably more densely wooded than New Brunswick, the area of land in a wilderness state not covered with forests being so small as to be merely nominal. Every acre of improved land in the Province, except the dyked lands, was at one time covered with a dense growth of trees, and there are yet millions of acres upon which the forest is unbroken. According to the census of 1881 the following amount of lumber was produced in New Brunswick in that year:

White pine	130,762	cub. ft.
Red pine	31,954	"
Oak	3,316	"
Tamarac	256,389	"
Birch and maple	348,441	"
Elm	2,400	"
Other timber	2,371,061	"
Pine logs	657,400	num.
Other logs	5,001,069	"
Masts and spars	54,406	"
Staves	955	m.
Lathwood	3,434	cords.
Tanbark	55,335	"
Firewood	781,729	"

The following statistics are from the same census and show the extent of the manufacture of lumber for home consumption and export:—

Number of Saw Mills	478
" of employes	7,175
Wages paid	$1,243,628
Value of raw materials	4,355,735
" of articles produced	6,532,826

The total cut of lumber, not including timber, in New Brunswick in 1883 was 225,000,000 superficial feet.

The most valuable of the New Brunswick forest tree is,

THE WHITE PINE,

so-called, from the whiteness of its wood when freshly cut. It is soft, light, free from knots and easily wrought. Its principal use is for the interior finish of houses, but it is adapted for many purposes.

RED PINE

is also found in the Province, and is almost as much esteemed as the white pine.

There is an extensive young growth of pine, and under a judicious system of forestry, the consumption would probably be exceeded by the annual growth.

BLACK SPRUCE

furnishes most of the deals for export. Thirty years ago it was estimated to constitute one-third of the forest, but this would not be considered an over-estimate. The annual cut has been very great; but the supply is yet large and will probably never be exhausted, or so reduced as to render the manufacture and export of spruce anything other than an important industry. The black spruce attains a height of from sixty to eighty feet and a diameter from eighteen to thirty inches. Its chief properties are strength, lightness and elasticity. It is largely used for building purposes. For export it is sawn into deals, which are 3 inches thick, 7, 9 and 11 inches wide and of various lengths. Other dimensions are also exported. Black spruce makes valuable "piles."

"Spruce logging," as it is called is a great industry in New Brunswick. It is prosecuted chiefly in the winter season when the snow affords loads by which the logs can be hauled to the banks of the streams. When the spring freshets come the logs are floated or "driven," as the expression is, to the booms when they are put together into rafts and are taken thence to the mills to be sawed. This industry gives employment to a great many men and horses, and furnishes a market for large quantities of farm produce.

WHITE PINE

is a smaller tree than the black spruce and its wood is not so highly esteemed. The supply is large, and it is cut and used indiscriminately with black spruce.

BALSAM FIR.

This is a common tree. It is quite resinous, producing what is known in the arts as "Canada balsam," which exudes through the bark. It is lighter in weight than either of the spruces and is used to some extent in building.

HEMLOCK SPRUCE

is larger in size than the black spruce. It is a firm, course-grained wood, lasting remarkably well under water or when kept thoroughly dry. Being very tenacious of nails it is much used for boarding in buildings. In the shape of logs it is much esteemed in wharf building and in mining. The hemlock is a widely diffused wood and is found in great quantities in several counties of the Province. Its bark is valuable for tanning purposes. In addition to the bark exported and that used in the country, there is annual export of extract of the bark to the value of about $200,000. The natural grain of hemlock, when varnished, is very pretty, and the wood is becoming fashionable for the interior finish of dwellings. Hemlock makes excellent packing boxes.

TAMARAC.

Hackmatac or larch is one of the commonest trees. It grows tall and straight to a height of eighty feet or more. The butts of the tree and one of the principal roots form a "knee," and are in great request in shipbuilding, forming an important article of export. Tamarac timber was much used in shipbuilding, but what is known as bay spruce has now largely taken its place, most of the large tamarac having been cut. There is yet much of smaller growth in the country, and, as it is a rapidly growing wood, it might be planted with advantage.

CEDAR.

Cedar is one of the most widely distributed and valuable of New Brunswick woods. It grows in wet ground and river valleys; sometimes a swamp of 50 to 100 acres in extent will consist of cedar trees standing so close together that their foliage is scarcely penetrable by the sunlight. It grows to a height of 40 feet and large specimens are two feet or more in diameter, but the majority of trees do not exceed a diameter of twenty inches, if measured a few feet from the ground. The wood of the cedar is light, soft, fine-grained and easily wrought. It has a pleasing, aromatic ordor, which it does not lose if kept dry, and hence is much esteemed as a material for closets. It is practically indestructible by the weather, and will stand a succession of moisture and dryness for many years. Made into shingles it will last upon the roof of buildings for upwards of thirty years, and its durability, when used as fencing, is even greater. Its lightness causes it to be esteemed by boat-builders. It is well adapted for household utensils as it becomes whiter and smoother by use. On nearly every farm sufficient cedar will be found to provide all requisite fencing, and this is a very important consideration to the settler. The principal use to which cedar is put, except for fencing, is for railway ties or sleepers, bridge piers, telegraph poles and shingles. The export of this wood is large and is chiefly to the United States. Shingles are of two kinds, shaved and sawed, the former are made by hand the latter by machinery.

Cedar makes a handsome hedge and is of rapid growth. This is not the true cedar; it is the Thuja Occidentalis of Linneus, and is also called the arbor vitæ.

BIRCH.

Black and yellow birch may be considered together as they are exported indiscriminately under the name of birch. The grain of black birch is very fine, close and pretty; it takes a bright polish, and is used to some extent in furniture and interior finish of houses. It is practically indestructible under water, and therefore is admirably adapted for piles and wharves. These birches grow upon the best of soils and the supply in the province is yet very great, although, in many districts, the larger trees, suitable for heavy timber, have been cut. The birch makes excellent fuel.

White birch and paper or canoe birch, though sometimes confounded are really different varieties. Owing to the vast supply of superior wood these birches are not much used except for the manufacture of show cases, spools, bobbins, brush backs, etc. It is from the bark of the paper birch that Indians make their canoes.

BEECH.

Two varieties of beech grow in New Brunswick, the red and the white. The red beech is a valuable wood. It is imperishable when kept perfectly dry or constantly wet. Being a hard wood and susceptible of a high polish it makes excellent tool handles, shoe lasts, mallets and the like. For agricultural implements or any purpose where strength and durability are required red beech is admirably adapted. It makes excellent flooring and is annually becoming more popular for this purpose. Red beech forms a considerable part of large forests and is becoming an important article of export. This tree produces very palatable nuts every second year.

MAPLE.

One of the most useful, beautiful and common trees in New Brunswick is the maple. There are several varieties of maple, but in general they may be described as lofty, well-shaped trees, with beautiful foliage; they are of quick growth and as they bear transplanting very well are greatly esteemed as shade trees, especially as they do not injure the grass growing beneath them. Their presence in the forest indicates the best quality of soil.

Rock maple is the king of the deciduous trees of North American forests; sometimes it grows nearly one hundred feet in height with corresponding proportions. In summer when clothed in green it is beautiful to look upon, and in autumn when its leaves change to blood-red, golden-yellow, brown and many other colours its appearance is magnificent. The wood of the rock elm is white when freshly cut, but becomes slightly reddish with exposure. The grain is fine, close, silky and very pretty, especially in the accidental, though common varieties, known as curled maple or bird's eye maple. Maple is adapted to all the purposes that beech is, but the more beautifully grained wood is much sought after by cabinet makers and others desiring a light wood of attractive appearance for finishing purposes. The bird's eye maple makes excellent violin backs. The ordinary maple is now sawn in various dimensions for builders' uses, and its popularity is on the increase. As a fuel rock maple is superior to all other woods; it makes the best charcoal and its ashes are rich in alkali.

The rock maple is also known as the sugar maple, because of the richness of its sap in the saccharine principle. Maple sugar is a regular article of commerce, the quantity produced in New Brunswick annually being about half a million pounds. It is made from the sap of the maple which begins to flow in the month of March. Syrup made from the sap is preferred to the finest grade of West India molasses.

(*To be continued in our next issue.*)

A MICHIGAN MAN'S VIEW.

Congressman Fisher, of the Tenth Michigan district, who is a lumberman, gives his views on the Morrison bill in the *Lumberman's Gazette* as follows:—

"I am not a protectionist," said Mr. Fisher recently in an interview, "nor am I a free trader; I am in favor of levying just enough import tax to meet the wants of the Government economically administered, and of making every article of luxury pay its fair share of that tax. I am willing to see the duty on wool, lumber and salt reduced if the rates of duty on sugar and iron and the rest of the necessaries of life are brought down in the same proportion, since nothing but the necessaries of life enter into the manufacture of lumber and salt. But it is rank injustice to put lumber and salt on the free list and leave the duty on articles of daily use the same."

"Why just look at it!" continued Mr. Fisher, "There can be no such thing as free lumber. For 1,000 feet of lumber, worth $12 at the wharf, consists of only $3 to $4 worth of timber on the stump, and $8 or 9 worth of labor, sugar, iron, horses, and working tools, and machinery of all sorts. And the wages of labor must be high, because the laborer has to pay a heavy duty on his sugar, woollen clothing, and a hundred other things that make up the necessaries of life. So when you put lumber on the free list, you should put everything else on the free list that goes into the manufacture of lumber, or that the laborer requires. The Democratic party is pledged to reform the tariff laws and to reduce duties, and I believe in doing it. But the proposed free list strikes at every important industry of the state of Michigan and would ruin their most valuable interests."

"However, I do not believe that free listing lumber and salt," continued Mr. Fisher, "would result as many think in making them cheaper and in allowing us to cut down the forests of Canada and bring the logs over to Michigan to manufacture. As soon as we attempt anything of that sort up will go the Canadian export duty on logs to $3 or $4 a thousand. They will not let us rob them any more than we would let them rob us."

Mr. Fisher thinks there is no need of letting in foreign lumber in order to save the Michigan forests. He says that the day when the cutting away of the trees in that state will cause a dearth of timber and the resulting evils of floods and change of climate is "away in the future" so far that it need not yet be considered. "The climate is good enough for me yet in Michigan," said Mr. Fisher. "Sufficient unto the day is the evil thereof. I believe in this generation taking care of itself and letting future generations do the same. There is no need of worrying ourselves over this matter. And besides," said Mr. Fisher, "when you once begin cutting timber as we are doing in Michigan, you can't stop. It would be ruinous to the owners of the timber tracts to hold the land without receiving enough from the products of the forest to pay taxes and interest. And it would be no less ruinous to the forests to stop cutting now, for it is a fact well known among Michigan lumbermen that, owing to some peculiarity of the soil or the climate of that state, when you cut over into a corner of a tract of woodland it seems to cause to death of all the neighboring trees, and this destruction extends farther and farther into the forest. Then there is the risk of fire. If one man cuts into his timber, leaving the dry limbs on the ground, it causes forest fires."

Subscribe for the CANADA LUMBERMAN.

LUMBERMEN GOING SOUTH.

Chicago and Michigan capitalists have created quite an excitement by purchasing all the best pine lands in Lousiana and Mississippi. Reports came from New Orleans that the Northern lumber kings have recently purchased 1,446,300 acres of Government lands at $1.25 per acre, making a total of about $1,800,000. Three years ago surveying parties and experts began to explore both States, locating carefully all of the longleaved pine lands in proximity to water and other transportation. When the information was all secured the desirable lands were taken up quickly. A list of the purchasers embraces many of the largest Michigan and Northwestern lumberman. The gradual disappearance of pine in Michigan has led the lumber barons to turn their attention to the Southern and Pacific coast pineries. The South had the advantage, because it could supply the same markets that have drawn on Michigan at about the same price. The leading question at the outset was: Could the white pine have a successor in the market? This has been answered in the affirmative, using yellow pine for framing and building purposes, and cypress in connection with finishing. Thus it is calculated that yellow pine and cypress may supersede the white pine, and that the South hereafter is to be the region to which the country, especially the West and Southwest, must look for its supply. Taking Louisville as the central market, both pines are found to be equidistant. The Michigan pine lands are new selling at from $25 to $75 per acre, while the Southern pine sells at from $1.25 to $2 50 per acre, In regard to economy of handling, the Southern pine is known to have a great advautage. The ground were it grows is level and open. The forests are like a grove with no underbrush, so that one can drive through them anywhere. There is little expense for road building, except through swampy districts. The Southern steamers are favorable for running logs at times and are deep and sluggish, more favorable for rafting than running logs. One disadvantage of logging in the South is in regard to supplies for log men. There is no adjacent farming region as in the North. The Southern pineries are little troubled with fires, as they contain no underbush. Herds of cattle and sheep feed in them. Every spring the grass and sprouts are burned off with little danger to the trees. The pineries are generally intersected with bayous, but logging railways can be laid at moderate cost. The cypress is soft, more closely resembling the better qualities of the white pine. It is easily worked and commands a high price in the market, merely because of its value and superiority. It grows in clusters on low, swampy grounds subject to overflowe:s. On account of its aquatic life it seems to endure exposier to the weather. Cypress roofs and sidewalks in New Orleans are a centry old. Cypress is usually cut in low water and floated out in high water. The Northern lumber companies are rapidly erecting mills and putting them in order in certain sections of Louisiana and Mississippi. From present appearances the lumber in these States will soon exceed the cotton interest. Suffice it to say there is an enormous supply of these varieties of lumber, and their manufacture and marketin6 will have some effect on the price of Western lumber.—*Manufacturers Gazette.*

A North Wisconsin paper states that "among the logs brought down this spring to be sawed by the La Crosse mills are thousands that have been lying in Rocky Run creek for the past 20 years. Logs may be found bearing the stamp owner dated in 1867. One log is supposed to be the largest ever taken out of the Black river country. When measured it scaled 2,200 feet. It was cut 19 years ago this spring."

The Mexican Government lately concluded a contract with Oscar Droege to plant 2,000,000 trees in the valley of Mexico, the work to be completed in four years. The trees specified are chiefly ash, poplar, acacia, and mountain cedar. It is the intention to form national nurseries, in which the study of scientific forestry can be carried on.

AN IMPORTANT QUESTION.

During a debate in the House of Commons on May 7th on the proposed Agricultural College, Mr. Fisher said:—

I wish also to make one remark with regard to Manitoba and the Northwest. I quite agree that in that region special experiments are required which cannot possibly be carried on at Ottawa, for example with regard to forestry. That is a question of enormous importance to the Northwest, and, indeed, to the whole of Canada. We must find out what trees are best adapted for cultivation in that country, whether for verdure or for fuel, or for windbreaks, wherever they may be required. In our eastern provinces we still boast of being a great lumber country, but before many years we shall be unable to make that boast any longer, and the question of forestry is likely to be a vital one in the eastern provinces. In the Northwest, especially, it is absolutely essential that experiments should be conducted with a view to ascertaining the best way of cultivating trees for windbreaks and other purposes. That cannot be done on a small scale, it cannot be done at Ottawa, and I believe that, also, will have to be done in the way I propose for other experiments, that is, all over the Dominion. The Government should appoint in different parts of the Northwest territory individuals who may be depended upon, who have been recommended for their intelligence and for their eagerness in carrying out this work, who will have to be asked to try the experiment of planting in their own locality, whatever trees are most likely to flourish in that region. For instance, there is a certain tree, the willow—that will serve the purpose of a windbreak all over the Northwest.

THE LOMBARDY POPLAR.

The poplars form one of the execptions to the rule—often stated without qualification in botanical text-books—that roots do not produce leaves or leafy shoots. This charateristic is most obvious when one of these trees has been felled, for then all the vitality that before spread from the roots into the main stem is diverted into the far-reaching lateral roots, and a small forest of suckers spring up, often at a distance of many yards from the parent tree. These are true root-suckers, and not merely ascending subterranean branches, like those of the rose; and as has been seen in the table just given the leaves on these suckers are often different in form from those on the branches of the tree. Though a merely "fastigiate" habit is not considered a character of specific importance, the presence of these suckers in the Lombardy poplar is an important distinction between it and the black poplar, with which botanists generally unite it. The absence of the grey hairiness common on the leaves of other species, which has earned for its allied form the inappropriate name of "black," is equally characteristic ef the Lombardy poplar. This fastigiate variety is probably a native of the mountains of Western or Northern Asia, perhaps of Persia. It has been common in that country, and in Cashmir and the Punjaub, from very early times, and is often planted along the roadsides in those distant lands, as is in France, its somewhat scanty shade-producing powers being there of more importance than they are with us. Introduced from these countries into Southern Europe, the tree derives its popular names, both in France and in England, from its abundance along the banks of the Po and the other rivers of Lombardy, where at the present time it grows readily from self-sown seed, which it will not do in England.—*From "Cassell's Familiar Trees."*

A SAW MILL NOVELTY.

Plans are now being prepared for the proposed new saw mill to be erected at Loring, Alaska, for the Alaska Salmon Packing Company, which contains some new features in mill building as well as possible improvements in other directions which deserve attention.

The mill is to be built to straddle a waterway about eighty feet in width, separating the mainland from a small egg-shaped island, which, with its smaller end pointing towards the shore, divides the main channel of Naha Bay from Freshwater Cove, a false inlet almost circular in shape, and about half a mile at its greatest diameter. The mill so built will thus have a berth for one or more vessels at either end, and will have in the cove a natural boom for the logs.

Though there is ample water power (estimated at 200 horses) in the stream that tumbles into the cove at its northern end, it is thought better to put steam into the mill rather than carry the water the necessary distance of about half a mile to the mill.

The mill is to be a band saw-mill, with all necessary adjuncts, and the addition of several Blanchard lathes, designed to turn out oars, banisters and other staple articles, for which the peculiar close grained, tough and tenacious yellow cedar of Alaska is especially adapted, experiments having proved the superior strength and lightness of an oar made from this timber over those made from the best Eastern swamp ash, while the refuse can be put to profitable use in making standard styles of stair rails, balusters, net floats, etc.

There is to be very little shafting or belting in this mill, as nearly every tool will have its own Westinghouse engine, which will be coupled direct, wherever practicable, thus doing away with the present system of line shafting and its attendant evils entirely.

The saving in material, friction, oil and supervision is estimated to cover the extra cost of the small independent engines, while the ease and facility with which one part of the mill can be run while all the others may be at rest, is a very important consideration, second only perhaps to the other one, which is, that any Siwash of ordinary intelligence and limited experience can attend to his engine and machine, with no interference and only cursory supvision.

Steam is to be furnished by a battery of plain cylinder boilers with conical heads. The consideration of safety is superior to any desire to save fuel, as the abundance of the latter is more a source of annoyance than of profit.

Work is to be begun at an early day, and it is expected that a profitable market for nearly ts entire outfit will found in the territory. The labor is to be almost entirely drawn from the native sources, for whose benefit it is principally intended, and as an adjunct to a mechanical training school to be erected at Loring by the Department of the Interior Bureau of Education. An agreement between Sheldon Jackson, Esq., agent for the Department in Alaska, and Mr. Max Pracht, calls for the aggregation at Loring of the three native villages now located at Skowls, Tongass and Cape Fox, Loring being a more desirable and central point, as well as a regular post office. Employment can be furnished in the various departments of the fishery and mill to a large number of intelligent and industrious natives.—*Ex.*

NEW FURNITURE FACTORY.

The name of another firm can be writen on the list of Peterborough manufactures. The Lindsay-Seldon Furniture Company is a firm which have embarked in the enterprise of manufacturing a finer class of furniture for the Canadian trade. Their place of business is located on Mill street, in the two upper flats of the large building erected by the Dickson Company last year. The new firm have fitted up the premises in a suitable way. Machinery of the modern type has been put in, consisting of band saws, shaping machines, planers, etc. On the third flat of the building the finishing room is situated. On the fourth flat the principal machinery is located. On this flat, also, a furnace supplies heat for the glue chest on the same flat, and for the dry kiln in the loft, where lumber is freed from all dampness.

The company have already commenced operations, and have turned out several sample sets, which are to be photographed in a few days. Their furniture is to be all made from designs worked out on the premises, and not from stock designs, as is too often the case. Mr. Seldon, himself, is the designer, and in this capacity has made a high reputation for himself. The sample sets, now finished, are very handsome. The walnut is well finished and ornamented by considerable hand carving and French veneer. The capacity of the factory is twenty-four complete sets weekly.

TUG FOR SALE

Now on Georgian Bay. Gross tons, 56.99; Length, 70 feet; Breadth, 15 feet; Depth, 8 feet. Was Re-built last Summer. Apply to

Ontario Lumber Company

219 TORONTO.

J. & J. T. MATTHEW

Ship Owners and Agents.

LUMBER AND TIMBER CARGOES A SPECIALTY.

TORONTO, Ont., 109 Bay Street.

GEORGE GALL

WHOLESALE and RETAIL

HARDWOOD LUMBER

MERCHANT

Car Lots sold on Commission, railway switch in to yard and plenty of room for storage. Yard corner of Strachan and Wellington Ave. Office, 9 Victoria St. Telephone Connection. L

FOR SALE

VALUABLE

Timber Limits

AND

50,000 SAW LOGS

ON SEVERN RIVER

The undersigned being desirous of confining their operations to their Lakefield Mills on the Trent waters, offer for sale the following limits:—

Township of Hindou, 70 square miles.
" Oakley, 45 " "
" Redout, 22 " "

An area of 137 square miles.

These limits are estimated to contain 180 million feet of Logs, well watered, and afford means of short hauling from all points, and quick and cheap driving to Georgian Bay. Are offered for sale together with plant, depots farms, 1,200 acres deeded lands and 50,000 logs, nearly all of which are on the main river, a large proportion of which are 16 feet long. Apply to

R. & G. Strickland,

3mL LAKEFIELD, ONT.

PATENTS

PROCURED in Canada, the United States, England, France, Germany Austria, Belgium, und all other countries in the world. Experts in all Patent Causes.

DONALD C. RIDOUT & CO.

ESTABLISHED 1867

22 KING ST EAST TORONTO

SAWDUST IN RIVERS.

In the House of Commons on April 30th quite an interesting debate took place on a bill introduced by the Hon. Mr. Foster repecting the protection of navigable waters. One of the objects of the bill was to provide for the prosecution of saw mill owners, who put rubbish and sawdust into rivers, thereby injuring the fishing business and interfering with navigation.

Mr. Cook pointed out that the Ottawa river was exempt from this clause.

Mr. Mills thought the Government was going beyond their jurisdiction when they interfered with Provincial matters.

Mr. Cameron (Victoria) agreed with the member of Bothwell.

Mr. Mitchell said it was a subject which had occupied public attention for many years. When he was Minister of Marine and Fisheries, it was agitated a great deal, and steps were taken to try and prevent the evil. He was in entire sympathy with the honorable minister in his efforts to get additional powers in relation to this matter. It is painful to see the way the Ottawa river was being destroyed, not only by sawdust, but by the slabs, refuse and bark thrown into it. The latter are quite as, if not more, injurious than the sawdust. When you reach Carillon or Grenville by steamer, in order to take the cars there, you will see at either place, forty or fifty acres of sawdust banks, the accumulation of refuse from the Ottawa mills. That should be put a stop to. In other portions of the country it is not allowed to exist. Take one of our greatest lumbering and manufacturing sections, that of Miramichi, from which he came, every mill owner there has his furnace for burning sawdust and the refuse from his mills, and by that means we have kept them out of our rivers, and our navigation such as it is has been largely preserved by the regulations established by the department for the purpose of preventing sawdust and refuse being thrown into the river. It was iniquitous the way in which the Ottawa river was being destroyed, and he was in entire accord with the Minister of Marine and Fisheries in his endeavor to get additional powers in this respect.

Mr. White (Renfrew) was glad to see that the Minister of Marine and Fisheries had reserved to himself the right of exempting from the provisions of this clause in cases where it may be deemed not against the public interest to allow sawdust to be conveyed into streams. Some reference had been made to the fact that sawdust is allowed to be conveyed into the Ottawa by mills in this vicinity. There are two sides to this question. There is the question of navigation, which is a very important one, and which ought to be paramount in connection with the navigation of these streams, but there was also the question of the interest of those people who have a very large amount of capital invested in the construction of saw mills, giving employment to a very large number of persons, who would be subject to enormous cost and great inconvenience, especially in a place like the city of Ottawa, in disposing of their sawdust in any other way than that in which it is now disposed of. That was not a new question. It engaged the attention of the Government of the honorable member for East York, when he was leader of the Government and Minister of Public Works, and, a commission was appointed, either in 1876, or 1877, to inquire into the question of the obstruction of the Ottawa river by the depositing of this mill refuse, and, as the result of the investigations of that committee or commission, the practice was allowed to be continued under certain conditions and restrictions—one of the con ditions being that all the slabs and edgings had to be converted into small chips or pieces by machinery placed in the mills. It would be a great and serious inconvenience and a great loss to the laboring population of this locality, if the power were taken away from the Minister to exempt certain localities from the provisions of this act, if, in the wisdom of the Governor-in-Council, it was deemed expedient and proper that those localities should be so exempted. It was quite true that there have been banks of sawdust formed in the Ottawa below the mills; but, as far as his observation had enabled him to judge, those banks have accumulated, not in the navigable portions of the stream, not in the deep water, but along the shores and in the eddies, and so they have not obstructed the navigation to any appreciable extent, though they show themselves in passing down the Ottawa. He ventured to express the hope, and to concur with the opinion of the member for Charlotte (Mr. Gilmour) that this portion of the act shall not be expunged from it, but that the power shall be continued to the governor in council to make exemption where it is thought necessary to do so.

Mr. Hilliard thought that if mill owners were prevented from putting in slabs and edgings into the river the sawdust would not do much injury. If the act was inforced in its entirety it would result in closing down the mills.

Mr. Vail said that the bill was legislating against the smaller mill owners in favor of the larger ones. He objected to making any exceptions in the case of any streams.

The bill was read a second time.

CAN'T KEEP ANYTHING.

When a careful workman is noticed making use of more than half his time in looking for what few tools he may be permitted to work with, or some one of the parts of a machine he is to repair, either he is slightly inclined to be forgetful, and fails to take notice where anything is left when he is through with it, or some one who is a privileged character is assisting in the disarrangement of an orderly shop. It must be the latter, for overy mechanic has no trouble in finding plenty of victims who must have encroached on forbidden territory. Such a simple thing as a belt lace is a handy thing to have and it is a source of pleasure to come across a workman who has a number of them carefully laid away in his workbench, with a belt punch and belt-awl in working trim. A long twist-drill, with a fluted reamer to follow, and a hardened and lathe-arbor make a nice set to keep by themselves whenever their size is mentioned, were it only possible to keep anything; but the belt-punch vanishes the very moment it is wanted for use, and the drill in the arbor set is diminished by one half its length in the pleasure of trying a cut in the boring mills. Not even the varnisher is permitted to keep a vial of shellac varnirh, a little reducing fluid and lamp black where they will be handy without the brush walking off with a dish of asphaltum when a neat little pattern is ready for a coat of blacking. No forgetfulness here; only a slight inclination to disseminate throughout the whole establishment, and out into the back yard. The lock and key is called for and an inventory taken every fourth hour of the day, which serves to brighten up the memory. More than half the time the missing tool is just where the finder had left it, and a little attention in the beginning would have saved time and trouble.

The man at the work bench, or the polisher at the lathe will have tools by the dozen that he can lay his finger on without noticing where he is to reach for them, simply for the reason that they are returned to the same place again though they are scattered waste pile. Out of all the explanations, in which lost, strayed and stolen figure conspicuously, the one "I know nothing about it," or "It's where you used it last," has done more toward fitting up a tool room where a check stands ready to account for every tool that is missing than the consoling advice "Have a place for everything and have everything in its place," as it is more in accordance with the nature of a mechanic.—*Boston Journal of Commerce.*

HARDWOOD INSPECTION.

The New York Lumber Auction Company's rules for the inspection of hardwood lumber are as follows:—

WALNUT.

The standard lengths are 12, 14 and 16 feet.

The standard lengths are §, 1, 1¼, 1½, 2, 2½, 3, 4 and 5 inches; and is inspected as firsts, seconds and culls.

FIRSTS.—Must not be less than 8 inches in width free and clear of all defects. 12 inches wide may have 2 inches of bright sap on one side. Boards 10 feet in length must be 10 inches over in width and clear, to be classed as a first. In wide boards a few small defects will be allowed.

SECONDS.—Must not be less than 5 inches in width. All pieces 5 inches wide, 10 feet and over long, must be free from defects. At 6 and 7 inches wide, one defect may be allowed. At 8 or 9 inches wide 2 defects, and 10 to 12 inches wide 3 defects, but in extra wide lumber a few more defects may be allowed.

CULLS—Any broad. regardless of width or length not up to the standard of seconds, and where half the piece is fit to use.

NEWELS—Must be without heart or defects any kind. 5x5, 6x6, 7x7, 8x8 and 9x9 are the most used; the regular length being 3½ and 4 feet; but 12, 14 and 16 feet are the most desirable.

BALUSTERS—Must be strictly squared to 1½x1½, 2x2, 2½x2½, 3x3 and 4x4; the regular lengths being 28 and 32 inches free from all defects.

ASH

The standard length are 12, 14 and 16 feet.

The standard thicknesses are 1, 1¼, 1½, 2, 2½, 3, 4 and 5 inches; and is inspected as firsts, seconds and culls.

FIRSTS—Must not be less than eight inches in width, and free from all defects. 12 inches and over will admit of 1 or 2 small defects, and a split of 12 inches will be allowed.

SECONDS—Must not be less than 6 inches wide. 10 inches wide may have at the most, 3 small sound knots. Additional small defects will be allowed according to the width of the board, but must be free from all doty and rotten spots.

CULLS—Any board, regardless of length or width not up to the standard of seconds, and where half the board is fit for use.

CHERRY.

The standard lengths are 12, 14 and 16 feet.

The standard thicknesses are 1, 1¼, 1½, 2, 2½, 3, 4, and 5 inches; and is inspected as firsts, seconds and culls.

FIRSTS—Must not be less than eight inches in with, free and clear of all defects. 12 inches wide may have 2 inches of bright sap on one side. Boards 10 feet in length must be 10 inches and over in width to be classed as a first. In wide boards a small defect will be allowed, but those having gum specks are positively excluded from this grade.

SECONDS—Must not be less than five inches in width. All pieces 5 inches wide, 10 feet and over long must be free of defects; 6 and 7 inches wide one defect will be allowed; 8 and 9 inches wide 2 defects; and 10 to 12 inches wide 3 defects; but in extra wide lumber a few more defects may be allowed.

CULLS—Any board, regardless of width or length not up to the mark of second, and where half of the board can be used.

OAK.

The standard lengths are 12, 14 and 16 feet.

The standard thicknesses are 1, 1¼, 1½, 2, 2½, 3, 4, 5 and 6 inches; and is inspected as firsts, seconds and culls.

FIRSTS—Must be 8 inches and over in width, clear and free of all defects. Small defects allowed in accordance with the width of the board, but boards having worm holes absolutely excluded.

SECONDS—At eight inches in width from 1 to 2 small sound knots or a little sap may be allowed; and at 10 inches and up other small defect may be allowed according to width of board.

CULLS—Any board that is wormy, knotty and unsound generally. No demand at all for this grade.

WHITEWOOD.

The standard lengths are 12, 14 and 16 feet.

The standard thicknesses are §, 1, 1¼, 1½, 2, 2½, 3, 4, 5 and six inches; and is inspected as firsts, seconds and culls.

FIRSTS—Must be 10 inches and up in width, free from all defects. 12 inches and over in width a little bright sap may be allowed.

SECONDS—Must not be less than 6 inches wide; and from 6 to 7 inches must be free of defects with a little bright sap allowed on one side; and 10 inches and over from 1 to 3 small sound knots.

CULLS—Any board having black sap, knots, and not up to the grade of seconds generally.

SQUARES—Must be free from splits, shakes, and hearts. The general lengths are 12, 14 and 16 feet, and in some cases 10 feet is saleable. The general sizes are 4x4,5x5, 6x6, 7x7, 8x8, 9x9 and 10x10.

BASSWOOD.

The standard lengths are 12, 14 and 16 feet.

The general thicknesses used are 1, 1¼ and 1½; and is inspected as firsts, seconds and culls.

FIRSTS—Must not be less than 8 inches, free from all defects.

SECONDS—Must not be less than 6 inches; at this width must be clear, but from 7 inches and up small defects are allowed according to the width of the board.

CULLS—Any board, regardless of length or width having black sap, knots and other imperfections, and not up to the grade of seconds.

MAPLE.

The standard lengths are 12, 14 and 16 feet.

The standard thicknesses are 1, 1¼, 1½, 2, 2½, 3 and 4 inches; and is inspected as firsts, seconds and culls.

FIRSTS—Must be 8 inches and over in width, free and clear from all defects; slight allowance being made according to width of board.

SECONDS—Must not be less than six inches in width, and admitting 1 sound standard knot. Increased defects allowed according to the width of the board or plank.

CULLS—Any piece of defective lumber, not up to the grade of seconds, in which half the board can be used.

CHESTNUT.

The standard lengths are 12, 14 and 16 feet.

The most desirable thicknesses are 1 and 1¼ inch.

This is inspected and graded the same as walnut with the exception of wormy boards which will reduce them in grade.

SQUARES—Must be fully squared to 4x4, and free from heart and shakes.

BUTTERNUT.

The standard lengths are 12, 14 and 16 feet.

The usual thicknesses are 1, 1¼, 1½, 2, 2½ and 3 inches.

This is inspected and graded the same as walnut.

All wormy and otherwise defective boards not up to the mark for seconds, are classed as culls; and are positively unsaleable in this market.

THE past winter, says the Sherbrook, Que., *Gazette*, has been one of the great activity here at the pulp mills, whcih any one can readily see judging by the immense stock of pulp wood, fuel wood, which is in the yards of the company. They have also some 3,000,000 ft. spruce logs on the Bank of the St. Francis river for the saw mill. The mill is running day and night to its fullest capacity. and, as usual, without mishap. There is not a pulp mill in Canada which can show such a successful running record as the East Angus chemical pulp mills.

THE Kingston *News* says:—The Government will be wanting in its duty if it does not check this losing game at once. Let a good stiff export duty of $4.00 per thousand be put on saw logs, and probably the enterprising American, who has captured 500,000 acres of our timber land, will find his patriotism succumb before the prospective loss of $2.00 per thousand on his timber."

JAMES MCLEISH, of Sebright, a river driver in the employ of the Longford Lumber Company, was drowned, while breaking a "jam" in Tollman's drive on Black river. Finding himself unable to reach the bank after he had disengaged the key piece, the poor fellow determined to go down the rapids with the logs, but he had scarcely started when he suddenly disappeared.

DANIEL TAYLOR, over 80 years old, of Schroon Eake, N. Y., a year or two ago had his hand mangled by a circular saw. He got well of that and last winter he had his skull fractured while at work in his mill. He has fully recovered from that also, and is again ready to tackle a buzz saw or stand a crack on the head.

THE log imput on the Winconsin and its tributaries for the season now closed, it is said, was 166,787,000 feet. Of this amount Wausau parties claim that 137,000,000 will go to that place for sawing.

Chips.

EDWARD MERRITT was killed at Alma by a falling log.

MCKILLOP'S saw mill and logs at Wallacetown, Ont., have been destroyed by fire.

THE mills at Ottawa started work with full gangs. Laborers receive from $1.25 to $1.50 per day.

THE Canadian Pacific railway is build an elevator at Toronto, Ont., with a capacity for 250,000 bushels of grain.

IT is estimated that over 40,000,000 feet of lumber is now (May 4th) *en route* to the English and American markets.—*Ottawa Journal.*

MESSRS. Corey Bros. have just planted a row of young black walnut trees along the roadside at Stanbridge East, Que.

H. B. RATHBUN & SON, the lumbermen of Deseronto, Ont., purpose to put on a line of side wheel steamers between Belleville, Ont., and Ogdensburg, N. Y.

A MAN named Joseph Bouchard, from Drummondville, Que., was drowned at Kingsbury, in Melbourne township, on 23rd April, while engaged in driving logs down Salmon creek.

IT is reported that Mr. Grandbois, of St. Anne de la Perade, has sold his cut of spruce deals at $40, $24 and $22 for firsts, seconds and thirds, to be delivered at Batiscan.

THE following vessels are said to have been chartered by Messrs. Price Bros., Quebec, to carry lumber to St. John's, Newfoundland, at $4.50:—Schrs. J. Savard, Marie Erzelie, Ste. Anne, Marie Vigilante, C Berner. and Marie Anne.

BEFORE Easter 2,000 dozen of eggs were shipped by one lumber firm of East Saginaw to their camps in the woods. Thus, says the *Northwestern Lumberman*, it will be seen that the monopolistic pine men are not unmindful of the religious wants of their employees.

F. W. GILCHRIST, of Alpena, Mich., has purchased the propeller Alonson Summer, which is 135 feet long, 24 feet wide, with 11 foot depth of hull. She will probably tow Gilchrist's yacht, the mammoth log barge, that is to take pine from the Canadian north shore to Alpena.

THE Resolute cleared from Deseronto on Wednesday morning at 7.45 o'clock, arrived at Oswego, discharging her cargo of 330,000 feet of lumber and was in Deseronto at 5.45 on Thursday morning. That beat the record, and Capt Cowan is confident that he can yet reduce the time for the round trip.—*Tribune.*

GORDEN GIBSON, of Macaulay, Ont., was drowned in Sharp's creek on the evening of his first day's work on the river this season. He was going to the shore, and in attempting to jump from a log to the shore by means of his pike pole, he was struck in the stomach by the end of the pole, fell into the water, sank and was drowned.

THE *Timber Trades Journal* of April 17th says:—Some vessels forming a portion of the Quebec fleet left the Tail-of-the-Bank for the outport this week. They carry coal at a freight it is stated of 2s. 9d. a ton which will just pay for the loading and discharging. The fleet is later this year in leaving the Clyde. Freights, Quebec to Clyde, about 18s. per load.

ON April 21st, Mr. J. B. Millar, President of the Parry Sound Lumber Company, made an attempt to reach Penetanguishene or Midland with the Company's tug *Minnehaha* and got as far as "Big Gull Rock" and was then obliged to turn back owing to the ice still being firm beyond that point for some two miles. Mr. Miller wasof the opinion that in a few days navigation would be open.

BIG piles of white poplar wood, said to be largely used in the manufacture of paper, were drawn out in the winter, and deposited along side the Central Ontario railway track in many places, but the piles are very conspicuous in the vicinity of Big Springs and Central Ontario Junction.

THE Chignecto *Post* says that the lumber drives in Nova Scotia are getting along finely, notwithstanding the scarcity of rain. B. Young & Son have ten miles of river full of logs, and expect to get every log cut. In Apple river drives are doing well, and all along the shore is the same story.

A GANG of 130 choppers, hewers and laborers were forwarded, on May 3rd, from Toronto *en route* to British Columbia. The men were chiefly lumbermen who were recently employed in the lumber woods in Ontario. They will be engaged for the first five or six months in erecting snow sheds for the C. P. R. at the Rocky Mountains.

JOSEPH HURL, while running the bark elevator in the Georgian Bay Lumber Company's mill, at Port Severn, Ont., had his leg caught in the chain and it was severed, being torn off midway between the knee and the foot. He died from the effects of the injury and the shock. The mill shut down on the day of the funeral.

A WISCONSIN lumberman was caught by a rolling log, the other day, and held so fast that he was unable to get away. He yelled in vain for help. While lying there a big bear came up to him. He drew a revolver and fired six shot killing the bear, and these shots were heard by a lumberman, who went to see what was going on and released the prisoner.

WE learn, says the Monetary *Times*, that a new firm composed of Messrs. McCol, Boyle & Wilson, has commenced business in Toronto as wholesale lumber dealers and manufacturers. The firm named, it appears, has just closed the purchase of 4,000,000 feet ef dry lumber, manufactured last season by the Georgian Bay Lumber Company, at Collingwood. This has long been looked upon as one of the choicest and best assorted stocks on the Georgian Bay. The firm's mill, at Huntsville, is to commence operations this week with a capacity of over 3,000,000 feet per annum which will be ready for shipment on the opening of the Northern & Pacific Junction line.

It is a fact that can be verified evywhere that West's Cough Syrup is the only compound known to scienceb that can eradicate the seeds of consumption in its early stages, and completely cure Coughs, Colds, Asthma, Bronchitis and, all Throat and Lung difficulties. Sold by J. D Tully, druggist. Price 25 cents, and 50 cents and $1.00 per bottle.

Scott's Emulsion of Pure Cod Liver Oil With Hypophosphates.

Possesses the remedial power of these two valuable specifics in their fullest degree. Is prepared in a palatable form, easily tolerated by the stomach, and for delicate, sickly children, emaciation, consumption, and all impoverished conditions of the blood is unequalled by any other remedy.

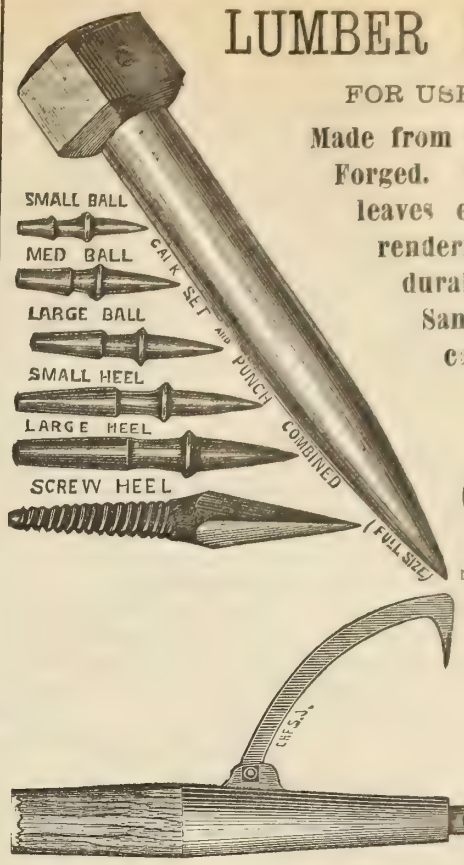
Health is Wealth

DR. E. C. WEST'S NERVE AND BRAIN TREATMENT, guaranteed specific for Hysteria, Dizziness, Convulsions, Fits, Nervous Neuralgia, Headache, Nervous Prostration caused by the use of alcohol or tobacco, Wakefulness, Mental Depression, Softening of the Brain resulting in Insanity and leading to misery, decay and death, Premature Old Age. One box will cure recent cases. Each box contains one month's treatment. One dollar a box, or six boxes for five dollars; sent by mail prepaid on receipt of price. We guarantee six boxes to cure any case. With each order received by us for six boxes, accompanied with five dollars, we will send the purchaser our written guarantee to refund the money if the treatment does not effect a cure. Guarantees issued only by J. D. TULLY Druggist, Sole Agent for Peterboro

LUMBER DRIVERS' CALKS

FOR USE IN STREAM DRIVING.

Made from the Best Refined Tool Steel and Forged. The method used in tempering leaves every one of the same temper rendering them stronger and more durable than any other Calks made Samples and prices free on application to the undersigned.



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Orono Cant Dog

Strongest and Lightest in the market. Made of Best Cast Ste by drop forging proces. The Handles are made of best quality straight grained split and turne Rock Maple, 5 to 6 feet in length, bored specially to suit the pick. Prices on application.

MANUFACTURED BY

T. McAVITY & SONS,

L2 ST. JOHN, N.B.

A FULL LINE of all Size Single and Double Belting constantly in stock.

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MARKET BLOCK, GEORGE STREET.

☞ Noted for BEST QUALITY GOODS at LOW PRICES! ☜

PAPER, ENVELOPES, PENS, INK and PENCILS.

And every house and office requisite always kept in stock, and sold retail in

BOTH SMALL OR LARGE QUANTITIES.

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Market Reports.

TORONTO.

From Our Own Correspondent.

MAY 10.—Lumber is moving briskly on the local market. Over the docks the amount going off is small. The accumulations of the winter will soon be all shipped away and our docks clear once more, and the quantity still to arrive from the mills north of us, of last season's cut, will be cleared out long before this season's cut is fit to move. Stocks to be cut this year are being rapidly bought up, and competition on this market is as keen as it ever was. Another new firm, that of McCool, Boyle & Wilso, have opened out to do a wholesale trade. The senior member of the firm is well-known in lumber circles here, and all the members of the firm are known as energetic men, and, will doubtless, do a thriving business. The figures quoted by retail dealers at their yards are not up to what they should be, in order to give a fair living profit, under the strict rules now in force by the railway companies, in weighing all cars of lumber, retailers cannot hope to stock up again at the same figures they have done hitherto. Nine-tenths of all the lumber coming into our city arrives by the N. & N. W. R. R. and the Canadian Pacific, and Grand Trunk companies, have managed to cajole or bully the former company to agree to an iron clad arrangement whereby all cars are to be weighed by an independent man, appointed by the three roads. Of course the latter two companies knew quite well that the lumber traffic forms but a small portion of their total earnings, so that if they could only rope in the N. & N. W. R. R., whose revenue is mainly made up by that branch of industry, they had all to gain and nothing to risk. The head officials of the N. & N. W. so aptly termed "Parlour Officials," by the *Globe* the other day, have never been noted for their large amount of wisdom, but there are few but gave them credit for more than they have displayed in this transaction. As mentioned in one of my former letters, there is a large amount of hemlock awaiting manufacture on the line of the N. & N. W. Road, and in localities where the pine is all cut off. During the last year or two at least 10 per cent. of the green bill stuff brought here by their road has been green cut hemlock. This portion of their revenue they have completely cut off, as no sane man can believe that such lumber can be freighted here at 9 cents per hundred weight. The lumber industry has stood a good deal of choking in the past, but it is possible to produce strangulation, and so far as the hemlock trade is concerned this has been done most effectually, and any man or set of men running a corner grocery, would be thought fit only for the asylum if they were guilty of such stupidity. The lumber industry has hard work, and uphill work, to hold its own, without any such stupid blunders as this being added to the many difficulties it has already to encounter. If the company have any interest in the lumber industry, and they doubtless know that their road would be absolutely nothing without that carrying trade, let them now make a special tariff for hemlock and other low-priced woods. This would in some part atone for the extra money now being forced from the lumbermen by the strict weighing process. If some such plan is not adopted they may find before long that they have strangled the goose that layed the golden egg. A good liberal man at the head of the N. & N. W. R. R. would soon place the company right with its patrons and at the same time add to the wealth of the institution. A cheese paring policy and hostile attitude to the true interests of the lumbermen will eventually prove disastrous to the interests of the company.

Mill cull boards and scantling	$10 00
Shipping cull boards, promiscuous widths	12 00
" stocks	13 00
Scantling and joist, up to 16 ft	13 00
" " " 18 ft	14 00
" " " 20 ft	15 00
" " " 22 ft	16 00
" " 24 ft	17 00
" " " 26 ft	18 00
" " " 28 ft	19 00
" " " 30 ft	20 00
" " " 32 ft	21 00
" " " 34 ft	22 50@22 50
" " " 36 ft	24 00
" " " 38 ft	27 00
" " " 40 to 44 ft	30 00
Cutting up planks to dry	20 00@25 00
" boards "	20 00
ound dressing stocks	16 00@18 00
Picks Am. inspection	30 00
Three uppers, Am. inspection	35 00@40 00
B. M.	
1½-inch flooring, dressed	25 00@30 00
1¼ " " rough	14 00@15 00
1¼ " " dressed	23 00@25 00
1¼ " " undressed	14 00
1 " " dressed	16 00@20 00
1 " " undressed	12 00@14 00
¾ Beaded Sheeting, dressed	18 00@20 00
Clapboarding, dressed	12 50
XXX sawn shingles, ₱ M	2 75@ 2 90
Sawn Lath	2 25
Red oak	20 00@25 00
White "	25 00@30 00
Basswood, No, 1 & 2	18 00@20 00
Cherry, No. 1 & 2	50 00@60 00
White ash 1 & 2	25 00@30 00
Black ash 1 & 2	20 00@25 00

MONTREAL.

From Our Own Correspondent.

MAY 10.—Since the opening of navigation the harbor is beginning to wear its customary busy appearance. Seven ocean steamers are at present in port, but as yet no sailing vessel beyond the small river crafts have arrived.

Freight rates on lumber to the United Kingdom and ports in South America are only nominal, nothing having been shipped to these places as yet. The indications are that a large export trade will be done this season.

Business at the yards in retail lots has been more active, and although quite an improvement can be noted since our last report. The demand for car lots has been slow. Freight rates on the Grand Trunk and Canadian Pacific railways for lumber have been reduced 20 cents per M.

The water was let into the Lachine Canal on the 2nd inst., and up to date 4,810 M feet have been delivered ex-barges from the Ottawa.

A fair amount of building is going on in the city.

The following are the quotations at the yards :—

Pine, 1st quality, ₱ M	$00 00@40 00
Pine 2nd " "	00 00@30 00
Pine, shipping culls, ₱ M	14 00@16 00
Pine 4th quality deals ₱ M	10 00@12 00
Pine, mill culls, ₱ M	8 00@10 00
Spruce, ₱M	10 00@13 00
Hemlock, ₱ M	9 00@10 00
Ash, run of log culls out, ₱ M	18 00@20 00
Bass, " " ₱ M	40 00@50 00
Oak, ₱ M	60 00 100 00
Walnut ₱ M	80 00 100 00
Cherry, ₱ M	35 00@40 00
Butternut, ₱ M	20 00@25 00
Birch, ₱ M	25 00@30 00
Hard Maple, ₱ M	1 50@ 0 00
Lath, ₱ M	2 00@ 3 00
Shingles, 1st, ₱ M	2 50@ 0 00
Shingles, 2nd, ₱ M	

CORDWOOD.

A number of barges with cordwood have arrived from the river ports below, but the market is dull and neglected.

The following are the quotations at the yards :—

Long Maple, per cord	$ 6 00@6 50
Long Birch "	6 00@0 00
Long Beech "	5 00@5 50
Tamarack "	5 00@0 00

OTTAWA.

From Our Own Correspondent.

MAY 10.—Since I last wrote you a great fire has devastated the city of Hull—the very centre as one may say of the lumber employees of this district, for in Hull could the lumberman who was in search bush hands or mill operatives always find a supply. By the fire on Sunday last there were a great many families of lumber employees thrown out homeless on the world, and this bore the more heavily from the fact that, as a general thing, these people were all poor and by the fire lost their all in the flames. However, it is consoling to know that the lumbermen of the district rose in their generosity equal to the occasion and by liberal subscriptions, and the offer of all the lumber to those who desire to rebuild, free of cost. Two of the Chaudiere lumbermen are deserving of especial mention in this case, and these are John R. Booth and Mr. Perley, of the firm of Perley & Pattee, who each subscribed $1,000 towards the relief of the sufferers. It may also be noticed that all the lumbermen came down handsomely in the matter of subscriptions, but Booth & Perley head the list. It is now only a matter of short time before Hull will again rise from its ashes, for the lumber industry is of such an extensive nature that the city and its lumber employee inhabitants are so intimately connected that one depends on the other. Fortunately the immense lumber piles so close to the scene of the conflagration escaped unscathed, although at times it was feared they were doomed. Had the fire once got amongst them the loss would have been enormous.

The hum of the saw is now a continuous sound. Night and day the mills are turning out lumber and the fleet of barges transporting it to market are kept busy. The chief exports so far are to the American market.

The log and square timber drive on the upper Ottawa is now well forward for the season, and water is reported very plentiful in all the tributaries of the Grand river. There will be no danger of any of last year's cut getting stuck this season. The output of logs will be somewhat in excess of last year, and men employed are getting fully 25 per cent. higher wages than they commanded last year.

CHICAGO.

BY THE CARGO.

The *Northwestern Lumberman* of May 8th says :—The stoppage of business at the yards has practically closed out the cargo market for the time being. When the lockout occured last Saturday there were a few cargoes at the market docks, and some on the way in. But when the trouble broke, instructions were forwarded to shipping ports not to forward any more lumber until the lockout should be over. The commission men were left with several cargoes on their hands unsold, and how to dispose of them was the question. South Chicago, Racine, Evanston and Michigan City came to the rescue, and thus the stuff was absorbed as John McLaren said. A stander-around on the docks said, however, that he thought the slips out of the mouth of the harbor had absorbed a large part of it. Undoubtedly cargoes have been sold in the places named. It is positive that dealers in South Chicago have purchased several cargoes.

Piece stuff is quoted at $9.50 for green, but some concession has been made on loads that have gone to outlying ports. Several boats have been loaded for points down the canal.

There has been considerable inquiry for lath. Green lath is worth $1.25 a thousand, and dry from $1.40 to $1,00.

AT THE YARDS.

As it would be natural to conclude, under existing circumstances, the actual trade feature of yard business is minus. The lumber trade of Chicago is now on a war footing, as it were, while the peaceful pursuit of selling and shipping lumber has been for a time suspended. A few of the retail yards on the north side, in the remote parts of the city and in the suburbs, are doing some business in the delivery of lumber to carpenters, but as a general statement it can be said that the lumber trade of Chicago is for the present hung up. There is prevailing a combined lockout and strike, which affects the lumber yards, planing-mills and box factories. Fully 6,000 men are out of work in consequence of the trouble. The yard owners have combined and elected a strong executive committee, to which has been submitted the control of affairs until the trouble is ended. In case the strikers partially succeed, or are able to continue the trouble indifinitely, the majority of wholesale dealers avow their determination to quit business here—throw up the trade entirely, or seek other localities for the location of yards where labor troubles are less likely to occur.

It was reported on Thursday that all trouble at the South Chicago yards had disappeared. Lumber shovers were at work unloading vessels, and yard business was proceeding as usual.

Building permits continue to be issued in considerable numbers. There is less disturbance in the building trades than in other lines. Projections for new buildings still present an extensive array. Yet much work has been temporarily suspended, and the building industry may be called minimum. But if the existing labor troubles should measurably die out within a short time there would be renewed activity in building, the haste to push forward work being greater on account of the period of delay. The halt in lumber movement on account of strikes is almost sure to be succeeded by a time of intense activity, with a rushing demand.

Receipts of lumber and shingles for the week ending May 6th, as reported by the Lumberman's Exchange :—

RECEIPTS.

	Lumber.	*Shingles.*
1886	32,972,000	8,748,000
1885	29,310,000	5,582,000

FROM JAN. 1, TO MAY 6, INCLUSIVE.

RECEIPTS.

	Lumber.	*Shingles.*
1886	176,841,000	43,833,000
1885	101,404,000	24,095,000
Increase	75,437,000	19,738,000

STOCK ON HAND APRIL 1.

	1886.	1885.
Lumber & timber	396,147,654	438,442,084
Shingles	298,665,960	223,422,800
Lath	43,065,153	35,073,175
Pickets	1,824,840	1,865,742
Cedar posts	279,971	167,674

EASTERN FREIGHT RATES.

FROM CHICAGO AND COMMON POINTS ON CAR LOAD LOTS OF HARD AND SOFT LUMBER.

To New York	25c.
Boston	30c.
Philadelphia	23c.
Baltimore	23c.
Washington	23c.
Albany	23c.
Troy	23c.
Buffalo and Pittsburgh	15c.
Shenectady	23c.
Wheeling	15c.
Suspension Bridge	15c.
Salamanca	15c.
Black Rock	15c.
Dunkirk	15c.
Erie	15c.
Toronto	15c.

ALBANY.

Quotations at the yards are as follows :—

Pine, clear, ₱ M	$55 00@60 00
Pine, fourths	50 00@55 00
Pine, selects	42 00@47 00
Pine, good box	22 00@33 00
Pine, common box	13 00@15 00
Pine, 10-in. plank, each	00 45@00 47
Pine, 10-in. plank, culls, each	00 25@00 27
Pine boards, 10-in	00 30@00 32
Pine, 10-in. boards, culls	00 16@00 20
Pine, 10-in. boards, 16 ft., ₱ M	28 00@32 00
Pine, 12-in. boards, 16 ft	28 00@32 00
Pine, 12-in. boards, 13 ft	28 00@00 00
Pine, 1¼ in. siding, select	40 00@43 00
Pine, 1¼-in. siding, common	15 00@18 00
Pine, 1-in. siding, select	40 00@42 00
Pine, inch siding, common	13 00@15 00
Spruce, boards, each	00 00@00 16
Spruce, plank, 1½-in., each	00 00@00 20
Spruce, plank, 2-in., each	00 00@00 30
Spruce, wall strips, each	00 12@00 12
Hemlock, boards, each	00 00@00 14
Hemlock, joist, 4x6, each	00 00@00 32
Hemlock, joist, 2½x4, each	00 00@00 14
Hemlock, wall strips, 2x4, each	00 00@00 11
Black walnut, gook, ₱ M	100 @120 00
Black waluut, ¾ inch	80 00@90 00
Black walnut, ¾ inch	00 00@85 00
Scaymore, 1-inch	28 00@30 00
Scaymore, ¾-inch	21 00@23 00
White wood, 1-inch and thicker	38 00@40 00
White wood, ¾-inch	28 00@30 00
Ash, good, ₱ M	40 00@43 00
Ash, second quality, ₱ M	25 00@30 00
Cherry, good, ₱ M	60 00@65 00
Cherry, common, ₱ M	25 00@30 00
Oak, good, ₱ M	40 00@43 00
Oak, second quality, ₱ M	20 00@25 00
Basswood, ₱ M	25 00@30 00
Hickory, ₱ M	40 00@40 00
Maple, Canada, ₱ M	28 00@30 00
Maple, American, per M	26 00@28 00
Chestnut, ₱ M	38 00@40 00
Shingles, shaved, pine, ₱ M	0 00@ 6 50
" 2nd quality	0 00@ 5 00
" extra, sawed, pine	4 30@ 4 50
" clear, "	0 00@ 3 00
" cedar, mixed	0 00@ 3 30
" cedar, XXX	0 00@ 0 00
" hemlock	2 25@ 2 37
Lath, hemlock, ₱ M	0 00@ 2 13
Lath, spruce, "	0 00@ 2 25

OSWEGO, N.Y.

From Our Own Correspondent.

Three uppers	$42 00@46 00
Picking	32 00@35 00
Cutting up	24 00@26 00
Fine Common	22 00@25 00
Common	14 00@18 00
Culls	11 00@14 00
Mill run lots	16 00@22 00
Sidings, selected, 1 in	30 00@35 00
" 1¼ in	32 00@36 00
Mill run, 1x10, 13 to 16 ft	16 00@21 00
Selected	21 00@24 00
Shippers	14 00@16 00
Mill run, 1¼x10	17 00@20 00
Selected	21 00@30 00
Shippers	14 00@16 00
Mill run, 1 & 1¼ in, strips	15 00@18 00
Selected	22 00@30 00
Culls	11 00@13 00
1x6 selected for clapboards	25 00@35 00
Shingles, XXX, 18 in. pine	3 10@ 3 50
XXX Cedar	2 75@ 3 00
Lath 1¼, No 1	1 85@ 2 00
No 2	1 00@ 1 25
Ash, 1st & 2nd 1 to 4 in	16 00@20 00
Basswood, 1st & 2nd, 1 & 1¼ inch	18 00@20 00
" culls, " "	8 00@11 00

TONAWANDA.

CARGO LOTS—MICHIGAN INSPECTION.

Three uppers	$42 00@44 00
Common	18 00@24 00
Culls	10 00@13 00

LONDON.

The *Timber Trades Journal* of May 1st says: The long interval since Thursday—for Saturday may almost be included amongst the holidays—will tell its tale on the dock and yard deliveries, perhaps more now trade is in such a chronic state of inactivity than had matters commercial been of a more wholesome kind. If orders had been coming in pretty briskly, the man of business would begrudge every day spent from his premises as so much mony lost; and though possibly quite capable of enjoying himself on the days set apart for recreation, would be only too ready to get back again to work. In slack times the case is different, and it does not matter much whether the holidays are extended an extra day or so. Indeed, we expect that the disposition will have been pretty general to carry the pleasuring well into the week.

The money put in circulation at these holiday times, when, as this Easter, everything has been in favor of out-of-door recreation and enormous passenger traffic, cannot fail of having a good effect on trade; and some briskness in buying and selling may be looked for as soon as the effervescence is over and people subside again into their ordinary avocations. But, if the timber trade is to rally again this year, some symptoms of it may be expected to show themselves within the next week or two. As far as London is concerned, the import trade is likely to evince considerable activity this month, and the dock deliveries will be a good index to the rest.

Though it would be unsafe to predict a material change for the better in the trade of this season, there is, nevertheless, ample room for hope that the stagnation of the timber trade is pretty nearly at an end. Some good business will, no doubt, be done. Let us trust it will not be overdone. That apprehension apart, better business might soon be looked for.

The dock arrivals this week are not so active as they were in our last record. Only one pitch pine cargo has come forward—the Hermon, for Messrs. J. M. Ross & Co.—mostly sawn timber; and what came under our notice, being rafted from the ship's side in Canada dock, seemed of fair quality. Steamers have been coming forward freely, however, and two from Gefle are now discharging, or were at the time of writing these lines, in the Surrey Commercial docks.

In the Victor, a barque from Karlshamn, for Messrs. Churchill & Sim, discharging in Canada dock, we noticed on some of the deals considerable quantities of ice, so that the cold must have been pretty intense when they were shipped.

The sale on Thursday was well attended; in fact, it was just as we anticipated, everybody would be there, expecting to see nobody, and Messrs. Churchill & Sim must have been surprised themselves at seeing such a number of buyers present. Prices, however, did not exhibit any improvement, and there was very little disposition amongst those present to put their hands in their pockets for more than would cover the requirements of the existing moment; in fact, some goods went back visibly in the short interval between this sale and that of the same brokers on the 15th April, only a fortnight previously. At that sale Russian wainscot logs fetched 62s. 6d to 65s. (12 ft. and up), while on this occasion goods of apparently the same class and character, and even of the same mark, did not reach higher than 57s. 6d. and 60s., a difference of 8 per cent. against the later seller. The logs, however, were not the straighest we have seen, and to their indifferent character, rather than to market influences, must the big drop in prices be attributed.

The teak buyers appear to have supplied themselves so well on the former occasion that they did not want any more, and not a single lot was sold out of the twenty-two submitted, the reserve price being evidently a bar to business on these goods. Battens went poorly throughout, though now and again a lot sold well, notably the 2x4 scantling mixed at £7 15s, and the 4th at £6 10s, but this was not the general character of the sale. Rough boards seemed sought after, a good many small buyers being to the fore. 1x6 5th quality at £6 was not a bargain, and even at a drop of 10s. at which two of the lots were secured, they were by no means cheap. The Saguenay pine, ex Magnum, was well sold, but just now there is rather a scarcity of 3rd pine plank in the market, and this parcel had nothing very special to recommend it.

The Arendal battens went cheap, as also did the Pitea goods, ex Inverleith, yellow balks falling at 31s. a load, the deals by this ship going also much under cost. Mixed white 3x9 at £6 10s is rather a startling price! Let us hope it is of an exceptional character. The pitch pine ex Lillie Soullard went very low, none of the lots reaching £9. The two lots ex Lock Awe, Savannah stuff, were better done by at £9 15s., but we should think even at this they did not cover cost. Generally, the unreserved goods disposed of were ordinary description, so that we must not take too severe a view of prices. The sale terminated shortly before half-past three, and, so close upon the holidays, things might have gone feebler than they did. There was very little flooring offered, and prices seemed to hang a good deal.

LIVERPOOL.

The *Timber Trades Journal* of May 1st says:—As usual, during Easter week, little attention was paid to business, or, at any rate, it was followed by comparatively small results. Owing to the arrival of several cargoes of Norwegian flooring, the quays are fairly occupied, and of the new arrivals a good proportion is forwarded to the country under old engagements.

Two cargoes of Christiania poles and spars have come to a good market, as the stocks remaining in dealers' hands had become worked down to a very small margin, and a very large quantity of these goods will be wanted for the International Exhibition, and for decorations in the street during the visit of the Queen to this city.

Next week an auction sale of spruce deals, birch timber, &c., will be held by Messrs A. F. & D. Mackay, which will include some of this season's shipments; but for the following week no whitewood sale is announced, nor is it very probable that any well be held, as business will be considerably interrupted on account of the Royal visit, which extends over three days.

The is no change in prices of any of the principal articles in the market, the absence of any improvement in the timber trade being in contrast to other large branches of business in this city, though the consumption of spruce deals and flooring must have been considerably stimulated by the large quantities which have been used in the construction of exhibition buildings and the numerous adjuncts to it in various parts of the ground. Comparatively little of the heavier portion of the work now remains to be done, the contractors for the joinery, Messrs, Brown & Backhonse, of Liverpool, having nearly completed all the heavy work; yet there will still be employment for a great number of hands in finishing the uncompleted parts of the building, which will occupy at least another fortnight, and for which no inconsiderable quantity of timber and boarding will be required.

GLASGOW.

The *Timber Trades Journal* of May 1st says The principal arrivals at Clyde ports to note during the past week are cargo of teak and one of pitch pine at Greenock, a cargo of pitch pine at Port Glasgow, and two of mahogany at Glasgow. Since last writing there have been no auction sales held by timber brokers here, and business has been quiet. Deliveries of deals from Yorkhill yards for April have been much under those for same month last year, being 50,000 pcs. as against 85,353 pcs. in April, 1885; the aggregate for the first three months of this year was, however, equal to that of the corresponding period of 1885.

The first two of this season's Clyde and Canadia steam traders sailed from the Broomielaw her a few days ago, one, the Allen line screw steamship Norwegian, and the other a Donaldson liner, the Alcides, The entire import of Quebec and Michigan deals landed at Glasgow last year came per steam liners. The number vessels of the sailing or log timber fleet that have left Greenock for the St. Lawrence this year is very much under the tonnage that had sailed by this time last year their departure being later owing to the long continuance of frost over Canada.

The tonnage of the vessels launched from Clyde shipyards in April will be a larger total than the monthly returns have shown for some time back; exact figures not yet made up. On one day recently there were four vessels put into the water measuring in the aggregate 10,280 tons. The launches expected to take place in May are few.

TYNE.

The *Timber Trades Journal* of May 1st says:—The arrivals of the past seven days are mainly composed of pit-props, mining timber and battens from the south of Norway, one cargo of battens from Gothenburg per sailing vessel, which is a little unusual in these days of steamers, and also a cargo of staves and headings from Memel.

The Easter holidays having come in the way have interfered a good deal with business and prevented its onflow. What little there is to be done is, according to common report, of a very unprofitable nature, prices being cut down to the lowest possible limit.

Stocks are getting a little lower, and the better descriptions of redwood deals especially may be reckoned very low. Of common battens there are still very large stocks held, and they do not appear very sensibly to diminish.

A few ships are reported to have been chartered during the last few days at rates, on the whole, a little lower than those formerly quoted. 25s. from Hudikswall is reported to have been done, a rate which certainly must have reached the lowest depths.

WOOD-WORKING PATENTS.

The following list of patents relating to the wood-working interests, granted by the United States Patent Office, April 27th, 1886, is specially reported by Franklyn H. Hough, solicitor of American and Foreign patents, 925 F. Street, N. W., Washington, D. C.

340,660—Lumber drier—W. E. Cole, Montgomery, Ala.

340,943—Saw mill, band—C. Esplin, Minneapolis, Minn.

340,697—Saw set—A. W. Zimmerman, Fernwood, Ill.

340,802—Saw setting device—A. C. McEwen, Jersey City, N. J.

340,585—Saw setting device—C. W. Coons & W. H. Metzger, Canton, Ohio.

340,583—Saw tool dressing device—H. O. Kelsey, West Salamanca, N. Y.

PATENTS ISSUED MAY 4.

341,149—Cutter head—H. C. Knowlton, West Gardner, Mass.

341,055—Saw guide—J. A. Robb, San Jose, Cal.

340,990—Saw mill, band—W. M. Dickerson, Indianapolis, Ind.

341,336—Saw mill, band—C. Esplin, Minneapolis, Minn.

341,011—Saw tooth, Diamond—T. A. Jackson, New York, N. Y.

341,187—Saw tooth, insertible—J. Timmons, Newark, N. J.

341,071—Saws, machine for grinding shingle saws—H. A. Squire, Ludington, Mich.

BUFFALO.

We quote cargo lots:—

Uppers	$45 00@46 00
Common	17 00@18 50
Culls	12 50@13 00

LUMBER SHIPMENTS.

The following is a complete list of the loaded barges by the respective forwarders, all of which will have left the harbour before Tuesday night:—

Blanchard & Williamson 10 barges for Montreal	2,175,000 ft.
D. Murphy & Co., 9 barges for Burlington and Whitehall	2,250,000 "
D. Murphy & Co., two barges for Quebec	500,000 "
D. Murphy & Co.,23 barges for Montreal	5,875,000 "
D. Murphy & Co., six American boats for New York	900,000 "
Bangs & Co., five barges for Burlington	1,268,000 "
Geo. A. Harris, eight barges for Burlington	1,875,000 "
Jas. Wood & Co., eight barges for Montreal	2,000,000 "
S. T. Easton, five barges for Kitgston	1,000,000 "

making a grand total of nearly eighteen million feet. Of this amount the following concerns loaded about as follows:—

	Barges.
E. B. Eddy	10
Gilmour & Co.	12
Lord, Hurdman & Co.	6
Bronson & Weston	3
G. A. Grier & Co	6
Perley & Pattee	16
J. McLaren & Co.	5
W. McClement & Co.	2
Ross Bros., Buckingham	4
W. C. Edwards & Co., Rockland	5
Hamilton Bros., Hawkesbury	2

The loading of these barges has given a week's employment to about one thousand laboring men, and has made quite a boom around the Chaudiere. The yards are still quite full and the forwarders are looking for a busy season. The following mills are now sawing:—Bronson & Weston, Gilmour & Co., Grier & Co., Perley & Pattee, and Lord, Hurdman & Co. Messrs. Booth & Eddy expected to start sawing on May 1st.

The following steamers left last night with their respective tows, viz.: Florence, with 8 barges, Montreal; E. B. Eddy, with 8 barges, Montreal; A. McMahon, 12 barges, Montreal.

The following will leave to-night: A. Gilmour, with five barges, Burlington; Icy, with 10 barges, Montreal, and on Monday night, G. A. Harris, with eight barges, Burlington; J. R. Booth and Elfin, with 18 barges, Montreal, Lake Champlain and New York.—*Ottawa Citizen May 1st.*

A NOVEL DESIGN IN STEAMBOATS.

Mr. A. P. Cockburn, M. P., General Manager of the Muskoka & Nipissing Navigation Campany, has just had a boat built on a new principle, from designs of his own, for use by his company. The boat was recently launched at Burk's Falls, Ont., and has been found to work admirably; indeed, the captain has telegraphed Mr. Cockburn that "she is a credit to her designer." She is best described as a combined paddle and screw general purpose steamer, and can run either with paddler or screw, or with both. In the waters were she will ply the channels are often blocked with logs, which seriously interfere with the passage of either paddle or screw steamers, as the logs get under the vessel, and if struck will injure either of the propelling powers, and the boat has to stop while the obstruction is cleared away. It is anticipated that it will be comparatively easy to keep the boat constantly moving by the use of either of her propelling powers when the other has to be detached. The detachment can by instantly made, or a change from screw to paddle, or *vice versa*, without delaying the boat. The boat is 96 feet long, 17 feet 9 inches beam, 27 feet over all, has 7 feet depth of hold, and draws 4 feet 6 inches of water. She is capable of maintaining a speed of thirty miles an hour. It is claimed for the vessel that she will prove one of the most convenient and and useful boats for her size and cost ever built.—*Railway Life*

Indians as Loggers.

Estimates of the log cut on the Court Oreilles Indian reservation, in Sawyer County, Wis., were too small. W. D. Stevens, the government scaler, furnished the *North Wisconsin*, of Hayward, the following statement: Callaghan Bros. cut 33,033 pieces scaling 6,671,860 feet; Dan McDonald cut 46,549 pieces, scaling 9,929,780 feet; Bergerson & Gaynor cut 16,588 pieces scaling 3,326,230 feet; Dobin & Stratton cut 119 660 pieces, scaling 27,573,240; making a total cut of contracted logs, or 47,499,120 feet. The logs were cut from 131 subdivisions belonging to individual Indians.—*N. W. Lumberman.*

AT the sale of timber limits held at Ottawa last week over $140,000 worth of property was disposed of, including a limit on the River Mattawa to Mr. Alexander Fraser for $62,000, also limits for $30,000 and $4,600 to the same purchaser, and a limit to Mr. J. B. Fraser for $5 200. Mr. A. Fraser also bought 344,000 cubic feet of square and wainey timber for $6,880; 357,551 do., $4,290; about 8,000 standard saw logs, $12,560, and about 140,000 feet sawn lumber, $11,900.

THE HENDERSON LUMBER CO. Limited.

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Dealers in, and manufacturers of, Dimension and Bridge Timber, Sawn Lumber, Clapboards, Shingles and Lath. Packing Cases and Boxes a Specialty.

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The Ontario Canoe Co, Limited.

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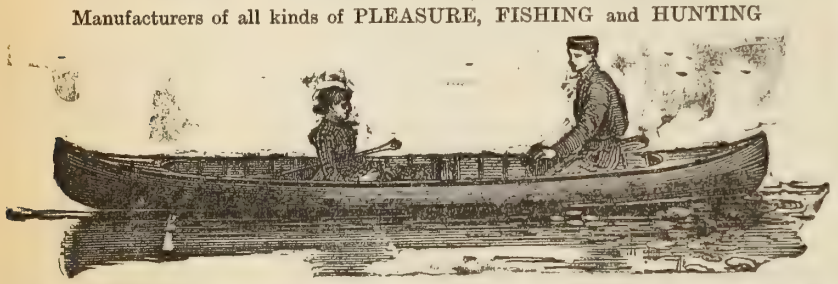


CANOES

Patent Cedar Rib Canoes, Patent Longitudinal Rib Canoes, Bass wood Canoes, Folding Canoes Paddles, Oars, Tents, etc., etc

Gold Medal, London Fisheries Exhibition, 1883.

J. Z. ROGERS,

President and Managing Director.

Send 3 Cent Stamp for Illustrated Catalogue.

Canoes for Lumbermen, designed to carry any amount of goods and chattels and strongly built, made to order on short notice.

HUGH GIBSON,

MANUFACTURER OF

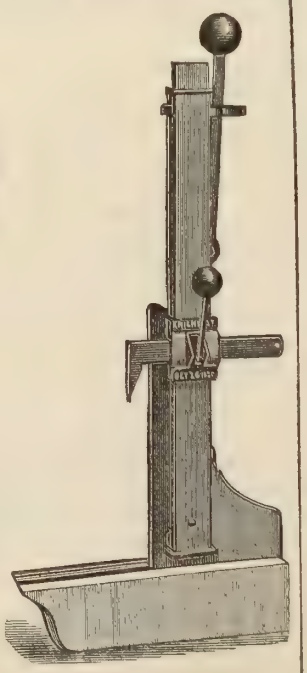
KNIGHT'S PATENT "EXCELLSIOR"

SAW MILL DOGS

The Sawyer's Favorite

For Holding Logs upon a Saw Mill Carriage while being Sawn into Lumber.

These Milldogs I guarantee to give satisfaction in every case. They will hold a frozen log as well as a soft one, for cutting Scantling, Square Timber, &c. These Dogs cannot be excelled, I sell them all on their own merits, give ten or fifteen days trial, and then, if not satisfactory, return them to my order, as I have no agents on the road this year, I will sell them at a reduced price. Send for Circular and price list.



EXCELSIOR DOG.

Manufactured by HUGH GIBSON, CHATHAM.

RENEW YOUR SUBSCRIPTION TO

THE CANADA LUMBERMAN

F. E. DIXON & CO.

Manufacturers of

Patent Lap-Joint Star Rivet

LEATHER BELTING

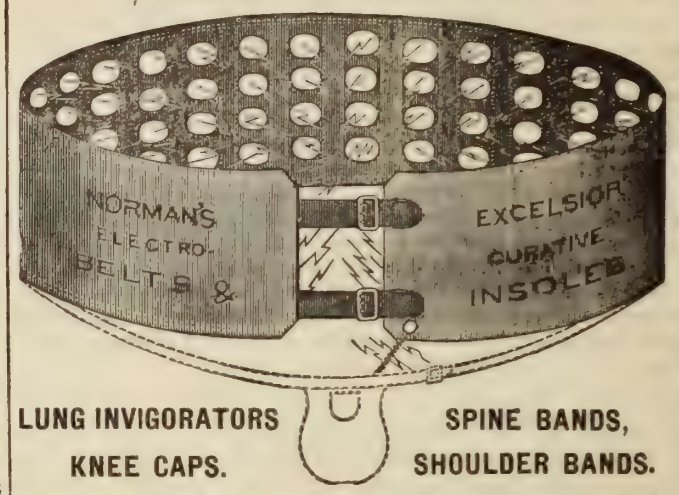
70 KING ST. EAST, TORONTO.

To Mill Owners, Manufacturers & others requiring Leather Belting

Do not buy any Belting unless with DIXON'S PATENT LAP JOINT. It will last longer and do more service than any other. Please note the address, 70 KING ST. EAST, and send for Circulars and Latest Discounts.

Noman's Electro-Curative Belt !

4 QUEEN ST., EAST, TORONTO.



LUNG INVIGORATORS

KNEE CAPS.

SPINE BANDS,

SHOULDER BANDS.

This Belt is the last improvement and the best yet developed Curative Appliance in the world for

INDIGESTION,

NERVOUS DEBILITY,

RHEUMATISM,

and all diseases of men, and is a grand remedy for Female Complaints also. Circular and consultation free.

A. NORMAN, Medical Electrician

4 QUEN STREET EAST, TORONTO.

N. B.—Mr. Norman has had long experience in the Treatment of Diseases by Electricity, and will give his personal attention to every case, by letter or examination

Sisters of Charity

Charity, attached to St. Mary's Infant Asylum, Dorchester, Mass., certify to the inestimable value of Ayer's Sarsaparilla in the treatment of sore eyes and skin diseases, among the many unfortunate children under their care. Mrs. S. D. Bodwell, Wilmington, Mass., writes concerning the treatment of her daughter, who was troubled with sore eyes, as follows: "I gave Ayer's Sarsaparilla to

My Little Girl,

and must say that she never took anything that helped her so much. I think her eyes never looked so well, as now, since they were affected, and her general health is improving every day. She has taken but half a bottle." A. J. Simpson, 147 East Merrimack st., Lowell, Mass., writes: "My weak eyes were made strong by using Ayer's Sarsaparilla." C. E. Upton, Nashua, N. H., writes: "For a number of years I have been troubled with a humor in my eyes, and was unable to obtain any relief, until I commenced using

Ayer's Sarsaparilla

may be "fairest and foremost of the train that wait on man's most dignified and happiest state," but the dignity and happiness of man cannot long endure without the health that may be obtained in a few bottles of Ayer's Sarsaparilla. A. W. Parker, lumber dealer, 209 Bleury street, Montreal, Que., writes: "After being troubled with Dyspepsia for a year, and with Salt Rheum

For a Number of Years,

I was cured of both diseases by using six bottles of Ayer's Sarsaparilla." M. G. Traine, Duxbury, Mass., writes: "I have found Ayer's Sarsaparilla an efficacious remedy for bilious troubles and Dyspepsia." Henry Cobb, 41 Russell st., Charlestown, Mass., writes: "I was completely cured of Dyspepsia, by the use of Ayer's Sarsaparilla." Wm. Lee, Joppa, Md., writes: "I have tried Ayer's Sarsaparilla, and it has done me so much good that I shall always regard it as the best of blood purifiers." Eminent physicians prescribe Ayer's Sarsaparilla. I believe it to be the best of blood purifiers."

in all cases requiring a powerful alterative treatment.

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass., U. S. A.

For sale by all Druggists. Price $1; six bottles for $5.

— RENEW YOUR —

SUBSCRIPTION

FOR THE

Canada Lumberman

IT WILL PAY YOU, Because :

1. It is the only newspaper published in the Dominion of Canada devoted to the lumber and timber industries.
2. It is devoted to the development and utilization of our forest wealth.
3. It furnishes complete and reliable quotations of prices of lumber in all the leading markets.
4. Its columns are filled with interesting reading matter, valuable alike to the land owner, manufacturer or dealer.
5. It costs only $2.00 per year to have it sent, post-paid, to any address in Canada, and no land owner, lumber dealer, manufacturer or individual in any way connected with timber industries, can afford to do without it.

☞TO ADVERTISERS.

It has a circulation among saw mill owners, manufacturers, lumber and timber dealers and all classes connected with the timber business.

Examine the field, count the cost, and you will at once decide that the CANADA LUMBERMAN is the

———CHEAPEST, BEST, MOST RELIABLE and ONLY TRUE MEDIUM———

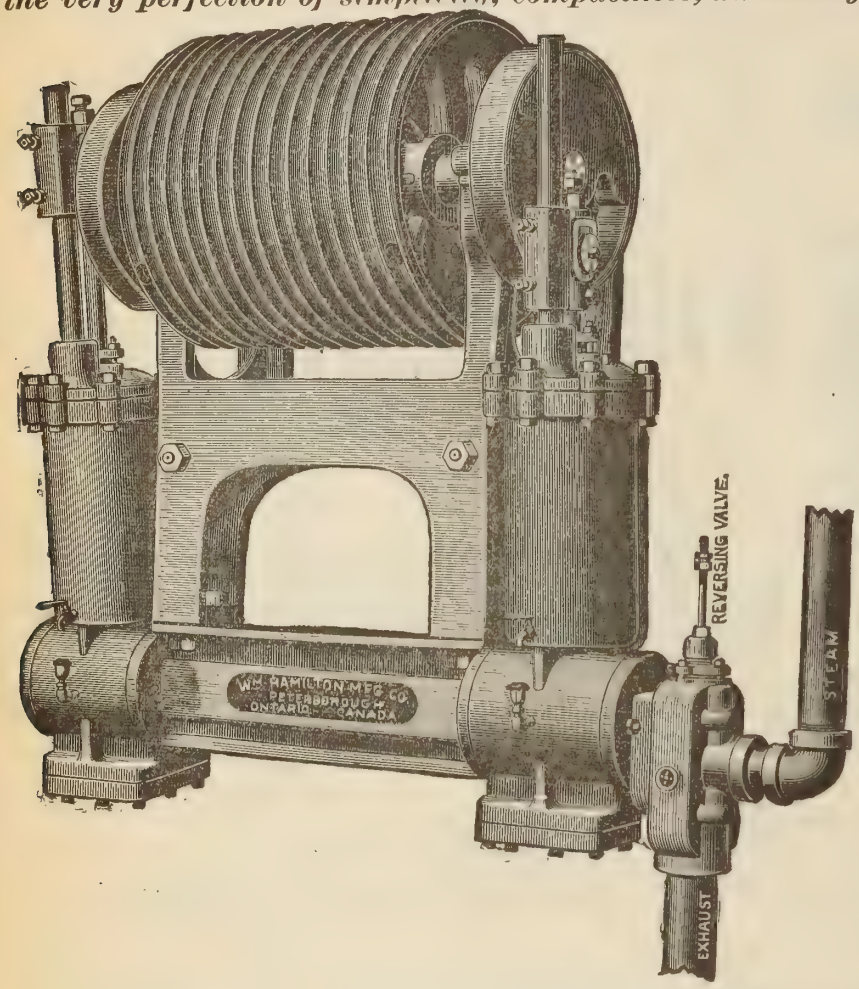
for placing your goods or wares before the saw-mill men and lumber and timber dealers of the Dominion.

CUNNINGHAM'S

PATENT OSCILLATING TWIN ENGINE

FOR STEAM FEED IN CIRCULAR MILLS WITH RACK OR ROPE.

This Engine has practically but two moving parts, aside from cranks and shafts. The whole array of eccentrics, valves, valve rods, connecting rods, cross heads, slides, levers, rock shafts, bell cranks, etc., is done away with, and the very perfection of simplicity, compactness, durability and cheapness attained.



The above engraving illustrates the Twin Engine, 10x16, for Rope Feed, for Saw Mill Carriages. The spool is 27 in. diameter, 30 in. face, is grooved 2 in. pitch for $1\frac{1}{2}$ in. rope. The shaft is steel, $4\frac{1}{2}$ in. diameter, with disk cranks. No connecting rods, eccentrics or valve rods to get loose and out of order. The ports are in the trunions, and worked by an oscilliation of the cylinders, and are held in their place in the downward motion by a steam cushion below. The sawyer's valve is a perfect balance, and by moving this valve the engine can be reversed, stopped or started almost instantaneously if necessary, as the sawyer has perfect control of it by his lever either to go fast or slow. Should the sawyer let go of his lever either by mistake or any other cause, it is balanced so that the valve will come to the centre and cut the steam off both cylinders and stop the feed. When standing, the lever is locked or fastended, so that is is impossible for it to start off itself. The engine stands upright below the carriage, and bolted to two upright beams, placed on the mill for the purpose. When a rack is preferred in place of the rope, we put on a steel wheel 30 in. in diameter, and the engine placed high enough to work into the rack on carriage bar, or if the beams come in the way, an idler wheel can be used between engine and rack segs; or, the engine can be placed at a distance and have a shaft rom it to the carriage; or it can be placed in the engine room, where it is under the control of the engineer for oiling, thence by shaft and pinion to carriage rack bars. These engines are well adapted for cutting long logs, or where the logs are mixed, the advantage of this feed will be apparent to mill men. When the carriages are used in two or more sections, the couplin and uncoup ling of each section is quick and simple.

There were two of these feeds working this summer and giving the best of satisfaction, one with rope feed at James Playfair & Co's Mill, Sturgeon Bay, near Waubaushene, and one at the new mill furnished by us to Francis Carswell & Co., at Calabogie Lake, on the Kingston and Pembroke R. R. This mill is working with the Rack and Pinion feed, and drops from fifteen to seventeen stock boards per minute. We have also sent one to the Rathbun Company, Deseronto, to put in to feed their heavy Circular Mills. They will also commend themselves for various other cases, especially for running Elevators, hoisting Engines, and wherever a simple and easily reversible motion is required.

We would also call attention to our Improved Band Saw-Mill for cutting logs

☞ ***We guarantee this to be the best Mill of its kind got up, and would ask any one wanting a good Band Saw-Mill to communicate with us. We would also call the attention of Mill Men to our new IRON GANGS, CIRCULAR MILLS and MILL MACHINERY. For further information, prices, &c., address the Manufacturers,***

The Wm. Hamilton Manufacturing Co'y, Limited

PETERBOROUGH

NORTHEY & CO'S STEAM PUMPS, TORONTO, ONT.

Pumps for Fire Protection a Specialty.

SAVE INSURANCE.

Our Combined Boiler Feed and Fire Pumps are a NECESSITY IN EVERY WELL ORDERED STEAM MILL or FACTORY.

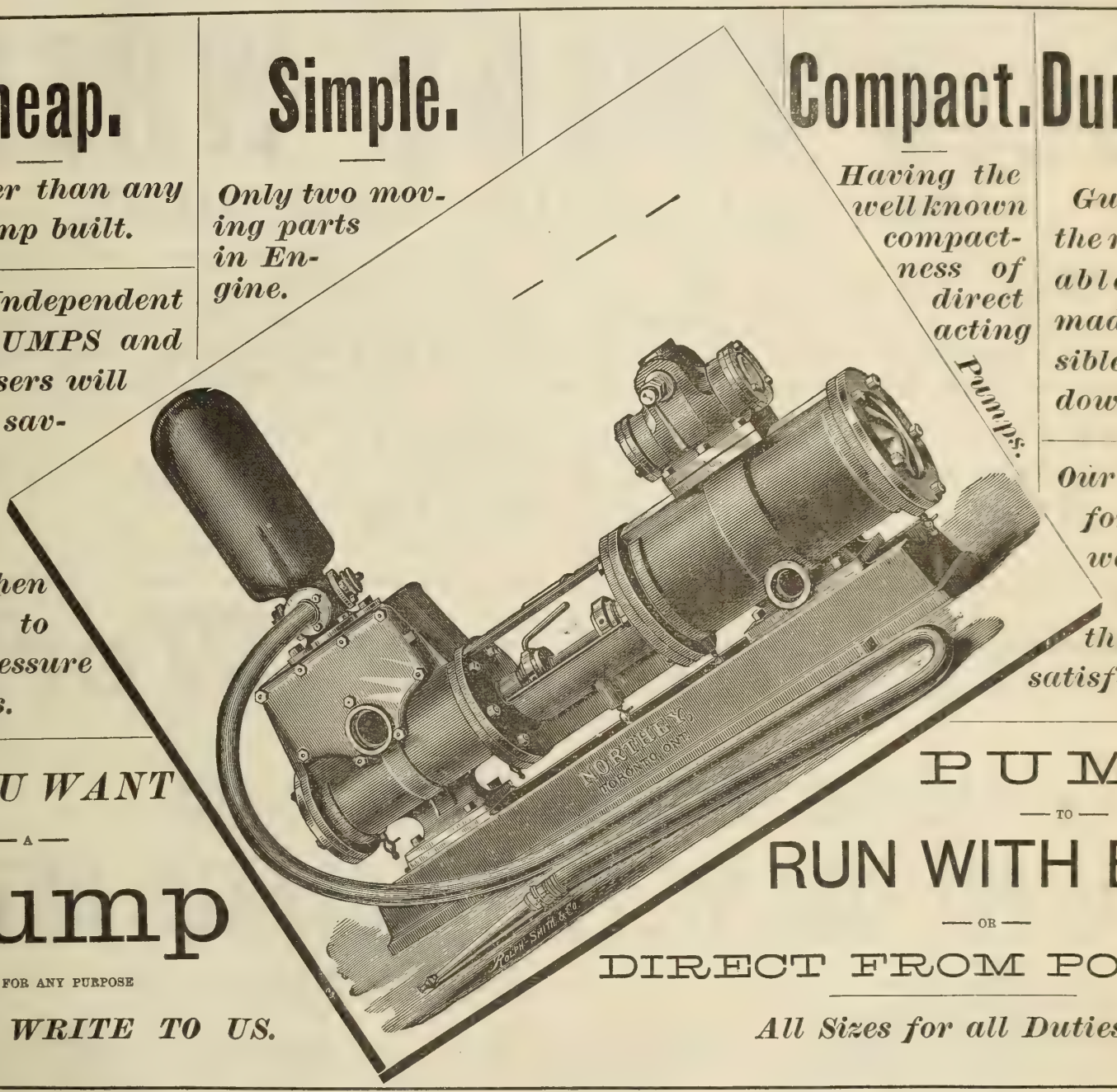
Cheap.

Cheaper than any Pump built.

Our Independent AIR PUMPS and Condensers will effect a saving of 30 to 50 per cent. when applied to high pressure Engines.

Simple.

Only two moving parts in Engine.



Compact.

Having the well known compactness of direct acting Pumps.

Durable.

Guaranteed the most durable Pump made; impossible to break down.

Our PUMPS for general water supply give the greatest satisfaction.

IF YOU WANT

— A —

Pump

FOR ANY PURPOSE

☞ ***WRITE TO US.***

PUMPS

— TO —

RUN WITH BELT

— OR —

DIRECT FROM POWER

All Sizes for all Duties.

Our make of Pump is specially adapted to Mills in out of the way places, as they can be absolutely relied on, and occasion no vexatious stoppages for repairs.

WE INVITE CORRESPONDENCE ON ANY POINT CONNECTED WITH PUMPS.

SEND FOR CIRCULAR AND STATE YOUR REQUIREMENTS.

NORTHEY & COMPANY,

Corner FRONT & PARLIAMENT STS, TORONTO, ONT

THE TANITE COMPANY

STROUDSBURG,

MONROE COUNTY, PENNSYLVANIA, U.S.

MANUFACTURERS OF

SOLID EMERY WHEELS

AND SHARPENING MACHINERY.

The products of the Manufacture of the Tanite Company have, for almost 18 years enjoyed a great reputation, and have been recognized for a long while, in all the countries of the world as a type of excellence in this class of work. In order to increase in Canada their already widely extended use, the Co'y has recently added to the liberality of its terms and conditions, and has chosen the following Houses, so extensively known, to be its Agents:

BEAUDET & CHINIC, F. H. ANDREWS & SON } QUEBEC.
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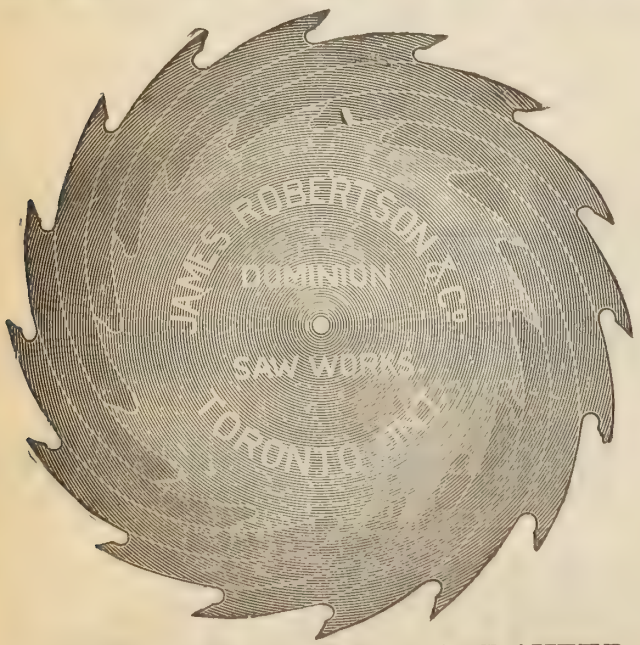
Dominion Saw Works!

JAMES ROBERTSON & CO.

253 to 267 KING ST. EAST, TORONTO, ONT.



EVERY SAW FULLY WARRANTED.
Prices on Application.

MANUFACTURERS OF SAWS

Circular, Shingle, Gang, Cross Cut,
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THURBERS ROYAL

Anti-Friction Babbit Metal

IMPORTERS AND DEALERS IN

Band Saws, Emery Wheels, Files,
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THE CANADA LUMBERMAN

AND MILLERS' MANUFACTURERS AND MINERS GAZETTE.

PUBLISHED SEMI-MONTHLY.

The only Newspaper devoted to the Lumber and Timber Industries published in Canada

SUBSCRIPTION $2.00 PER ANNUM

VOL. 6. PETERBOROUGH, ONT., JUNE 1, 1886. NO. 11.

NEW BRUNSWICK FORESTS.

The New Brunswick Government has published an interesting work, written by Mr. Charles H. Lugrin, A. B., Secretary of the New Brunswick Board of Agriculture, on the resources, progress and advantages of that Province. The following is the chapter on the forest, continued from last week :—

ELM.

There are two species of elm in New Brunswick, the white and the red. Both are beautiful shade trees. The white elm often grows to the height of 100 feet, its branches are long and pendulous, its foliage rich and pleasing in shape. It grows wild on the low, deep soiled intervals, and the quantity available for commercial uses is limited. The wood is strong, tenacious and elastic, does not split easily, and bears the driving of bolts and nails better than any other wood. It is durable if kept either constantly wet or constantly dry, but decays rapidly when these conditions alternate. It is used in making ships blocks, and for other purposes in which wood of its peculiar properties is required.

The elm does not grow to as great a size as the white elm. Its wood possesses the same properties as that of the white elm, but is somewhat coarser and more durable. Its home is on dry elevated situations.

BUTTERNUT

is a species of walnut found along river banks It grows to a considerable size and yields in profusion nuts which are agreeable to the taste and very oily. The name of the tree is derived from the fact that the Indians formerly used to pound the nuts and having boiled them so as to separate the oil, used it with their food as a sort of butter. Butternut wood is light and of a reddish tinge, taking a high polish. It is used in making furniture, for wainscoting and other purposes. It is easily propogated and grows rapidly. There being a constant demand for the wood its cultivation would probably be found profitable.

ASH

is found in New Brunswick in several varieties, the white, black and yellow chiefly, the wood of each differing according to the soil and situation where it is grown. The white ash is a common tree growing to the height of sixty feet with a diameter of eighteen inches or more. Its growth is rapid and its foliage beautiful, the trunk is perfectly straight, the wood strong, tough and elastic. Black ash is a smaller tree than white ash and is somewhat coarser. It is a fashionable wood for bedroom furniture, its texture being very pleasing and is used for a variety of purposes in first-class buildings. Being already a valuable article of commerce, its supply will probably not long keep pace with the demand; its cultivation will likely be profitable. It is used by the Indians in the manufacture of baskets, for which it is admirably adapted. The yellow ash is similar to the black ash but is lighter in color. The red ash is somewhat similar to the white ash.

OAK

is found in New Brunswick in three varieties, the white, the red and the grey. The wood of the latter is very durable. The supply is limited.

CHERRY

is found in abundance. The fruit is small and slightly bitter. None of the varieties attain sufficient size to possess much commercial value.

POPLAR

occurs in two varieties, the Aspen and the balsam poplar, or "balm of Gilead." Poplar wood is very white and of light weight. It becomes hard and tough when dry and takes a high polish. Its principal commercial use at present is in the manufacture of what is known as Excelsior, an article used for mattress making, upholstering and packing purposes, the wood for these purposes being cut into long shreds. The demand is large and increasing. The lightness, whiteness and durability of poplar are causing it to become very much esteemed for many purposes. It makes an excellent paper pulp.

BASSWOOD

is found in considerable quantities. Its properties are somewhat similar to those of poplar. The natural color of the wood is pale yellow.

HORNBEAM AND IRONBEAM

are tough heavy woods capable of sustaining great weight. These trees do not attain a great height.

Alders willows and other inferior trees abound, but those above named constitute the principal part of the New Brunswick forests. It will readily be admitted that such forests must be exceedingly beautiful, and the soil which supports them of great fertility. Such is particularly the case with the deciduous trees, "the hardwood ridges," as they are called, that is the rolling hills covered with maples, birches and beeches, with a few scattered spruce and pine trees, not only making a most attractive landscape, but being generally, when cleared, the finest of farming land. But if these ridges are beautiful to look upon in the summer, they are resplendent in the autumn when the ripened leaves, after the early frosts, begin to change their color. The brilliant scarlet and other hues of the maple, the golden-yellow of the elm, the almost countless shades and tints of red, blue and brown, relieved by the sombre evergreens, make up a picture which the eye never grows weary of and words cannot describe.

GENERAL OBSERVATIONS.

Although for nearly one hundred years the forests of New Brunswick have furnished the greater portion of the exports of the Province, and the trees have been cut in a most lavish and wasteful manner, it is doubtful if their commercial value has yet been realized. It will be seen from the facts above given that the Province contains extensive supplies of wood, valuable for countless purposes. The forests are intersected by streams in all directions, and these with the railways furnish the best possible means of conveying the wood to the seaports, whence it can be shipped to the market. Innumerable water powers afford facilities for cheap manufacture, in fact all the elements exist requisite to make the Province the seat of very extensive wood working establishments, except the single essential of capital. A prominent architect of Liverpool, England, in a letter to Mr. Cornwall, agent of New Brunswick in England, after speaking of the adaptability of New Brunswick woods to numerous purposes in connection with buildings, said :—

"There must be a great advantage in making wood-work in countries where the woods are available, as well as cheap steam producers, besides the saving of carrying so much waste timber such a long distance, for at least one-seventh of timber imported is cut to waste in planing, sawing and refuse. The extra cost of carrying manufactured articles would, I judge, not nearly amount to the difference."

Large orders have been offered by English houses to manufacturing establishments in New Brunswick, but, for lack of capital, they have not been accepted. The *Monetary Times*, a commercial paper published in Toronto said :

"Great Britain and other European countries use enormous quantities of wooden goods, and they are largely made in the United States and shipped from Boston and New York. Why should not Canada, whose supplies of timber are nearer the seaboard, compete successfully? It can be done; but it is not to be done in a day. Nor is it to be done without observation and pains."

But it is not only to the European market that New Brunswick may look for the disposal of the products of its forests. In the United States the question of wood supply is becoming annually more serious, and the people of that country will shortly find themselves compelled to admit Canadian wood goods duty free. Already the tendency in this direction is unmistakable. It is evident, therefore, that the manufacture of all descriptions of wooden goods may be regarded as likely, at no distant day, to form an important industry in New Brunswick. Among the articles which may be advantageously made are building material for both inside and outside finish; shipbuilding, from the hull to the spars; agricultural and horticultural implements; waggons, carriages, sleighs; packing. salt, fish, and other boxes; tubs, pails, churns, step-ladders, furniture of all kinds, broom, hoe, pick, edge tool and other handles; clothes-wringers, washboards, clothes and towel horses, bench screws, Venetian blinds and slats, cloth boards and rollers; bobbin spools, ships' block, coopers work of all kinds; boot and shoe lasts, trees and crimps, musical instruments, railway ties, carving and turned work, wood pulp.

Several establishments are already engaged in the manufacture of various descriptions of wood goods, among them being the Quaco Wood Manufacturing Company, the Petitcodiac Spool and Bobbin Works, and the Woodstock Woodworking Company, and the establishment of the Flewwellings, at Hampton, and others, all of which are doing an excellent business. The attention of investors is directed especially to this industry.

To the settler in New Brunswick the existence of an abundance of the best of fuel and building and fencing material is an advantage which can scarcely be over-estimated. It is truly one of the greatest recommendations which any country can have. In addition to the value of the fuel for domestic use, the cutting of it for sale, particularly on land adjacent to the railways, is a profitable occupation, as will be seen by statistics given elsewhere. Wood for fuel is a not unimportant article of export to the United States, and the demand will no doubt largely increase. The New Brunswick farmer has for the labor of cutting it, the material for his buildings and fences, and an inexhaustible supply of fuel, and these considerations far outweigh any supposed advantage which the prairie farmer may have in preparing for his first crop. The experience of farmers in New Brunswick has clearly proved that the existence of the forest is one of the greatest advantages which the settler can possess. In the matter of fuel nothing but experience can tell the difference in comfort between the great fire of blazing logs which a New Brunswick farmer heaps up on a winter night, as much for the pleasure of looking at it as for warmth, and a smouldering fire of coal or of wood, so scarce that the pieces must be counted, which his brother in the Far West has to be content with When the logs blaze and crackle on the hearth, their streaming light illumining every corner of the room, what matter if the storm blows fierce or the mercury drops below the freezing point? So long as the forest lasts, and there is no reason why the preserved wood lots should ever be exhausted, the New Brunswich farmer need never fear the cold. The problem of fuel is one with which the settler in this Province need not concern himself.

THE proposition made last season for a telegraph cable to connect the Manitou islands, in Lake Michigan with the mainland, so that news from distressed vessels, and other marine news can be sent to interested parties at ports of departure, and elsewhere, is about to be realized.

WOOD-WORKING PATENTS.

The following list of patents relating to the wood-working interests, granted by the United States Patent Office, May 11th, 1886, is specially reported by Franklyn H. Hough, solicitor of American and Foreign patents, 925 F. Street, N. W., Washington, D. C.

341,703—Saw handle—B. H. Ten Eyck, Emporium, Pa.

341,678—Saw mill, circular—J. P. Moore, Snow Hill, Md.

341,789—Saw tooth—E. J. M. Becker, New York, N. Y.

341,667—Sawing stumps, machine for—A. Leitelt, Grand Rapids, Mich.

341,513—Turning wooden bowls, machine for—P. B. Skinner, Wilmington, Indiana.

PATENTS ISSUED MAY 18.

341,951—Log turner—R. W. Shelbourne, Blandville, Ky.

342,235—Plane—A. J. Traut, New Britain, Conn.

341,975—Planing machine—G. F. Wetherill & R. B. Jones, Chicago, Ill.

341,989—Saw, band—E. C. Atkins, Indianapolis, Ind.

342,234—Saw, drag—F. H. Taylor, St. Joseph, Mich.

342,188—Saw swaging machine—M. Covel, Chicago, Ill.

342,172—Saw swaging machine—G. S. Black, Indianapolis, Ind.

342,263—Saw teeth, device for cutting and gumming—A. S. Norwood, West Point, Miss.

342,029—Saw tooth, insertible—F. Miller, Mendinoco, Cal.

342,068—Shingle sawing machine—G. E. Cooke, Clarksville, Tenn.

342,017—Shingles, machine for cutting—A. B. Ireland, Greene, N. Y.

PATENTS ISSUED MAY 25.

342,536—Log handling mechanism—W. J. Perkins, Grand Rapids, Mich.

342,535—Saw—W.J. Perkins, Grand Rapids, Mich.

342,560—Saw frame—A. M. Barber, Bridgeport, Conn.

342,416—Saw mill, band—E. C. Atkins, Indianapolis, Ind.

342,361—Saw mill dog—E. D. Johnson, Milton, Fla.

342,534—Shingle sawing machine—W. J. Perkins, Grand Rapids, Mich.

THE OLD PLAN AND THE NEW.

Mr. Jas. F. Morse, Vice-President of the Security Mutual Benefit Society of New York York, 233 Broadway, has recently placed insurance to the amount of $100,000 on the lives of Ex-Senator Arkell and his son, W. J. Arkell, proprietor of the Albany *Evening Journal* and the *Judge*. This insurance has been placed in the above named and other leading companies doing business on the assessment plan. The annual cost of carrying it will be less than a thousand dollars. In the old life or level premium companies the cost would be four thousand five hundred dollars. The Arkells are among the leading business men of the country, and their endorsement of this method of life insurance will carry weight in the businesss community.

The Security Mutual Benefit Society was organized in 1881, and we learn that the cost for assessments to a member forty years of age has been less than five dollars a year for each thousand dollars of insurance.—*New York Financial Review.*

A good move has been made for the disposal of sawdust by a lumber firm on the Ottawa Messrs. Edwards & Co. They are having a monster furnace erected in which to burn the sawdust and other refuse from their mill. The structure, which is being built of fire brick encased in plate iron, is a circular tower, and when finished will be 140 feet high, and is 36 or 40 feet in diameter.

JAMES WATSON, of Emerson, Man., has been awarded the contract for getting out timber for use in the construction of the Canadian Pacific snow sheds. These sheds are to be constructed in the Selkirk range and the Rockies. They will be some twelve miles in length and will contain 14,000,000 feet of timber.

BOBCAYGEON.

TIMBER DRIVES —No less than three drives of logs in the immediate vicinity of this village on their rapid course down the Gull river waters. They belong to the firms of Dixon & Co., J. E. Gould, and McArthur and Thompson. Mr. Aikins expects a very large drive to issue from Rocky creek upon Gull Lake during this week, and Ullyott & Co. have a large drive gone down ahead. These are all about a month in advance of the progress made last year. Altogether the present spring has been a most beneficial one to both lumbermen and settlers and we trust a rich harvest will ensue.

Moving a Big Tree.

Col. Walter C. Larned, the famous art connoisseur, has been in San Francisco for several weeks on a curious mission. He wishes to transplant to the handsome lawn of his magnificent summer residence at Lake Forest one of the big California trees, and he has just closed a contract with the Wells & Fargo Express company to this effect. Special cars are to be constructed to transport the tree across the plains and the umbrageous leviathan will have to be drawn by horse power after the Missouri river has been reached, because the obstacles in the way of railroad curves and bridges east of that point can not be overcome. The tree which Col. Larned has selected is somewhat over 300 feet in height, is 98 feet in circumference near the base, and weighs about 40,000 tons. The cost of transplanting this monarch of the forest will exceed $18,000.

FOR telegraph poles in England the Norway spruce is employed. Larches of English growth, formerly employed were found sadly wanting in durability. In America, cedar is used where it can be had tall and cheap enough, yet nothing is found better than chestnut, cost and durability both considered. Ten or fifteen years is the average duration of an American telegraph pole. Though the English are talking of iron for telegraph posts, it is a conceded fact that they will cost fourfold those of wood. It will be some time before iron posts are used in a wooden country like the United States.

MESSRS. Rathbun's saw mill at Campbellford, Ont, is fast approaching completion, and very shortly it is expected to be at work. The boilers are being fitted up this week.

THE Eau Claire Lumber Co. is actively preparing to erect a saw mill at Calgary, N. W. T.

A Sure Thing.

There are very few things in this life of which we may be absolutely certain, but this is one of them: that Dr. Pierce's "Pleasant Purgative Pellets" have no equal as a cathartic in derangements of the liver, stomach and bowels. They are very small and their action is pleasant. Purely vegetable, perfectly harmless. 25 cents a vial. All druggists.

PETERBOROUGH WATER CO'Y.

OFFICE, corner of Hunter and Bethune Sts. W. HENDERSON, Superintendent. d71

OVER WORKED Women

For "worn-out," "run-down," debilitated school teachers, milliners, seamstresses, housekeepers, and over-worked women generally, Dr. Pierce's Favorite Prescription is the best of all restorative tonics. It is not a "Cure-all," but admirably fulfills a singleness of purpose, being a most potent Specific for all those Chronic Weaknesses and Diseases peculiar to women. It is a powerful, general as well as uterine, tonic and nervine, and imparts vigor and strength to the whole system. It promptly cures weakness of stomach, indigestion, bloating, weak back, nervous prostration, debility and sleeplessness, in either sex. Favorite Prescription is sold by druggists under our *positive guarantee*. See wrapper around bottle. **Price $1.00, or six bottles for $5.00.** A large treatise on Diseases of Women, profusely illustrated with colored plates and numerous wood-cuts, sent for 10 cents in stamps. Address, WORLD'S DISPENSARY MEDICAL ASSOCIATION, 663 Main Street, Buffalo, N. Y.

SICK HEADACHE, Bilious Headache, and Constipation, promptly cured by Dr. Pierce's Pellets. 25c. a vial, by druggists.

THE

Gutta Percha & Rubber Mfg. Co'y

T. McILROY, Jr., Manager.

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do	*July 13th,*	*do*	*November 2nd,*

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Hall's Hair Renewer,

and now rejoice in the possession of hair as abundant as ever." E. J. Adams, St. Paul, Minn., writes: "A diseased scalp caused my hair to fall out, and, after using a number of preparations without avail, I finally tried Hall's Hair Renewer, which caused a vigorous new growth. I am still using it, and could ask for no better results." Mrs. R. H. Corning, Battle Creek, Mich., writes: "By the use of Hall's Hair Renewer, my head, which was quite bald, has been covered with a fine growth of young hair."

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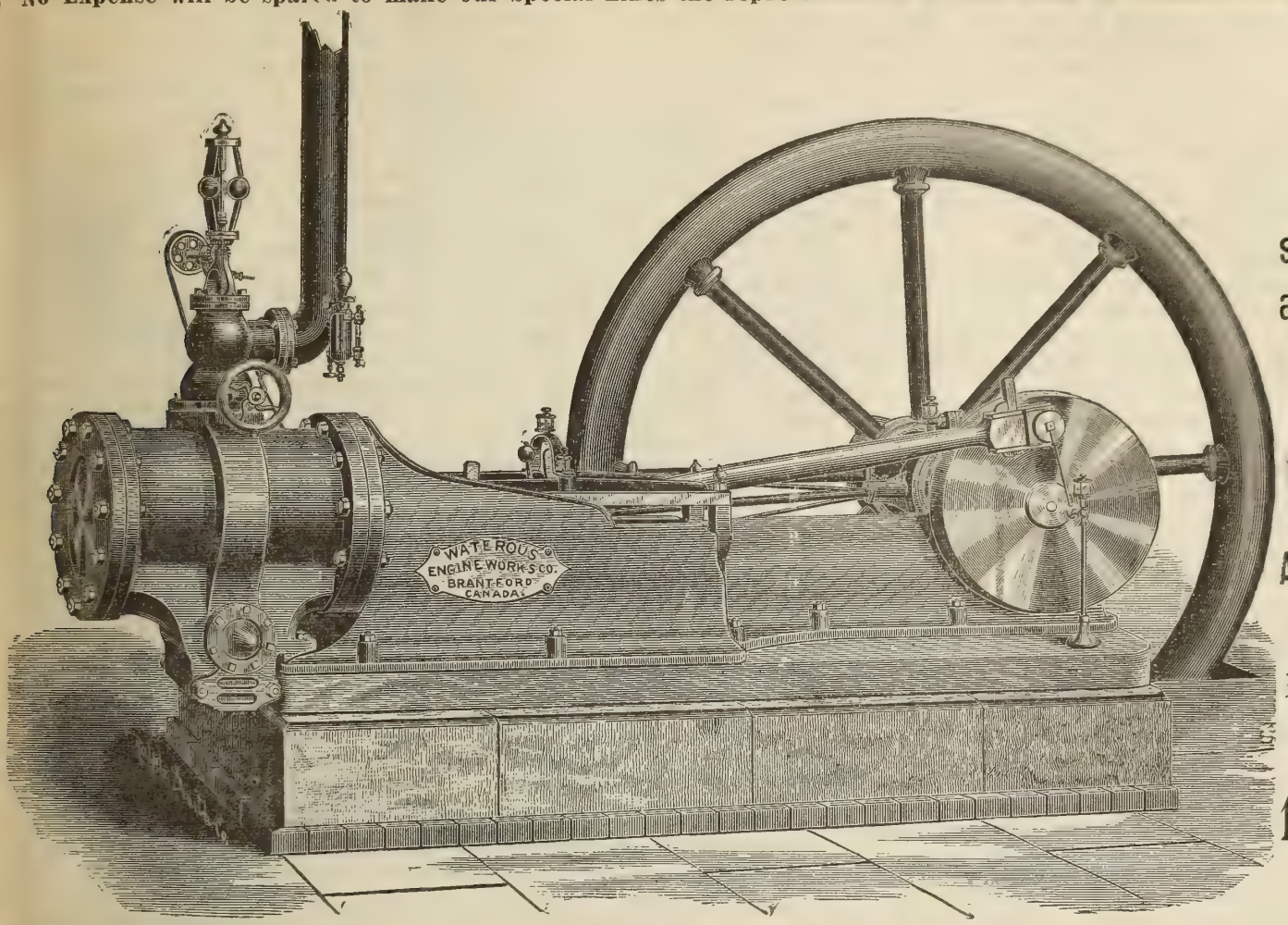

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EXPORT DUTY ON SAW LOGS.

The following letter has been published in the Montreal *Gazette*:

SIR,—The unanimity with which an increase of the export duty on saw logs is approved by the press and the people of Canada is most gratifying—the only question in the matter being whether the present is an opportune time for making the increase, now that the Government of the United States is considering the propriety of removing duties from lumber, some fearing that it might be looked upon as an unfriendly act towards the people of the United States. The fact is, no greater mistake can be imagined than this, for the people of the United States, with the single exception of the few lumbermen, are all in favor of free lumber, and would be delighted at any legislation that would tend to make the United States lumbermen let go their grip. The United States lumbermen are looked upon by the people generally as a greedy set of cormorants, who have no thought but their own interests, and who will use any means, however despicable, to carry out their aims.

The New York *Nation*, one of the most respectable papers published in the country, said of them in 1883, on the subject of the tariff on lumber:—

"The duty was placed upon Canadian lumber in the interests of the Northwestern lumbermen. It benefitted no other class, and was desired in no other section. * * * The country is not without words of warning in regard to the dangers which threaten the forests; they have been spoken far and wide. In the meantime we continue to take $2 from the pocket of every man using a thousand feet of pine or spruce lumber, and hand it over to the manufacturers as a bounty to induce them to destroy the forests more rapidly. It is natural then that the manufacturers resist any attempt to have this duty removed. They will make a still more determined fight to prevent it. They are bold, rich and united. They are actuated by a single purpose—to convert the greatest amount of forest into the largest amount of money in the shortest possible time. Their organization is perfect. They control legislatures and elect members of Congress; they own Governors and Senators. They know what they want and they mean to have it at any cost, and without any regard to the future welfare of the country. It will take something stronger than the tariff commission to make them let go their grip upon the people. We repeat, the tariff upon lumber is a premium on the devastation of the country, and should be repealed without delay."

These are the strong words: "They control the legislatures and elect members of Congress; they own Governors and Senators. They know what they want, and they mean to have it at any cost."

We are now regaled with any number of bunkum speeches and resolutions by Senator Frye, of Maine, who is attempting to raise a tempest in a teapot in Washington about the fisheries; and I have no doubt many people think that this doughty Senator is greatly exercised about fish, but it is not free fish but free lumber that is troubling him, and everything is fish that comes to his net, so that he exercising his ingenuity to see how he can kick up a rumpus about fish or anything else to prejudice his people against Canada in order to serve his friends the lumbermen.

Here is what the New York *World* said of this gentleman in 1883, under the heading of the lumber swindle in Congress:

"Mr. Van Wyck, the independent and public spirited Senator from Nebraska, yesterday made an emphatic protest against one particularly outrageous swindle of the tariff. He moved to strike out the whole list of duties on wood and woodenware, and let all these things in duty free. This was a patriotic proposition, and was naturally opposed by * * who represents the men who are anxious to clear out what is left of the forests of Michigan, and Frye, who represents the men who are anxious to clear out what is left of the forests of Maine. These greedy creatures in asking for a duty on lumber or its products, are simply asking for a bounty to be given them for making away with the patri mony of the country," and after showing how rapidly the pine and spruce timber supply was diminishing continues: "How their replacement is to be secured is the problem that ought to agitate statesmen. The problem that does agitate statesmen of the school of * * * and of Frye is how can the rest of the forest be most speedily and effectually cleared, and a bounty for clearing them, in the form of a duty upon the competing product of Canada, is the device formed by these statesmen for that end. * * * * Mr. * * * of Michigan, and Mr. Frye, of Maine, think it better that their lumbering constituents should have large profits and quick returns than that the next generation should have any timber to cut. But there is no reason why other Senators should not deem it more important that the forests should be preserved than that * * * and Frye should continue to adorn the Senate by dint of grinding the axes of their timber cutting constituents."

So we see that Mr. Frye's fishery interest is of a somewhat fishy character. If we wish to assist the people of the United States to have the duties removed from Canadian lumber we must make the United States lumbermen who have timbe properties in Canada alike interested with ourselves in this matter, and even Col. Jeffers, with his 2,000 million feet of Canadian pine, when he finds that he must either saw his logs in Canada and pay $2 per 1,000 United States duty like the rest of us, or contribute largely to the Canadian treasury in case his patriotism is so much superior to self-interest that he will in any event take the logs over and saw them in Michigan, might weaken slightly in his patriotism; for I have always observed that patriotism and $2 per 1,000 on Canadian lumber were strong cards with United States lumbermen. It would be most unjust to suppose that the $2,000,000 advantage Col. Jeffers would enjoy in taking over his two thousand millions of timber to be sawn in Michigan, could have any influence in arousing his patriotism. Put the export duty on saw logs up to $4 per thousand feet, and in less than a week I will warrant you will find governor, colonels and the whole army of Michigan lumbermen who are in Canadian timber lands down at Washington, as active in urging Congress to remove the duties from lumber as they are now persistent in having them retained.

That the fiscal arrangements of Canada had resulted in ruining the saw mill interests of the north shore of Lake Erie was bad enough in itself, but to be laughed at for our folly by those gentlemen who had made their millions out of our timber by towing it over to Buffalo and Tonawanda, N. Y., leaving us the pine stumps alone remaining in evidence of the wealth of timber lost to the country, is by no means a pleasant reflection, but which is fully deserved if we allow this pernicious system to continue any longer.

Congressman lumberman Fisher, of Michigan, speaks right to the point when he says:—"As soon as we attempt anything of that sort (meaning towing over logs to Michigan), up will go the export duty on logs to $3 or $4 a thousand feet. They (the Canadians) would not let us rob them any more than we would not let them rob us." Unfortunately this is exactly what we have been allowing them to do for the past twenty years on Lake Erie, and this they fancy we will continue to do, thinking, no doubt, that we have not spirit enough or intelligence enough to know our own interests.

Since my former communication to the *Gazette* on this subject, members of Parliament have written to me asking that requisitions be sent in, and that they were sure the Government would act at once in this matter in the manner indicated by me, as it was directly in accord with the Government policy, yet it appears to me that the disadvantages under which the Canadian lumberman has to work when competing with the United States lumberman manufacturing Canadian saw logs are so self-evident, that I am sure it is only necessary to call the attention of the Government to the facts to have matters put right.

I am, dear sir,
Your obedient servant,
WILLIAM LITTLE.

Forestry Chambers, Montreal, May 17th.

CHANGES IN THE LUMBER BUSINESS.

As showing the wonderful changes in the lumber business, brought about by improved transportation and the development of new fields of operation, the following points given by the *Manufacturer's Gazette* are interesting and suggestive. One of the largest owners of Aroostook pine timber lands, and also one of the largest manufacturers of that fine grade of soft pine, informs us that the prices of high grade pine lumber are lower to-day than they were thirty-five years ago. This manufacturer runs several mills in St. John, N. B., and commenced his business there in 1851, when Aroostook pine lumber was in great demand, and met with ready sale at $45 for No. 1s and 2s at St. John, $35 for planing 3s, $22 for planing 4s, $16 for shippers, $10 for poor 4s, and $4 per thousand for scoots. Now it is difficult to realize these prices, and the principal grades are offering to-day at $2 to $3 per M less than they sold for in 1851. This is partly due to the fact that the Aroostook lumbermen still get out pine logs of various lengths, while the market here demands the even lengths and even widths which are furnished by the Canadian and Michigan mills. Again the railroad transportation is such that lumber may be frequently shipped from Michigan to interior New England points, or even to Boston, cheaper than it can be shipped from St. John to Boston, the latter by vessel. No doubt if our St. John friends would manufacture their pine of even lengths and even widths, its superior quality would enable them to secure as much or even more than the market affords the Michigan and Canadian lumbermen. The supply available of good pine on the Aroostook is very small compared with what it was years ago, but the market for lumber appears to have run away from it, and there is plenty of pine to be found in other sections to take its place. No pine has ever come to this market which rivalled the Aroostook pine in its soundness and valuable qualities for fine work. In judging of the lumber business one cannot confine his vision to a single state or a single river, but must take the whole continent in view, and bear in mind that the railroads and canals have made wonderful changes in the facility for transporting lumber from one section to another. The lumber famines which are frequently predicted by some of the forestry orators, will hardly come during the present generation. True, some sections are being rapidly depleted of their timber growth, but others are yet undeveloped by reason of the lack of the necessary transportation facilities. The enterprise and push of the lumbermen is constantly reaching out into unexplored territories and utilizing the virgin forests, hitherto a sealed book to the wood-chopper and the lumberman.

CUTTING PRICES.

The ill effects of such a course as cutting prices are attracting attention in the United States. According to the *Bulletin*, "Probably the most prevalent vice in the mercantile world is that of cutting below recognized and established values in order to get ahead of competitors, which is the worst habit that business men can adopt, as it involves a principle which, if persisted in, must result in bankruptcy." The first cut is, frequently, the first logical step to the calling of a meeting of creditors. When a tradesman begins to undersell, he has no idea of overstepping the bounds of moderation; but the great trouble is that moderation in the cutting of prices is the most difficult thing to define. "Commencing by just a shade below regular prices, the cutting propensity grows and grows, until the slightest shade above cost is reached, and in not a few cases bargains have been closed on the hard pan basis of cost itself, while in some instances the pruning process cuts even below it. Now, what is the inevitable result of all this? Why, simply, a resort to the dishonest practice of supplying an inferior article in place of the one sold, in order to make a profit."

If, says the *American Storekeeper*, two or more merchants in the same town, or at competing points, cannot agree like men to stop cutting and to sell staples at a living profit, it will pay any one of them to stop the senseless practice short off, and to step out, alone, if need be, in the path of keeping store for money. No live storekeeper need be forced into "marking down" by the unbusinesslike example of his competitiors. There are other ways of keeping trade. Customers whose patronage is worth having are bright enough to appreciate, when told, that they cannot get something for nothing, and that the merchant who pretends to deal with them on that basis has sinister desires upon their poketbooks. It is better to stop cutting and unprofitable selling by consent and agreement, and an effort to establish such an understanding is advisable, but it is well to stop it anyway.

SUCCESSFUL SALESMAN.

The successful salesman of lumber, or of any other commodity, must have a good many inherent qualities. Primarily he must be a worker. Steadfast industry, even if it results in "main strength and awkwardness," will often accomplish a good deal. He must in some manner bring himself to the point of telling his customer the truth, at least about the article he is selling. If needs be to keep himself at a natural moral level, he can lie about anything else under the sun save the goods he is selling. Deceit in this particular won't do, and it is the very thing that makes more failures among salesmen than anything else. The saleman's ambition should be to secure for himself and the house he represents the esteem and confidence of his trade. This much done his avocation is easy, and his success sure. The weakness of salesmen is to overrate the quality of the goods they are handling, and they thus succeed in disappointing a customer in such a way that it is almost impossible to ever secure another order from him. Meals and bed-time at best are at very irregular hours with the average traveller, but he should make them as regular as possible. "Painting the town red" at night and attempting to do business next day won't do. If a salesman has customers that renders going out and getting drunk a necessity to the continuance of their patronge, it's a line of trade that will hurt his house in the end. It will not only hurt his house but will ruin him, and the sooner he abandons it the better. The successful salesman must be careful of his credits. Don't sell a man a bill of goods if his credit does not appear right. Your opportunity of "sizing up" your customer's business methods and condition is much better than your principal's, and if you exercise discretion in your sales your judgment will be relied on. The salesman, whose house "stands at his back and swears by him" and his transactions is on a much better road to success than the man whose every transaction is scrutinized with distrust, and whose judgment is questioned. Again, if your house allows you some leeway in the matter of prices, don't have your order book filled with prices at the lowest notch at which you can sell. Keep yourself posted on values. And, again, aim at all times to sell, not what your customer may ask you for, but what your house has for sale—keep posted on your stock, and always crowd the "slow sellers" and hang on to the class of goods that sell themselves. For example, any chump can go out on the road and sell a lot of wide, good boards, but it takes a salesman to place cull Norway boards when a man thinks he can use nothing but white pine, or to sell him 14 feet lengths, when he swears he won't buy anything but 16's; or 10 inch stock when he wants 12. But it can be done, and a stock left in a good, unbroken condition all through the year, and a successful salesman can do it.—*Northwestern Lumberman.*

Trade With British Columbia.

The *Herald* of Vancouver, B. C,. the new city on the Pacific coast, in its issue of April 30th says:—

"The works of the Royal City Planing Mill Co. here are progressing rapidly towards completion. The engine and boilers, together with part of the machinery, arrived this week. This was sent from the Hamilton Machine Works, Peterborough, Ontario."

THE mill men of Maine have taken preliminary steps towards forming a state organization.

THE MATTAWA DISTRICT.

The Nipissing *Times*, of North Bay, now turns its attention to the territory embraced in the townships of Mattawa, Olger, Phelps, Mulock and Widdifield, which lie on the north side of the Mattawa river, between the Ottawa river and Lake Nipissing. Mattawa is a very pretty village of nine hundred inhabitants, situated at the junction of the Ottawa and Mattawa rivers. It had its origin in the establishment at this point, of a Hudson Bay Company trading post, and the founding of a mission by the Oblate Fathers among the Indians, before the lumbermen, who were the pioneers of the Upper Ottawa, penetrated the wilderness so far northward. Its growth and commercial importance subsequently arose, however, from the extension of lumber industries in the district of Nipissing. There are here some stores devoted to general or special lines of merchandise and shops devoted to mechanical industries, which will compare favorably with those of the same class in towns of greater pretensions. There are a public and separate school and churches with resident pastors belonging to the Roman Catholic, Anglican, Presbyterian and Methodist persuasions. Moreover, the hotel accommodations here, which are always an object of interest to the traveller, will not be surpassed by any outside of the great cities. There is also a large saw mill, owned by Jas. McCool & Co, situated about a mile above the town, where all kinds of lumber required for building purposes may be obtained. The stranger visiting Mattawa, for the first time, will probably be unfavorably impressed by rough and rocky appearance of its site; but the multitude of boulders which cover the ground is soon lost sight of amid the beauty and sublimity of its surroundings. The lofty mountains whose blue summits mark, in the distance, the bounds on either side of the mighty Ottawa, whose waters rush down from their great northern reservoirs; the huge rocks which project from the mountain's side just opposite the village, eastward, and hang in massive cliffs above the river flowing at its base; the terraced hills, clad in verdure, which rises as they recede westward from the shores of the Mattawa, forming an enchanting background to the church and cemetery which occupy a conspicuous position near the river; the majestic appearance, on the south, of the locomotive leading its long line of cars as it sweeps around the curve with terrific speed, then gradually slackens its pace until it ceases to move at the railway station; and finally, the junction of two great rivers, the commingling of whose many waters in one broad stream presents an emblem of the happy union of different races in the formation of our Canadian nationality, all combine to render Mattawa one of the most attractive villages in the valley of the Ottawa.

Yellow Pine.

Yellow pine, in the form of heavy timbers for large buildings, is making headway in this city. We have previously made mention of the large bill of 1,500,000 feet that Norwood & Butterfield are furnishing for the Marshall Field & Co. warehouse between fifth avenue and Franklin street. Mr. H. F. Seymour states that his house is filling an order for about 100,000 feet of stuff for the Huck Malting Company's new building, corner of Eighteenth and Canal streets. This order is for timbers 12x18, with some much larger than that. Yellow pine has been selected wholly because of its strength. The specifications for the great "Rookery" building, on the site of the old city hall, at first called for maple flooring, but this item has been changed to yellow pine, and bids are out for contract to supply it. It will require 1,000,000 feet to fill the bill.—*Northwestern Lumberman.*

No Right to Make Alaska Lumber.

A despatch from San Francisco on May 7th says:—The revenue cutter Rush sailed last week in search of the schooners Gem and San Buenaventura, bound to this point from Alaska, and known to be loaded with lumber. As the land there is not open to pre-emption, it is unlawful to cut timber upon it. The San Buenaventura, however slipped past the cutter and was nloading on Wednesdy.

The schooner, with her 200,000 feet of pine and cedar, was seized to-day by the United States Marshal. She is the property of the Alaska Trading Company, which owns a mill on the southern extremity of Wrangel Island The technical defence will be that the timber was cut by Indians and simply converted into lumber by the companies who purchased the logs.

WEST'S WORLD'S WONDER OR family liniment has proved to be one of the greatest blessings of the age. It is a never failing remedy for rheumatism, cuts, sprains and bruises. Call on J D. Tully f or a trial bottle and you will use no other

Perhaps the most extraordinary that success has been achieved in modern science has been attained by the Dixon treatment for Catarrh Out of 2,000 patients treated during the past six months, fully ninety per cent. have been cured of this stubborn malady. This is none the less startling when it is remembered that not five per cent. of the patients presenting themselves to the regular practitioner are benefitted, while the patent medicines and other advertised cures never record a cure at all. Starting with the claim now generally believed by the most scientific men that the disease is due to the presence of living parasites in the tissues, Mr. Dixon at once adapted his cure to their extermination; this accomplished the Catarrh is practically cured, and the permanency is unquestioned, as cures effected by him four years ago are cures still. No one else has ever attempted to cure Catarrh in this manner, and no other treatment has ever cured Catarrh. The application of the remedy is simple and can be done at home, and the present season of the year is the most favorable for a speedy and permanent cure, the majority of cases being cured at one treatment. Sufferers should correspond with Messrs. A. H. DIXON & SON, 305 King street west, Toronto, Canada, and enclose a stamp for their treatise on Catarrh.—*Montreal Star* 1y122.

GEORGE GALL

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An area of 137 square miles.

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THE CANADA

LUMBERMAN

DEVOTED TO THE LUMBER AND TIMBER INTERESTS OF THE DOMINION.

PUBLISHED SEMI-MONTHLY BY THE

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All communications, orders and remittances should be addressed and made payable to THE PETERBOROUGH REVIEW PRINTING AND PUBLISHING COMPANY (LIMITED), Peterborough, Ont.

Communications intended for insertion in the CANADA LUMBERMAN, must be accompanied by the name of the writer, not necessarily for publication, but as a guarantee of good faith. Communications to insure insertion (if accepted) in the following number, should be in the hands of the publishers a week before the date of the next issue.

Advertisements intended for insertion in any particular issue should reach the office of publication at least four clear days before the day of publication, to insure insertion.

The CANADA LUMBERMAN is filed at the Offices of MESSRS SAMUEL DEACON & Co., 154 Leadenhall Street, London, England, who also receive advertisements and subscriptions for this paper.

PETERBOROUGH, Ont., JUNE 1st, 1886.

THERE are 5 500 miles of railway in Germany on which metallic sleepers are laid.

FROM fourteen to twenty car loads of square timber passed Mattawa eastward daily last week.

MR. PRENEVEAN'S saw mills in Belmont, Ont., were destroyed by fire last week. The origin of the fire is a mystery. No insurance.

THE steamer Butcher's Boy will run on a line between Ashland, Wis., and Port Arthur, Ont., this seasou.

THE Messrs. Patterson Woodstock, have given an order to J. E. Murphep, of Hepworth Bruce county, for 402,000 feet of lumber to be used in their new buildings.

AN oak was recently cut on J. B. Vandervanter's farm in Gilead, Mich., which measured five feet 10 inches at the base, and was 40 feet to the first limb, where it measured four feet.

THE tannery owned by Geo. Hollinge at Hanover, Ont., was totally destroyed by fire on May 20th. Insured for $2300 ; loss not nearly covered by insurance.

GILMOUR & Co's drive of logs in Squaw river have grounded, on account of the floods washing out dams and allowing the water to escape. The logs will have to remain where they are until next spring.

It is circulating in Michigan papers that a syndicate is being formed in Saginaw valley, with a capital of $1,500.000, for the purchase of $600,000,000 feet of standing timber on Columbia river, Oregon or Washington, or both.

THE first raft of the season, consisting of som cribs of oak, ash and pine belonging to Messrs. McConnell & Klock, has arrived in the canal basin at Ottawa from up the Rideau. It comprises, says the Citizen, some remarkably good oak.

IT is stated that the Siam Forest Company has been formed in Bombay, India, to work a large forest concession which has been granted to it by the king of Siam. The concession is of forests covering an area of over 2,000 square miles, and said to contain much fine oak timber.

A cargo of hardwsods from the Philipine Islands has been shipped to England, about two thirds of it being cedar. In connection with the above, when we read of regular arrivals at Melbourne, Australia, of lumber from the Baltic sea, the world-wide and complicated character of the lumber trade is faintly appreciated.

A despatch from Quebec says:—Mr. William Dobie, a youngman in a lower town mercantile establishment, who arrived out from Edinburgh about two years ago, has recently fallen heir to over £380 000 by the death of his father in England. He intends returning to the old country to live, taking with him as a bride one of Quebec's charming daughters, Miss Eva Wilson, daughter of C. W. Wilson, the well known lumber merchant.

THE NORWOOD STEAM WORKS.

But too little notice, it is to be regretted, has been taken of some of the leading industries of the village of Norwood. In fact, it may be said of the enterprise now under notice, one of the most important industries in the county of Peterborough not on account of the wages disbursed in the factory, but on account of the useful and valuable material the product of the Finlay Works; or, as they are appropriately called, the "Norwood Steam Bending and Hub and Spoke Factory," owned and managed by Finlay & Son, the elder member of the firm being a man of great business capacity, energy and stability, qualities which have enabled him to battle successfully with many trying commercial storms. Energy and enterprise stimulated by sound judgment and keenness of observation, generally leads to success, and such in a word, has been the career of Mr. John Finlay, though meeting with not a few discouraging obstacles.

The business of this factory, under the fostering care and push and pluck of the proprietors, has increased to immense proportions. A visit to the works recently, by the writer, found the large building, occupying extensive grounds, fairly alive with the hum of rapidly revolving machinery, and it was with pleasure and interest we observed the rough material passing from one piece of machinery to another till finally it came forth a useful and valuable article. Perhaps a brief description of the methods by which hubs are manufactured and the bending process is performed, may be interesting. The timber is brought to the factory during the winter in logs, and first passed over to the sawyers, who with large circular saws propelled by steam, cut them into blocks the different lengths required, these are passed over to a boring machine which bores the heart out of the blocks. The hub rougher comes next into operation, which pares the rough bark apparently with as much ease as one would pare an apple—this part of the machinery, by the way, sprung from the ingenuitive mind of Mr. Finlay himself. The turner now handles the hub, smoothing its surface and giving to it its beautiful rounding, symmetrical form. The mortising machine is now brought into requisition, which neatly and rapidly pierces the required holes for the placing of the spokes. The hub by means of a tramway passes over to another wing of the large factory, where the painters give the finishing touches, and the hubs are now ready for shipment.

In the second story of this establishment are the Bending Works. The timber for this department is also brought from the woods during the winter, and is first cut into planks, then passed to fine or small saws, which rip them into the different sizes required for cutters or sleighs; they are thoroughly planed and then placed in a large steam box, where they remain till they are bent to the required shape ; and now, after going into the factory a huge and unbarked log, are turned over to the spacious packing room a smoothly surfaced and gracefully turned cutter or sleigh runner, and ready for shipment to the numerous patrons of this great factory.

The proprietors have recently added the most approved machinery for the manufacture of the above wares in a very complete manner, and in a style and finish to compete with any factory of the kind in the Dominion. The hands are paid every Saturday regularly, a system which Mr. Finlay has punctually followed for a number of years. The cash paid out thus every week amounts to about $100, but figures for wages are largely increased when stock is being procured for the succeeding season, thus giving employment to as many as 25 or 30 hands, besides many teams of horses, disbursing in this manner, annually, the large sum of $8,000, or perhaps $9,000, not, of course, including in this estimate the large amount of money paid out for logs and other raw material required for the manufacture of hubs, spokes, cutter and sleigh bents, &c.

The Messrs. Finlay certainly deserve their success and prosperity, and the elder Mr. Finlay the personal popularity he has attained in our community. His energy and enterprise has planted in our midst our principal "wage earner," in which considerable capital is invested, and through which a large amount of money is weekly circulated in our village. It is to be hoped that success and prosperity will long attend the works of John Finlay & Son.

HOW A LUMBER KING DIED.

A despatch from Dubois, Pa., to the New York *Sun* says:—The circumstances surrounding the death of John Dubois, the father and patron of this town, were very pathetic, and and have left a deep impression on the community. Although not an infidel, he had lived a careless life. He seldom went to church, preferring to spend Sunday walking about his mills or his fine farm of 1000 acres. For a year or more, however, his mind had been strongly inclined to religious matters. He did not go to the preachers with his perplexities. He read his Bible and consulted with his lawyer about it His lawyer was the Hon. George A. Jenks, who has just resigned the Assistant Secretaryship of the Interior in order to keep a promise to Mr. Dubois that he would take the place of the latter as confidental adviser to a young nephew who gets the vast estate.

A few days before his death Mr. Dubois sent for the Rev. Mr. Bell, and, after a long conversation with him, he was baptized and received into the Presbyterian Church. He immediately sent for the heads of all the departments in his works and as many of the men as could crowd into the sick room, to the number of about fifty. When they were gathered he gave them such an exortation as had never been heard before in all this region. He told them he was dying, and that if he had been well assured of his eternal welfare a week before he would not have been living to talk to them. He could not leave go of life, he said, until he got that question settled, and he urged them not to put it off as he had done. He was willing now to die, but if it was the will of Providence that he lived one year longer, he would not wish to take up his affairs again. He would put in every day, he said, going about the mills telling his men the great truth that he had at length found out and trying to undo some of the evil his example had wrought in his long lifetime.

His voice and brain were strong, although his body was wasted almost to a skeleton and he could scarcely sit up in bed propped with pillows. The men had worked for him—some ten some twenty, some thirty years. They were rough, grizzly fellows from the logging camps and the mills, but there was not a dry cheek in the room as he talked to them and called them by name and bid them good-by. Three days afterwards he died. He was buried on his own farm where he lived. He picked out the spot himself. It is on the top of a gentle sloping hill, and overlooks his mills and the town he built. For the three days between his death and his funeral all hands in the town were as idle as his own. Not a wheel turned in any of the mills. Nobody did any business in the stores. Three thousand people looked at him in his coffin and walked behind it to the grave.

Although his works were divided up into different departments, each under its responsible head, he knew all of the 800 men who worked for him, and always spoke to them as courteously as if they were all millionaries as well as himself. Some years ago, when times were hard and lumber fell at a low figure, the managers of the works agreed that there must be a reduction in the wages of the men, and so told him. He heard them through and took the figures they had brought him, but made no decision. The next day he summoned them to meet him again, and said :

"This will not do. I have examined the books at the store, and find that it takes about all these men earn to buy necessaries for themselves and their famalies. If we must reduce wages I will begin with you, who are better paid. Say no more about it ; I guess I can stand a loss better than the men can a reduction."

EXPORT DUTY ON LOGS.

WE would again call attention to the subject of the export duty on saw logs, for it is a matter that should not be allowed to sink into oblivion and neglect. It is obvious that the duty on export logs should be raised to $2 so as to counterbalance the United States import duty on lumber. Till this change is made the very least that should be done is to enforce the payment of the present export duty of $1. It absurd to suppose that this cannot done. There are regulations for shipping, there are ways of dealing with sumgglers that can be made effective, whether the offenders fly the Canadian or the United States flag. Saw logs cannot be smuggled like jewels or lace, and both they and the vessels concerned would be liable to seizure. The great risk of such a serious loss would check attempts to evade the law if its stringent enforcement were practiced.

The cost of collecting the duty, though it has been alleged as an obstacle, is not really a serious objection, for it would be recouped over and over again by the amount collected. But even if there were more than the amount of revenue spent in collecting it, the argument against enforcement would not be conclusive. Under such circumstances it would still be alike just and politic to protect our lumbermen from unfair competition, and our forests from devastation in order to enrich foreign millowners.

This is matter which is becoming more and more urgent. Lumbermen from the United States have of late purchased a great extent of timber limit from the Ontario Government and others. The purchasers make no secret of their intention to convey these Canadian saw logs across the lakes to supply saw mills in the United States. Inadequate as is the present duty it should certainly be collected, and as soon as possible it should be doubled. The evil has already become of some magnitude and it is certain to be greatly increased ere long if proper precautions are not taken.

Since writing the above we are glad to learn that the export duties have been increased as follows :—Single bolts $1.50 per cord, spruce logs $2 per thousand, pine logs $3 per thousand. This satisfactory as to the duties, and now it only remains to see that they are enforced.

BURNING SAWDUST.

Thos. Price writes as follows to the *Machinist* concerning wet sawdust, etc. : "I had a little experience in sooty flues and smoke-box from wet sawdust and bark, and used to have a burn-out often at noon when the fire was low. I have eight boilers, 48 inches diameter by 16 feet long, and at first built them with grates, eight feet long, thinking that the larger the grate area, the better the combustion. But I could not keep steam to run half what I drive now, and had to find a remedy. The draft was too sluggish. I could not change my smokestack, so I thought I would try less grate area. I simply laid fire-brick across the back end of the grate-bars, and raised the bridge wall within eight inches of the boilers I made double the steam I could before, and the tubes and smoke boxes and breeching were free from soot, and have never burnt out since.

THE LUMBER EXPORT DUTY.

Mr. Perley, of the extensive lumbering firm of Perley & Pattee, on being asked by a *Journal* reporter to-day his opinion in regard to the new export duty on logs, stated that although it did not effect the lumbermen about Ottawa, it was a good and just thing for Canada at large, as it enabled the Western Ontario lumbermen to preserve their lumber resources, and not have them swallowed up by American capitalists. The latter come over, and in the district surrounding Georgian Bay and Lake Superior, get out an immense quantity of logs and send them over to their mills on the American side free of duty. In this manner the fine lumber resources of Georgian Bay and Lake Superior are being drained of their best timber by these American capitalists. Mr. Perley also thought that the measure would have its desired effect in causing the Americans to remove the duty on manufactured lumber.

Mr. Bronson, of Bronson and Weston was called on, but was not to be found. The manager of the firm said that the measure was a decided boon to the Western Ontario lumber merchants. He also thought that the measure would compel the Americans to remove the duty on manufactured lumber, as the present duty on Canadian logs would affect to a great extent the American lumber merchants on the shore of Lake Superior.

Mr. E. B. Eddy on being called upon stated that the measure was a good one.—*Ottawa Journal.*

DOWN A FLUME.

A Chicago newspaper man tells in the *Herald* of that city an experience he once had riding in a Nevada lumber flume. "Lumber flumes in the Sierra Nevades," he said, "are all the way from five to forty miles long. They are built on a regular engineer grade. The bed of the flume is made of two-inch plank in the form of a V, the sides of the V being from eighteen to twenty six inches high. They are built on a grade of about sixteen feet drop to the thousand. They carry eight inches of water in the acute angle, and discharge it at the rate of 400 miner's inches a minute. In other words, turn in your water at the head of the flume, and it will carry a log weighing 400 pounds with a velocity greater than the fastest engine that was ever made. The log's displacement just about fills the V without any more friction than necessary to keep it in place.

"About nine years ago I was up at Lake Tanoe with E. W. Smalley and W. H. Patton of the Mackey & Fair Lumber Company. Patton was showing us the sights. We had come up from Carson City, sixteen miles, by stage, and it was a hot and tedious ride. About sundown Patton said: "Boys, we'll go home by the flume, and we'll get there a little quicker I think."

"He directed a man to bring out the yacht, as he called it. This was a V shaped canoe about 14 feet long, very shallow, and made to fit the flume and just about fill it with the displacement of 600 pounds. The yacht had a brake—two rubber pads on either side, worked with a lever, and so applied against the V flume that on pressure it would lift the yacht gradually and allow the lightning current to pass under her. She also had two small rubber wheels, one on either bow, to keep her nose from grinding on the sides of the flume as she went by curves.

"Now boys," said Mr. Patton, "button up your coats, tie down your hats and hold on. Don't get scared. Trust your lives to me for the next half hour. I've sailed in this yacht before, and I know she's staunch."

"There were three seats. Patton took the front one to handle the break. Smalley took the next one and I took the rear and worked the tiller. That was rigged just like a ship's rudder, with a rubber wheel to ease of her stern against the side of the flume if she got to yawing. Patton told his men to put on two inches more of water, and then, with a wave of his hat we weighed anchor. Great Scott! how that thing jumped! Smalley got seasick. I jammed my helm hard down, but Patton yelled through the air, "Let her go; I've got her!" And with one hand on his brake, his hat crushed down on his head, and his teeth set, he looked the incarnation of courage. We plunged down the mountain with a speed that no steam could give. Trees flew like spectres. Looking ahead down the narrow thread-like flume it seemed like a plunge to destruction. Several times the flume carried us over a high trestle. It seemed like leaping over a precipice. Smalley held his breath, but the little yacht jumped it through the air apparently with a swish. Curves would show themselves ahead. The rudder wheel would squeak on either side, and the good ship would round that curve with a flash. Sometimes an unevenness in the flume would occur, and then, as the craft sped over it, the spray would rise 50 feet in the air.

"Keep on your hats!" shouted Patton, then, as we struck a straight five-mile stretch, "now hold on to your teeth."

"I don't exactly know what the next sensation was, but I tried to peep out from the rim of my hat, and my soul, it was all a blur—trees, rocks, landscapes, were all mingled in an indistinguishable mass. It was as if one was blown through the air from a catapult.

"Well, from the time we weighed anchor up at Lake Tahoe until Patton put on his brakes just outside the lumber field at Carson City it seemed like a minute or two. We all looked at our watches. We had made just 16 miles in eight minutes and forty seconds. I never in all my life had such an illustration of the force of water."

ITEMS FROM THE EAST.

Among lumber items from the Maritime Provinces, says an exchange, we observe the statement that the snow was all out of the New Brunswick woods on May 12th, and without heavy rains it is likely that large quantities of logs will be hung up till next season. In the river St. John the water fell rapidly last week. On Monday, 17th, all the logs were out of the tributaries of Grand Lake. The lumber running into the booms at present is principally Aroostook; little or none is coming over Grand Falls from the upper St. John at present. All the Tobique lumber drives are now out except those belonging to Babbitt & McNair. It is stated by the Sun that little or no driving has been done by Alex. Gibson on the Nashwaak this season. At last accounts (15th) the lumber in Salmon river and its branches was nearly all out. Much of the lumber on the Washademoak, however, is hung up, and there are few prospects of its being brought to market this season. A Parrsboro telegram of May 14th says that Young's lumber drive was in and sawing was begun, and that deals were pouring into the port. We learn from the Amherst Gazette that 18 ships are now on the way to Northport, and Mr. Hickman has 6,600,000 superficial feet of deals ready to load them. The vessels are chartered for west coast of Ireland and Liverpool at £2 3s. to £2 5s. Twelve more vessels are to be loaded during the summer, on that shore, making his shipments for the season eleven millions—an increase of one-third over last season's operations.

FENELON FALLS.

SAWLOG DRIVES.—Last Monday the first of this season's drives of sawlogs passed over the slide. There were about 40,000, all belonging to Boyd & Co., who have at least 100,000 altogether, and Mr. Hilliard has about 16,000. Some are across the lake and some near the pulp mill and for several weeks to come, the river below the falls will be so full of them that boats can not get either up or down. There are a few big ones among them, but the average is much smaller than it was ten or a dozen years ago. —Gazette.

The Civil Service Reformers

say their object is simply to retain good men in office when you find them. This theory may be safely applied to the treatment of the human system by means of medicine. Those who have once tried Dr. Pierce's "Golden Medical Discovery" for scrofulous swellings and sores, loss of flesh and appetite, weak lungs, spitting of blood and consumption, will apply to it the real principle of Civil Service Reform and "hold fast to that which is good."

Argument in the celebrated Toronto appeal case of Dumoulin v. Langtry was concluded on Friday before the Supreme Court, judgment being reserved.

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Hair Magic!

It restores Gray Hair to its natural color. It contains no greasy or oily substance, nor any injurious properties. For hair that is feeble and has no strength, it stimulates it, and where the roots are not entirely gone, will bring in a heavy and thick growth of hair.

For sale at TULLY'S DRUG STORE, the Agent for Peterborough.

A. DORENWEND,

Sole manufacturer for U. S. and Canade. 103 and 105 Yonge Street, Toronto, Canada.

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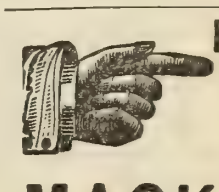

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Unlocks all the clogged avenues of the Bowels, Kidneys and Liver, carrying off gradually without weakening the system, all the impurities and foul humors of the secretions; at the same time Correcting Acidity of the Stomach, curing Biliousness, Dyspepsia, Headaches, Dizziness, Heartburn, Constipation, Dryness of the Skin, Dropsy, Dimness of Vision, Jaundice, Salt Rheum, Erysipelas, Scrofula, Fluttering of the Heart, Nervousness, and General Debility; all these and many other similar Complaints yield to the happy influence of BURDOCK BLOOD BITTERS.

T. MILBURN & CO., Proprietors, Toronto.

THE POSITION OF SPRUCE MANUFACTURERS.

There are several reasons why the spruce business in the east has failed to realize that measure of success which was so fondly hoped for, and so reasonably anticipated, early in the year. The prime cause must be attributed to the labor troubles; but aside from that there has been a noticeable lack of unanimity among the manufacturers. The *Lumberman* in previous comments upon the subject, has endeavored to take into consideration all the factors necessary to bring about the most satisfactory results. A careful comparison of stocks on hand and supplies at the mills, together with a fair estimate of the demand, both actual and prospective, led to the belief that the time had arrived for the manufacturers of spruce lumber to take a stand that would place them in a position to at least share, if not wholly dictate, the distribution and value of such stock in the eastern markets. Our position was based on the g ound that for the last three years the selling price of spruce in the New England and New York markets had been less than the real value of the wood, and that the net results were inadequate to insure a reasonable profit to the operators. We still cling to that belief, and although there are existing circumstances which necessarily curtail dist ibution, we fail to see wherein the manufacturers are any worse off than others in the same line, in different sections of the country. It is an ill-advised policy to pursue the tactics of certain large manufacturers at the present time, who, from lack of foresight, attempt to force supplies upon the market, when the local conditions are such that an overstock will break the price. It is not probable that the disturbance which now threatens the building trade in that section will last long, and when the matter is settled the demand will doubtless again rise to its just proportions, and sales will be made in sufficient amounts to offset the present lack of demand.

Mill men should not ship spruce to the leading market s at present, except on actual orders, and should not accept cut prices under any consideration, for many of the larger yards in Boston and New York are actually destitute of certain sizes, and must replenish. A concession in prices at this time means cut prices all summer, and possibly a worse form of demoralization than has been undergone during the last few years. Spruce manufacturers should stand firm and not dispose of their output through fear, or a misunderstanding of the real situation.

It must be remember that the yard dealers all through the east handle spruce dimension stock for the sake of securing orders for other lumber on which a good profit can be secured, and consequently it can make but little difference to them whether the market price is $13.50 a thousand or less; but it does make a difference to the mill men.

From present reports it is indicated that there will be snfficient demand to require all the spruce that will be cut this season, and consequently another reason is added to the list why manufacturers should stand shoulder to shoulder and exercise good judgment in accepting orders both in quantity and price. A false step taken at this time is absolutely certain to ruin the wholesale trade for the year, and as all the circumstances point to the folly of such a course, mill men should "make haste slowly," and not become their own financial executioners.—*Northwestern Lumberman.*

FROZEN TIMBER.

A correspondent of the *Northwestern Lumberman* writes:—It was refreshing to recognize an old acquaintance in the statement of a "well informed lumberman" that frozen lumber occu pies less space than when well aired or kiln dried. If age is a test of truth, this fable must be true, as I heard the same statement more than fifty years ago. I think the man that laid the frozen fl or boards must have been a brother of the man who, to prove that old growth red oak never could be seasoned, said that his grandfather had a red oak mantle that was in for 75 years, and that when the house was torn down and mantle cut up and burned the sap ran out as it was burning; but seriously, is it possible that men can believe such fables? They are so contrary to nature that it is difficult to believe that men who have come in direct contact with nature can take stock in them. There is nothing in the wood but the sap (which is water) that can freeze. Water always expands in freezing. This can be easily proved by placing it in a broken vessel If water contracted when freezing, it would sink to the bottom of the rivers and ponds, instead of re aining at the top. The heart of white pine never freezes unless it is shaky. Years ago I had an argument with a sawyer who was sawing frozen timber, on this very point, and, to convince him, sawed out a piece of pine exactly two feet long, nine inches wide and seven-eigths of an inch thick. This was in February, and the following July the board was removed from its resting place over the stove pipe and measured, and it was found to measure two feet in length, 8 13-16 inches in width and 13-16 inches in thickness. In other words it had not shrunk any in length, but had shrunk two per cent. in thickness. The difference in contraction was on account of the piece being cut slashways.

THE KOOTENAY COUNTRY.

The Columbia river and Kootenay Railway Company intend to build this season a railway twenty-five miles long, extending from the mouth of Kootenay river, on the Columbia to Kootenay lake. It was originally intended to be a narrow gauge. It is intended to tap the rich mining region of Kootenay lake, which is accessible, except from Sand Point, on the Northern Pacific. In connection with the railroad the company will build steamers to run from their western terminus up the Columbia river to Farwell— the west crossing of the Columbia by the Canadian Pacific Railway—and also steamers to run on Kootenay lake to the boundary line between British Columbia and the United States. The company has a grant of seven hundred and fifty thousand acres of land from the British Columbia Government. Of this it has already taken up 50,000 acres in the rich mineral belt on Kootenay lake. The remaining seven hundred thousand acres will be settled along both banks of the Columbia river, from the boundary line to the head of navigation on the stream. A reserve of six miles wide on each side of the Columbia has been made by the Government to continue till the end of 1888, during which time the company must make its selection of lands. The mining region of Kootenay Lake district consists of an argentiferous belt of galena ore, several miles in width. In this belt exists the most extensive deposits of lead ore probably in the world. The assays of the various veins of ore vary from $15 to $175 worth of silver per ton. The facilities for smelting are very great. Iron ore and limestone exist in the immediate vicinity, both being needed for a flux in smelting. A clay capable of producing fire brick is also found on the borders of the lake. Charcoal can be obtained from the forests which surround the lake. It is the opinion of good judges that within a few years the Kootenay district will be the largest base metal producing district no the Pacific coast, and that hundreds of tons of pig lead will be shipped daily from that region. Northerly from the immediate vicinity of the ead mines, along the rivers emptying into the Kootenay lake, placer gold diggings were found during the season of 1885, and a railway is now pr jected from the town of Farwell to the head of Upper Arrow Lake, thence across a low divide to Kootenay Lake mines. South of the boundary line, in the Colville district, rich silver and lead mines have been opened during the past season and it is probable that the belt will be found continuous throughout Idaho and Montana North of the town of Farwell, in the Big Bend region of the Columbia, some very rich gold bearing quartz veins have been discovered, which will attract a great many miners and capitalists during the coming season. Steamboats will be put on the Columbia river, from Farwell upwards, to supply this district. This mining region will supply a large body of the traffic to the Canadian Pacific, as the lead of Kootenay, in pigs, will be shipped over the road to Montreal en route to Swansea.—*Inland Sentinel, Kamloops*

THE COFFIN-MAKING INDUSTRY.

There are 34 coffin factories in the United States, an exchange says, and they turn out an average of 150 coffins and caskets a day. The largest factory is in Cincinnati; it covers acres of ground and its shop facilities are so great that it manufactures everything necessary to complete a funeral, except corpses. Anything from a tack up to a hearse can be seen in process of manufacture on their premises. Next to Cincinnati, Chicago has the largest coffin factories. The biggest coffin kept in stock by one Chicago house is 6 ft. 9 inches in length and has an opening of 28 or 29 inches. The average is 18 or 19 inches, and the average long coffin is 6 feet 4 inches. The longest coffin turned out by any factory is a 9 footer, in which the dignitaries of the Catholic church are buried. Such a coffin was used at the burial of Cardinal McCloskey, the extra length being required for his crown which he wore in death. About 24 hours were taken to put this coffin together, but an ordinary coffin, that is, a coffin of extra large size, no matter what its cost or the character of the trimmings or upholestry, can be put together from the rough boards in three hours at the utmost

ARBOR DAY IN QUEBEC.

Arbor Day was generally observed as a holiday in Quebec, the principal event being the planting of a large number of trees in Covefield The Lieut.-Governor, the Speakers and members of both Houses of Parliament, Mayor Langelier and the members of the City Council, with many private citizens were in attendance. The proceedings were opened by the Hon. Mr. Lynch, Commissioner of Crown Lands, who alluded to the happy suggestion of Hon. Mr. Joly, which was the cause of the first celebration and its successful results as shown in the interest exhibited in to-day's proceedings. The first tree was planted by His Honor Lieutenant-Governor Masson, and then the workmen present set to work, under the supervision of Mr. Lesage and Mr. Gauvreau, of the Public Works Department, in planting the trees provided. After the Cabinet Ministers and their wives had each done their duty in the premises, the Lieutenant-Governor addressed those present paying at the outset a merited eulogium to Hon. Mr Joly. The proceedings were closed with cheers for the Queen and the Lieutenant-Governor.

THE LAST HEMLOCK TREE.

A Honesdale, Pa., despatch says:—The last merchantable tree in the vast hemlock forests that have supplied the mills on the Dyberry Creek, one of the tributaries of the Laxawaxen River, for more than a quarter of a century, has been cut, and on Saturday the veteran river pilot, "Bill" Kimble, drove the last log down the stream that will ever be run to the mills. He also drove the first log that was cut in the great forest, in 1860, and has never missed a day's log driving on the creek in all the intervening time. This tract of hemlock was nearly the last of any extent in Wayne county, whose forests ten years ago were yielding 100,000,000 feet of that lumber a year. Fifteen years ago more leather was tanned in Wayne county than in any other county in the Union. The disappearance of the hemlock has caused all but two or three of the tanneries to be abandoned. All who were engaged the business made large fortunes, and nearly all of them are now engaged in the same business in Elk, Forest, Warren and other western counties, where the greatest hemlock forests in world still densely cover the hills. The tanning industry of those counties now supplies almost the entire sole-leather product of the world. The cutting away of the hemlock woods in Wayne county has had a disastrous effect on the water courses, many lage streams having become almost entirely dry within the past decade.

THE NEW RAFTING IDEA.

The New York correspondent of the *Northwestern Lumberman* says:—Another trial is to be made in the matter of rafting logs on the ocean. H. R Robertson some time ago secured letters patent for his invention from the United States Commissioner of patents for 17 years, and also in Canada, Norway and other countries. It is not a series of rafts, but all in one, somewhat in the shape of a cigar, with a chain through the centre and at distances around it, about seven feet apart. It can be built any length, and the arrangement of the chains is such that the traction in towing seems to tighten. One has been building at Two Rivers, Nova Scotia, since April 1st, by B. B. Barnhill, under the direction of the patentee. It is, I believe, about 400 feet long. The centre chain was put in place the last of April, and it is now nearing completion, and will be lauched early in June, and towed to this city, arriving about the last of the month. It is built on a "way," after the fashion of a ship and launched in the same manner. It is possible that the construction could take place in the water where the tide was not so great; where it is building the tide rises over 40 feet.

This raft will contain from 2,500,000 to 3,000,000 feet of saw logs, piling and spars. The cost of towing will be about one-quarter of the freight charge if shipped on vessels. The raft is satisfactory to underwriters and can be insured at low rates. The Captain of the tug which will tow the novel thing says he could take it across the ocean. It is said that a Cincinnati firm has offered a tempting sum for the right to build a similar raft in British Columbia. If the thing proves a success, as it now promises, we may see rafts of redwood and cedar from the Pacific coast towed into this harbor. What a handy thing the ship canal across the isthmus will be!

TILBURY DOCKS.

The opening of spacious docks at Tilbury, Eng., at the mouth of the river Thames, shows that London has outgrown the waterway of the Thames. Mariners have become impatient of tides which served a less expeditious age. The Thames is overcrowded with shipping, and the steamers of to-day are too gigantic to make a safe passage up the river. The great harbor which has been provided at Tilbury, at a cost of fifteen million dollars, must be pronounced a triumph of engineering skill. The new docks occupy what, until their construction was little more than a marshy waste, whatever the locality may have been when, at the time of the Spanish armada, a camp was formed at Tilbury through which Queen Elizabeth rode on horseback to inspire her troops. Four years have elapsed since the first turf was cut, and the average number of men employed on the works has been 4,500. The docks covered three hundred acres, have three miles of stone quays, and consists of a main basin and four dry dock. Thirty-one of the largest vessels in the world can be loaded at one and the same time to their full draught along the quay. A depth of 45 feet at high water will permit steamers to pass straight into the docks on their arrival from distant shores. An enormous saving of time and money will thus be effected by big steamers being docked and their cargoes transhipped at Tilbury instead of having to wait as heretofore for the tides to enable them to reach the port of London proper. Trains will run to Fenchurch street in thirty-five minutes, so that ocean voyagers, in less than an hour after arriving off Gravesend, may find themselves with their luggage in the heart of London. For the convenience of passengers on arrival or departure, a spacious hotel has been erected near the river bank. Every provision is made for the expeditious loading and unloading of cargoes. Sixty movable hydraulic cranes have been constructed, each capable of lifting a ton and a half, in addition to a powerful floating steam crane designed to swing fifty tons. The electric light has been fitted throughout the entire dock system and hotel, eight arc lamps of 3,000 candle power having been fixed on masts, together with 1,000 glow lamps, which will render shipowners independent of day light when a cargo has to be taken in or discharged. The emptying of the dry docks by pumping out 12,000,000 gallons of water, will be performed in an hour, so that vessels, without delay, can undergo necessary repairs.

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Chips.

THE water on the rivers and lakes fell more rapidly this spring than has been known for years past.

FOUR hundred species of trees are found in North America. Of these sixteen are heavy enough to sink in water when dry.

THE Grand Trunk railway is to erect a new station in Montreal, this season, to cost from $300,000 to $400.000.

A BOOM of logs to be used in making a steamer landing at the Old Man's Island, near Brockville, broke away Saturday night and was lost.

JOHN KENNEDY, who has charge of Burton Bros., Powers' and Maxwells' drives, is running upwards of 65,000 pieces. They have passed over the dam at Burk's Falls.

THE men unloading the lumber on barges at Kingston were receiving fifteen cents per hour. They struck for twenty cents and their demand was acceded to.

A NUMBER of forest fires in Burlington and Atlantic counties, New Jersey, burned buildings valued at $4,700, and swept through a cedar swamp, destroying much valuable timber.

THE new band saw in the Chippewa Lumber and Boom Company's mill, at Chippewa Falls, Wis., gives the best of satisfaction. It cuts between 25,000 and 30,000 feet a day.

THE schooner Oregon, with lumber from the Kennebec for New York, arrived at Gloucester, Mass., May 9th, leaking badly. In a storm the night before a deck load was lost.

CANTIN'S ship carpenters in Montreal struck work on Monday for an advance of wages from $1.50 to $1.75. Mr. Cantin agreed to pay his men $1.75 for the future.

THE Conger Lumber Company's steam mil at Parry Sound was started up on May 11th and is being run up to its full capacity. The company expect to do a big season's cutting this season.

THE cut of logs on Androscoggin waters the past winter is something above 60,000,000 ft. Of this amount about 50,000,000 feet, in the opinion of the *Post*, will probably reach market the present season.

MICHIGAN dealers are buying black walnut fence rails in that state, that have been used twenty years. The thoroughly seasoned wood is used for chair legs, spindles and other small articles.

IT is estimated that on the 3,269,439 acres of uncleared land, tributary to White river, Arkansas, there are 34 814,333,000 feet of hardwood fit for lumber and timber. It is a wonder that the odd inches were not included in the estimate.

AT Beaver Falls, Pa., a co-operative planing mill company has been formed among a number of practical mechanics, with a capital of $50,000. They have purchased the planing mill of Wareham, Dodds & Co., and propose to fit up with the most approved and costly wood-working machinery.

A TOW of four Canadian vessels recently loaded square timber at Marquette, Mich., for Burton & Nelson. It goes to Garden Island, in St. Lawrence river, where it will be put into rafts and floated to Quebec. The amount of timber Burton & Nelson have at Marquette will load the same tow four trips.

A TOW of Canadian vessels lately arrived at Tonawanda, N. Y., to load cargoes to be taken through the Welland canal for Quebec, and thence to South America. The lumber thus to be shipped belongs to the Export Lumbe Company, and goes to its trade in Buenos Ayres.

BARNET and Mackey's square timber cut on the Sturgeon river has all passed Sturgeon Falls en route to Cache bay from which point it will be shipped by the C. P. R. to Papineauville. The C. P. R. Co are building a spur a mile long, striking the river above the falls, where D and E. D. Moore will boom and load their square timber. The iron will be all laid in a few days.

THE soundness of timber may be ascertained by placing the ear close to one end of the log, while another person delivers a succession of smart blows with a hammer or mallet on the opposite end, when a continuance of the vibrations will indicate to an experienced ear even the degree of soundness. If only a dull thud meets the ear, the listener may be certain that unsoundness exists.

THE increase in strength due to seasoning in different woods is as follows: Elm, 12.3 per cent; oak, 26.6 per cent; ash, 44.7 per cent.; beech, 61.9 per cent. The comparative value of different woods in respect to crushing strength and stiffness is thus shown: Oak 4,074, ash 3,571, elm 3,468, beech 3,079. Regarding relative degree of hardness shell-bark hickory stands the highest and calling that 100, white oak is 85, white ash 77.

THE Parry Sound *Star* of May 14th says:—There is considerable activity around the lumber docks this week. On Saturday evening the Parry Sound Lumber Co.'s barge Van Straubenzie left Sarnia with a full cargo of lumber. On Tuesday the same company's steam barge Lothair and Corisande arrived in port from Oswego having made the run from here to Oswego, discharged their cargo and returned in two weeks. They expect to leave to-day for Oswego, with full cargoes. The same company's schooner Jane C. Woodruff came into port the early part of the week and is now loading lumber for Midland.

BABCOCK & ENGLEMANN are building a logging railroad, ten miles long, in the vicinity of Grayling, Mich. It will be called the Grass Lake & Manistee River railroad Over this railroad it is estimated that 100,000,000 feet of pine will be conveyed and put into Manistee river—pine that is naturally tributary to the Au Sable. When the new road is completed there will be six logging railroads in operation in the vicinity of Grayling, and 65,000,000 feet logs will be by them put into Manistee and Muskegon rivers this season. It is estimated that in Crawford county, with Grayling as the centre, there is 2,200,000,000 feet of standing pine.

A SITE for the Halifax dry dock has been selected. It lies between the sugar refinery and the dock yards, and has a frontage of 808 feet running back to the railway line. The dimensions of the dock will be: length on top 580 feet; length on bottom 560 feet; width on top 162 feet; width on bottom 70 feet. It will built obliquely into the land with the entrance down the harbor and will, says the *Chronicle*, be capable of taking in the largest ships of her majesty's navy, including the great Inflexible of 8,000 tons, thus proving to be, when finished, one of the very largest in the world. Work was commenced last week.

AN English paper states that birch is a good material for doors. A gentleman recently had black birch used for the folding doors of his new house, against the architects protest. The result has so far been satisfactory. The birch in texture resembles satin wood and is a dark cherry in color. The doors are admired by every one that sees them. Although this is so, the question of durability still remains to be tested. Black birch is not generally considered so lasting a wood as some other kinds. There is undoubtedly a great field for furniture and cabinet woods among many of those which are native to our New England soils, and some time the furniture men and architects will wake up to the value and importance.

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Market Reports.

MONTREAL.

From Our Own Correspondent.

MAY 27.—Activity in the lumber trade has continued here since our last report, and the amount of business done has been very good. Dealers are busy receiving and delivering, and there is every prospect of a good season's business; in fact, if no strikes occur (and so far none have been threatened) the lumber trade will attain to very respectable proportions. It is likely that if the strikes in the United States do not speedily end, many building contracts in New York and Brooklyn will have to be cancelled, and prices in Ottawa will not rule so firm as at present. A large stock of lumber is on hand here, but prices are steady, and the probabilities are that they will be maintained, as dealers have had to pay from five to ten per cent. more for lumber at the mills this year than last. Large quantities are arriving daily per barges from the Ottawa.

Freights to South America ports are quoted at $11 per M. One vessel, the Cambridge, is now loading for Buenos Ayres. Two vessels for the United Kingdom which were chartered in London at 50s. per standard are also loading. Activity in the building line continues.

The following are the quotations at the yards:—

Pine, 1st quality, ₱ M	$00 00@40 00
Pine 2nd " "	00 00@30 00
Pine, shipping culls, ₱ M	14 00@16 00
Pine 4th quality deals ₱ M	10 00@12 00
Pine, mill culls, ₱ M	8 00@10 00
Spruce, ₱M	10 00@13 00
Hemlock, ₱ M	9 00@10 00
Ash, run of log culls out, ₱ M	20 00@25 00
Bass, " " ₱ M	18 00@20 00
Oak, ₱ M	40 00@50 00
Walnut ₱ M	60 00 100 00
Cherry, ₱ M	80 00 100 00
Butternut, ₱ M	35 00@40 00
Birch, ₱ M	20 00@25 00
Hard Maple, ₱ M	25 00@30 00
Lath, ₱ M	1 50@ 0 00
Shingles, 1st, ₱ M	2 00@ 3 00
Shingles, 2nd, ₱ M	2 50@ 0 00

CORDWOOD.

Prices are unchanged.

The following are the quotations at the yards:—

Long Maple, per cord	$ 6 00@6 50
Long Birch "	6 00@0 00
Long Beech "	5 00@5 50
Tamarack "	5 00@0 00

TORONTO.

From Our Own Correspondent.

MAY 25 —During the past two weeks lumber has moved off quite lively, on the docks as well as from the yards there has been no lack of trade. One tow for Boston, via Ogdensburgh, took away 1,500,000 feet. This was part of a stock bought by a Boston firm from the Ontario Lumber Company, some 3,000,000 feet still, I believe, remaining yet to ship. The price realized for this stock is said to be a good one. Most of the retail yards have lowered their stocks considerably, and purchases from the track side will brisker from now to the end of the season. I find great difficulty in keeping you advised of quotations on lath, and some other kinds of stock, owing to the methods taken by retail men in the matter of sales. more especially is this the case with lath; one dealer will not sell to his customers unless he makes a fair profit, and to do this after piling in his yard he must get $2.20 to $2.25 per M pcs., while others say they never expect to reap any profit from the sale of lath, but keep them solely to accommodate their customers, and so retail them at about $2.10. Owing to the lack of any lumbermen's association there is really no uniformity in prices, each one runs his own gait. One retail firm, not long in the business, in order to work up a trade, is said to have sold on 50 cents per M margin, including teaming, so that if any of your subscribers are disposed to question the schedule of prices given by me, I can only say, as I cannot find any two dealers who quote alike, I give it as nearly to the correct thing as it is possible to get at it, and any dealer who does not realize those figures should do so in order to live by the business.

The mills to the north of us are all in full blast now, and green bill stuff is coming in to fill orders, but is not easy to see how bills can in the future be filled at past prices. The railroad companies are drawing the strings tighter as the weeks pass by, They have now issued a circular calling lumbermen's attention to the fact that after this date, 25 per cent. will be charged on all excess weight over the capacity of the car, that is to say, from all stations where the tariff on lumber is .09 cents per hundred weight will after this date be 11½ cents on all excess weight. This is so manifestly unfair that lumbermen for their own protection must resist it. Let us suppose, for example, that a mill man asks for two cars to be sent for loading, the company sends one the capacity of which is 24 000 pounds, and the other 40,000 pounds, what amount of lumber is he to instruct his men to load on those two cars? If he gets on only 20,000 pounds the company will make him pay for 24,000 pounds, if it turns out that he has loaded on 30,000 pounds on the smaller capacity car, or 40,000 on the larger, the company, forsooth, intend to make him pay 25 per cent. additional on all the excess weight, and yet he has loaded to the best of his judgment about what he thought was right. The company may reply, why let him load so many feet of green lumber and so much of dry? Perhaps the railroad companies will be kind enough to inform lumbermen when lumbar is dry, and when green; there is so much disputing on this point perhaps they might settle it. I must confess my own ignorance on this question. If I take the time that has elapsed since it was cut for a guide I find that in some localities lumber is lighter after having been cut three months, than in other places where it has been cut six months. Doubtless, mill men and lumbermen will be glad to get the company's definition of what really constitutes dry lumber, and in the meantime if those interested do not wage war against this monstrous injustice, lumbermen have not the quantity of grit they are generally credited with possessing. Boycotting might be employed with justice in this case, and while our water routes are open is just the time to bring it into play. What say you lumbermen?

Mill cull boards and scantling	$10 00
Shipping cull boards, promiscuous widths	12 00
" stocks	13 00
Scantling and joist, up to 16 ft	13 00
" " " 18 ft	14 00
" " " 20 ft	15 00
" " " 22 ft	16 00
" " 24 ft	17 00
" " " 26 ft	18 00
" " " 28 ft	19 00
" " " 30 ft	20 00
" " " 32 ft	21 00
" " " 34 ft	22 50@22 50
" " " 36 ft	24 00
" " " 38 ft	27 00
" " 40 to 44 ft	30 00
Cutting up planks to dry	20 00@25 00
" boards "	20 00
ound dressing stocks	16 00@18 00
Picks Am. inspection	30 00
Three uppers, Am. inspection	35 00@40 00

B. M.

1½-inch flooring, dressed	25 00@30 00
1½ " " rough	14 00@15 00
1¼ " " dressed	23 00@25 00
1¼ " " undressed	14 00
1 " " dressed	16 00@20 00
1 " " undressed	12 00@14 00
⅜ Beaded Sheeting, dressed	18 00@20 00
Clapboarding, dressed	12 50
XXX sawn shingles, ₱ M	2 75@ 2 90
Sawn Lath	2 25
Red oak	20 00@25 00
White "	25 00@30 00
Basswood, No. 1 & 2	18 00@20 00
Cherry, No. 1 & 2	50 00@60 00
White ash 1 & 2	25 00@30 00
Black ash 1 & 2	20 00@25 00

CHICAGO.

BY THE CARGO.

The Northwestern Lumberman May 22nd says:—The resumption of business in the yards is too recent for effect as a stimulant on the cargo market. There has been an increase of inquiry within two or three days, and a few cargoes have been sold. But while affairs in the yards remained unsettled the commission men sent out few vessels, so that it will require a week or ten days to bring a liberal supply to the market, even if commission men determine to order the lumber forward at once, which is not at all likely, as the majority of them think that it will be some time before the market will bear much of a load. It is evident that the policy pursued last year of bringing forward supplies cautiously is to be the rule this year. The day for crowding lumber on the market to be slaughtered seems to have passed. The bulk of the lumber destined for this market is now held in strong hands, that are growing stronger every year. Hence prices are likely to be steadier hereafter than in former years.

The piece stuff that has been sold this week has mostly gone for $9 25 a thousand for short green and $10 50 to $11 for dry white pine, some dry Norway having been sold for $10. Long stuff sells for higher prices, ranging from $11 to $13. No. 2 boards and strips range from $11 to $12. As yet there has been too little of this class of stuff on the market to establish prices.

The shingle market has been druggy until within a day or two; now there is a little more inquiry, but prices are indifinite; in fact, neither sellers or buyers have much to say about shingles. Sales of extra brands have lately been made at $2 05 a thousand. Mill men this spring tried their usual scheme of sending forward a lot of inferior cedar shingles, and thus degraded the market value of all cedar stock. Good shingles only of this kind are wanted in this market. The reputation of cedar shingles here and in the tributary territory around, is yet in a measure on trial, and nothing but a good article should be forced on the market. Manufacturers were, perhaps, encouraged by the headway that cedars made last year, and on that basis have ventured too far with poor qualities this spring.

AT THE YARDS.

Last week Thursday it was known that the yard lockout strike was virtually over, and on Friday there was a considerable rush of the old hands for re-instatement in their former positions. There were already a number of new men at work in the majority of yards, and this, coupled with the falling off in business since the trouble began rendered it unnecessary to employ as many men as formerly. On Saturday each yard had as many men as could be worked, and hundreds were turned away.

By the monthly statement of the secretary of the exchange it appears that the stock on hand in the yards of this city May 1st, was 312,715,417 feet, as compared to 396,147,654 feet on April 1st, a decrease of 83,952,237 feet for the month. As compared with the amount on hand May 1st, 1885, there was on May 1st, this year, a decrease of 22,314,252 feet. Shingles increased during April to the amount of 35,276,370, and during the year 169,231,100.

Receipts of lumber and shingles for the week ending May 19th, as reported by the Lumberman's Exchange:—

RECEIPTS.

	Lumber.	*Shingles.*
1886	26,057,000	15,693,000
1885	61,713,000	16,729,000

FROM JAN. 1, TO MAY 19, INCLUSIVE.

RECEIPTS.

	Lumber.	*Shingles.*
1886	195,804,000	69,162,000
1885	195,846,000	54,426,000
Increase	19,958,000	14,736,000

EASTERN FREIGHT RATES.

FROM CHICAGO AND COMMON POINTS ON CAR LOAD LOTS OF HARD AND SOFT LUMBER.

To New York	25c.
Boston	30c.
Philadelphia	23c.
Baltimore	23c.
Washington	23c.
Albany	23c.
Troy	23c.
Buffalo and Pittsburgh	15c.
Shenectady	23c.
Wheeling	15c.
Suspension Bridge	15c.
Salamanca	15c.
Black Rock	15c.
Dunkirk	15c.
Erie	15c.
Toronto	15c.

OSWEGO, N.Y.

From Our Own Correspondent.

Three uppers	$42 00@46 00
Picking	32 00@35 00
Cutting up	24 00@26 00
Fine Common	22 00@25 00
Common	14 00@18 00
Culls	11 00@14 00
Mill run lots	16 00@22 00
Sidings, selected, 1 in	30 00@35 00
" 1½ in	32 00@36 00
Mill run, 1x10, 13 to 16 ft	16 00@21 00
Selected	21 00@24 00
Shippers	14 00@16 00
Mill run, 1¼x10	17 00@20 00
Selected	21 00@30 00
Shippers	14 00@16 00
Mill run, 1 & 1½ in, strips	15 00@18 00
Selected	22 00@30 00
Culls	11 00@13 00
1x6 selected for clapboards	25 00@35 00
Shingles, XXX, 18 in. pine	3 10@ 3 50
XXX Cedar	2 75@ 3 00
Lath 1½, No 1	1 85@ 2 00
No 2	1 00@ 1 25
Ash, 1st & 2nd 1 to 4 in	16 00@20 00
Basswood, 1st & 2nd, 1 & 1½ inch	18 00@20 00
" culls, " "	8 00@11 00

BUFFALO.

We quote cargo lots:—

Uppers	$45 00@46 00
Common	17 00@18 50
Culls	12 50@13 00

TONAWANDA.

CARGO LOTS—MICHIGAN INSPECTION.

Three uppers	$42 00@44 00
Common	18 00@24 00
Culls	10 00@13 00

ALBANY.

Quotations a the yards are as follows:—

Pine, clear, ₱ M	$55 00@60 00
Pine, fourths	50 00@52 00
Pine, selects	42 00@47 00
Pine, good box	22 00@33 00
Pine, common box	13 00@15 00
Pine, 10-in. plank, each	00 45@00 47
Pine, 10-in. plank, culls, each	00 25@00 27
Pine boards, 10-in	00 30@00 32
Pine, 10-in. boards, culls	00 16@00 20
Pine, 10-in. boards, 16 ft., ₱ M	28 00@32 00
Pine, 12-in. boards, 16 ft	28 00@32 00
Pine, 12-in. boards, 13 ft	28 00@00 00
Pine, 1½ in. siding, select	40 00@43 00
Pine, 1¼-in. siding, common	15 00@18 00
Pine, 1-in. siding, select	40 00@42 00
Pine, inch siding, common	13 00@15 00
Spruce, boards, each	00 00@00 16
Spruce, plank, 1½-in., each	00 00@00 20
Spruce, plank, 2-in., each	00 00@00 30
Spruce, wall strips, each	00 12@00 12
Hemlock, boards, each	00 00@00 14
Hemlock, joist, 4x6, each	00 00@00 32
Hemlock, joist, 2½x4, each	00 00@00 14
Hemlock, wall strips, 2x4, each	00 00@00 11
Black walnut, gook, ₱ M	100 @120 00
Black waluut, 2 inch	80 00@90 00
Black walnut, 1 inch	00 00@55 00
Scaymore, 1-inch	28 00@30 00
Scaymore, ½-inch	21 00@23 00
White wood, 1-inch and thicker	38 00@40 00
White wood, ½-inch	28 00@30 00
Ash, good, ₱ M	40 00@43 00
Ash, second quality, ₱ M	25 00@30 00
Cherry, good, ₱ M	60 00@65 00
Cherry, common, ₱ M	25 00@30 00
Oak, good, ₱ M	40 00@43 00
Oak, second quality, ₱ M	20 00@25 00
Basswood, ₱ M	25 00@30 00
Hickory, ₱ M	40 00@40 00
Maple, Canada, ₱ M	28 00@30 00
Maple, American, per M	26 00@28 00
Chestnut, ₱ M	38 00@40 00
Shingles, shaved, pine, ₱ M	0 00@ 6 50
" 2nd quality	0 00@ 5 00
" extra, sawed, pine	4 30@ 4 50
" clear, "	0 00@ 3 00
" cedar, mixed	0 00@ 3 30
" cedar, XXX	0 00@ 0 00
" hemlock	2 25@ 2 37
Lath, hemlock, ₱ M	0 00@ 2 13
Lath, spruce, "	0 00@ 2 25

LONDON.

The Timber Trades Journal of May 15th says:—The great wave of depression now rolling over the country, and which threatens to make 1886 memorable in the commercial history of the United Kingdom, is becoming more appreciable every day. There are so many causes operating to foster the slackening of our industries that we suppose we must be thankful that matters are not considerably worse than they are: but we can hardly view with equanimity the consumption of the week, again a thousand standards short of that of the preceding years. Those who hold large stock—and we could point to a London firm or two who are heavily handicapped in this way—must feel the tension caused by the present extraordinary bad state of trade; hence we are not surprised at the brokers' catalogues being so well filled, that being about the readiest way of shaking off the burden of last year's enormous accumulations. The dock deliveries last week, at least those from the Surrey Commercial, show a shortage on the corresponding week of 1885 amounting to 893 standards of deals and battens, 96 standards of flooring boards, and 255 loads of timber, about 1,074 standards altogether.

The system of driving trade at high pressure, which has grown to an unwholesome degree during the past two or three years, is likely to receive a considerable check if things do not shortly mend, as it seems impossible that the nominal profits at which a big proportion of the trade is now carried on can cover the daily increasing risks engendered by a succession of bad years. It is reported from the Swedish side that some of the logs are likely to be hung up for want of water, and we hear that a few of the mills at the upper gulf ports have withdrawn their quotations for autumn shipment on the chance of an insufficiency of logs.

Messrs. Churchill & Sim were by no means favored in the matter of weather on Thursday, the day being most unpropituous for business of the kind they had in hand, the general feeling so prevalent of bad trade being by no means enlivened by the continuous downpour of rain with which the earlier portion of the day was ushered in.

Deals appeared to be out of favor, 1st Bjorneborg 4x10 going as low as £9 5s, and the Fredrikstad parcel of 1st yellow ex Bayard at a similar price, a little lot of good average lengths, reads cheaply enough.

The mixed descriptions represented by the Minna Elkan and the Elise, from Koping, near Stockholm, at £12 15s., were not indicative of any alteration in the market price of such goods; but the 4th Gefle deals ex Merannio, of the Korsnas manufacture, at £7 5s., were decidedly cheap; 4x9 went to £8 10s., but even this, for seasoned goods, is a very low price. Best Petersburg, Gromoff's, hung at £11 10s.; in fact, there was no particular animation amongst buyers, though the benches were well filled throughout the proceedings. There was a good deal of bidding for the St. John spruce ex Rowena, but 1st planks, at £7 a standard, does not afford an encouraging outlook for importation.

Just towards the conclusion of the sale we happened causually to ask a prominent member of the trade who was watching the proceedings, if had anything coming forward, and his answer given with a considerable amount of fervor, was, "Thank heaven, not at present." He, evidently was not pleased at the way things were going.

LIVERPOOL.

The Timber Trades Journal of May 15th says:—What with the prevalence of easterly winds and the interruption to business caused by the general holiday on Wednesday, there has been little of interest to note in the state of trade during the past week.

The absence of any public sales of whitewoods has also tended to keep it in the same monotonous groove it has followed for such a long time past. Even had there been any there would have been small importance attached to them, unless a widely different spirit had been shown to that exhibited at last few recent auctions.

We hope that those to be held next week may prove to be different, but there is no great probability of such occurring, if the reports from the country travellers of the flat and depressed state of trade in tha manufacturing districts are to be believed.

They say that orders are still most difficult to get, and when they are obtained are small in extent, and done on the very narrowest margin of profit.

Stocks in hand, as well as seen from reference to the figures given this week, are not heavy compared with those of last year, but with such a languid condition of business as we are suffering from at present they are in nearly every instance quite ample for the probable demands that may be made upon them for some time to come.

This being the case, it is evident that we can look only to a prolonged reduction in imports if this state of matters is to be altered for the better.

Very little business in c.i.f. or f.o.b. contracts is reported to be done, and shippers agents like most other branches of the trade, are experiencing the greatest difficulty in carrying business through to a satisfactory conclusion.

GLASGOW.

The Timber Trades Journal of May 15th says:—At the public sales held here during the past week transactions have been light, the demand being quiet. Particulars of prices are given below.

Although there has been a good attendance at the auction sale of deals here on the 12th inst., and a varied catalogue submitted, very little business was done. There were some lots afterwards sold privately. Transactions at the sale of log timber at Greenock amounted to over 300 logs.

Imports to Clyde for the week include a cargo of teakwood from Java, consigned to Messrs. Allison, Cousland & Hamilton. This is the first direct importation of teakwood from Java. At Grangemouth several steamer cargoes of deals, etc., have arrived from the Baltic. In the course of a week or two arrivals of Quebec deals at Glasgow per steam liners will begin. The stock of deals in hand is at a pretty low ebb at present, but, as there was last season a larger importation than usual of Michigan 1st pine deals, there is still a considerable balance of these on hand; narrow 1st pine deals are inquired for.

The deliveries of deals and planks from Yorkhill Yards, Glasgow, this year to end of April amounted to 261,675 pieces as against 296,723 pieces for corresponding period last year.

On Wednesday forenoon the saw mills of Messrs. A. Hood & Co., situated to the east of Polmadie Road, Glasgow, were burned down. The damage, estimated at about £2,000, is covered by insurance.

On the 6th inst., at Greenock, Messrs Singleton, Dunn & Co., brokers:—

	Per cub. ft.
	s. d.
Quebec waney boardwood—	
50 & 52 c ft avg per log	1 6
Quebec yellow pine (extra quality)—	
65 c ft avg per log	1 4¾
Quebec yellow pine (joisting)—	
45 c ft avg per log	1 0
Quebec red pine—	
30 c ft avg per log	11
Quebec red pine—	
25 c ft avg per log	10
Quebec oak—	
100 c ft avg per log	1s 10d & 1 9¾
Mobile hewn pitch pine—	
101 c ft avg per log	1 1¼
Mobile sawn pitch pine—	
30 c ft avg per log	1 0
Pensacola hewn pitch pine—	
32 c ft avg per log	0 9¾

On the 12th inst, at Glasgow, Messrs. Singleton, Dunn & Co., brokers;—

		Per cub ft.
		s. d.
Quebec 3rd yellow pine deals—		
14 to 17 ft	11/19×3	1 1½
9 to 13 ft	12/22×3	1 0½
Tamarac deals—		
16 to 23 ft	7×3	0 9
16 ft	7×3	0 8½
16 to 22 ft	6×3	0 8½
Miramichi, N. B., spruce deals—		
14 to 24 ft	9×3	0 8½
New Richmond, N. B., poplar deals—		
9 to 20 ft	6/11×3	0 9
Quebec birch—		
(20 logs=301 cub ft.)		0 11

BOARD OF TRADE RETURNS.

The following are the returns issued by the board of Trade, for the month of April 1886; and also for the 4 months ending April 1886:

MONTH ENDED 30TH APRIL, 1886.

	Quantity. Loads.	Value. £.
Timber (Hewn).		
Russia	2,105	7,288
Sweden and Norway	72,673	93,946
Germany	11,523	30,332
United States	7,822	26,496
British India	4,961	63,533
British North America	497	1,726
Other Countries	34,874	45,393
Total	134,455	268,714
Timber (Sawn or Split, Planed or Dressed).		
Russia	4,030	7,682
Sweden and Norway	105,912	231,631
United States	28,603	79,170
British North America	3,398	7,160
Other Countries	7,543	17,131
Total	149,486	342,774
Staves, (all sizes)	14,810	69,552
Mahogany (tons)	3,407	32,077
Total of Hewn and Sawn	283,941	611,488

FOUR MONTHS ENDED APRIL 30TH, 1886.

Timber (Hewn).		
Russia	3,560	14,561
Sweden and Norway	128,683	172,434
Germany	14,515	41,384
United States	31,920	109,081
British India	13,705	178,672
British North America	3,166	9,807
Other Countries	149,229	193,136
Total	344,778	719,075
Timber (Sawn or Split, Planed or Dressed).		
Russia	8,898	16,161
Sweden and Norway	154,452	336 082
United States	86,613	232,924
British North America	15,016	31,883
Other Countries	12,863	39,979
Total	277,842	657,029
Staves (all sizes)	24,419	125,925
Mahogany (tons)	17,156	135,349
Total Hewn and Sawn	622,620	1,376,104

THE lumber and shingle mills of John Fell, M. P. P., at Fenelon Falls were burned on May 24th.

LIVERPOOL STOCKS.

We take from the *Timber Trades Journal* the following Comparative Table showing Stock of Timber and Deals in Liverpool, Birkenhead and Garston, on April 30th 1885 and 1886, and also the consumption for the month of April 1885 and 1886:—

	Stock, 1885	Stock, 1886.	Consumption 1886.	Consumption 1885.
Quebec Square Pine	162,000 ft.	220,000 ft.		
" Waney "	246,000 "	241,000 "	60,000 ft.	69,000 ft.
St. John Pine	24,000 "	19,000 "	6,000 "	1,000 "
Other Ports Pine	25,000 "	48,000 "	7,000 "	3,000 "
Red Pine	18,000 "	37,000 "	0,000 "	4,000 "
Pitch Pine, hewn	303,000 "	611,000 "	161,000 "	77,000 "
" Sawn	751,000 "	669,000 "	268,000 "	346,000 "
Planks	00,000 "	00,000 "	0,000 "	0,000 "
Dantzic, &c., Fir	44,000 "	88,000 "	9,000 "	22,000 "
Sweden and Norway Fir	44,000 "	48,000 "	7,000 "	1,000 "
Oak, Canadian and American	197,000 "	176,000 "	27,000 "	12,000 "
" Planks	158,000 "	180,000 "	74,000 "	34,000 "
" Baltic	6,000 "	14,000 "	0,000 "	1,000 "
Elm	18,000 "	11,000 "	5,000 "	1,000 "
Birch	118,000 "	59,000 "	[illegible]	[illegible]
Ash	10,000 "	26,000 "	0,000 "	4,000 "
East India Teak	229,000 "	55,000 "	6,000 "	12,000 "
Greenheart	105,000 "	74,000 "	33,000 "	26,000 "
N. B. & N. S. Spruce Deals	13,479 stds	18,800 stds.	3 696 stds.	3,978 stds.
" 810 "	380 "			
Quebec Deals	4,802 "	2,399 "	821 "	1,273 "
Baltic Red Deals, &c	3,373 "	2,426 "	404 "	363 "
Baltic Boards	215 "	90 "	18 "	5 "
" prepared Flooring	2,447 "	825 "	482 "	1,502 "

NEW YORK.

The following is the official list of the prices obtained at the New York Lumber Auction Company's sale at New York on May 11th:—

Lot 1—1½ inch Whitewood, firsts, 9,697 ft.; seconds, 1,552 ft.; culls, 69 ft. $25.

Lot 2—Cherry, 1 inch, firsts, 1,512 ft.; seconds, 2,973 ft.; culls, 228 ft. $51.

Lot 3—Ash, 1½ to 2 inch, firsts, 7,399 ft.; seconds, 2,819 ft.; culls, 90 ft. $29.

Lot 4—Whitewood, 1 inch, firsts, 2,616 ft.; seconds, 5,196 ft.; culls, 414 ft. $21.

Lot 5—Whitewood, 1 inch, firsts, 2,942 ft.; seconds, 6,011 ft.; culls, 392 ft. $21.

Lot 6—Cherry, 1 inch, firsts, 1,220 ft.; seconds, 3,313 ft.; culls, 437 ft. $52.

Lot 7—Walnut, 1, 1½ and 2 inch, firsts, 2,666 ft.; seconds, 6,265 ft.; culls, 677 ft. $62.

Lot 8—Hemlock joist, 508 pieces, 3x4x13. 12 cents each.

Lot 9—Whitewood, 1 inch, firsts, 1,130 ft; seconds, 1,419 ft.; culls, 98 ft. $22.

Lot 10—Whitewood, 1 inch, culls, 11,607 ft. $13.

Lot 11—Walnut balusters, 2x2, 2½x2½, 3x3, 1,655 pcs, and 2,614 ft. $50 per M.

Lot 12—Walnut, 1, 2, 2½, 3 and 4 inch, firsts, 181 ft. seconds, 1,717 ft., culls, 3,071 ft. $38.

Lot 13—Whitewood, 3 inch, firsts, 12,309 ft.; seconds, 8,493 ft.; culls, 224 ft. $31.

Lot 14—Chestnut, 1 inch, seconds, 3,159 ft.; culls, 987 ft. $13.

Lot 15—Whitewood, 1 inch, 2,807 ft.; culls, 8,187 ft. $15

Lot 16—Quartered white oak, 1 inch, firsts, 1,833 ft.; seconds, 827 ft.; culls, 96 ft. $45.

Lot 17—Quartered white oak, 1 inch, firsts, 2,243 ft.; seconds, 1,101 ft.; culls, 208. $40.

Lot 18—Quartered white oak, 1 inch, firsts, 2,401 ft.; seconds, 553 ft.; culls, 119 ft. $47.

Lot 19—Hemlock boards, 1x10x13, 1,000. 12½ cents each.

Lot 20—Hemlock joist, 924 pieces, 2½x4x13. 12 cents each.

Lot 21—Whitewood, 1 inch, culls, 7,415 ft. $13.

Lot 22—Whitewood, inch, culls, 7,757 ft. $14.

Lot 23—Walnut, firsts, 754 ft.; seconds, 1,987 ft.; culls, 75 ft. $69.

Lot 24—Walnut, 1½, 2, 2½, 3, and 4 inch, firsts, 1,207 ft.; seconds, 2,510 ft.; culls, 138 ft. $70.50.

Lot 25—Whitewood, 1 inch, firsts, 3,704 ft.; seconds, 5,748 ft.; culls, 390 ft. $25.

Lot 26—Walnut, 1, 1½, 1½ and 2 inch, firsts, 456 ft.; seconds, 1,714 ft.; culls, 5,607 ft. $44.50.

Lot 27—Whitewood, 1 inch, firsts, 4,426 ft.; seconds, 6 378 ft.; culls, 247 ft. $23.50.

Lot 29—Ash balusters, 2,599 pieces. 2½ cents each.

Lot 31—Whitewood, 1 inch, culls, 4,352 ft. $13.50.

Lot 32—Whitewood, 1 inch, culls, 4,681 ft. $14.50.

Lot 33—Whitewood, 1 inch, culls, 4,866 ft. $14.

Lot 34—Walnut, 1, 1¼, 1½ and 2 inch, culls, 6,474 ft. $35.

Lot 35—Whitewood, 1 inch, seconds, 1,024 ft.; culls, 9,763 ft. $15.50.

Lot 36—White pine shelving, ⅞ inch, common planed two sides, 49,477 ft. $15.50.

Lot 37—Ash, 2, 3, and 4 inch, firsts, 6,421 ft.; seconds 4,368 ft.; culls, 191 ft $26.50.

Lot 38—Whitewood, 1 inch, culls, 11,479 ft. $14.50.

Lot 39—Whitewood, 1½ inch, firsts, 9,585 ft.; seconds, 3,818 ft.; culls, 204 ft. $31.50.

Lot 40—Ash balusters, 4,372 pcs 2x2 in. clear, 2¾ c. each; 3,094 pcs. 2½x2½ in. clear, 4 c. each; 176 3x3 in. clear, 4¾ c. each,

Lot 41—Cherry balusters, 280 pcs. 2x2, clear, and 34 pcs. 2½x2, 5 cents each.

Lot 42—White pine box, 1½ inch, 12,848 ft. $16.

Lot 43—Hemlock joist, 546 pcs. 3x4x13. 13½ cents each.

Lot 44—Walnut, 1¼, 1½, 2 and 2½ inch, culls, 8,803 ft. $34.50.

Lot 45—Whitewood, 1 inch, seconds, 1,502 ft.; culls 9,539 ft. $15

Lot 46—Walnut, 1 inch, culls, [illegible]72 ft. $26.

Lot 47—Walnut, 1 inch, culls, 5,192 ft. $35.

Lot 48—Whitewood, 1 inch, firsts, 3,388 ft.; seconds 6,084 ft.; culls, 565 ft. $26.50.

Lot 49—Ash, 1½ and 2 inch, firsts, 7,392 ft.; seconds, 2,768 ft.; culls, 42. $25.

Lot 50—White ash, 2, 2½, 3 and [illegible] inch, firsts, 1,881 ft.; seconds, 4,031 ft.; culls, 665 ft. $21.

Lot 51—Whitewood, 1 inch, culls, 11,457 feet. $14.25.

Lot 52—Whitewood, 1 inch, firsts, 1,016 ft.; seconds, 5,158 ft.; culls, 4,393 ft. $21.50.

Lot 53—Walnut dimension stuff ¾, 1, 1¼, and 1½ in. 7,829 ft. $27.

Lot 54—White pine, 1½ inch, extra pine cutting up stock, 12,567 feet. $19.

Lot 55—Walnut, 1, 1½, 2, 2½, 3, 4, 5 and 6 inch, seconds, 1,248 ft.; culls, 3,473 ft. $38.

Lot 56—Whitewood, 1 inch, culls 12,170 ft. $14.

Lot 57—Whitewood, 1 inch, firsts, 74 ft.; seconds, 2,838 ft.; culls, 8,299 ft. $16.50.

Lot 58—Ash, 1½ and 2 inch, firsts, 3,030 ft.; seconds, 2,173 ft.; culls 40 ft. $27.

Lot 59—Ash, 2 inch, firsts, 3,011 ft.; seconds, 1,553 ft.; culls, 81. $31.50.

Lot 60—Ash, 1 and 2 inch, firsts, 2,507 ft.; seconds, 1,120 ft.; culls, 19. $31.50.

Lot 61—Whitewood, 1 inch, seconds, 395 ft.; culls, 10,060 ft. $14.

Lot 62—Whitewood, 1 inch, seconds, 1,367 ft.; culls, 8,589 ft. $15.50.

Lot 63—Walnut, 1½, 2, 2½ and 3 inch, seconds, 833 ft.; culls, 6,905 ft. $32.

Lot 63b—Walnut balusters, 2x2x30 to 34 in. 1,020 pcs. 5½ cents each.

Lot 64—Pine shelving, 1x16 common, 15,706 ft $16.

Lot 65—Walnut, 1, 1½ and 2 inch, firsts, 97 ft. seconds, 2,680 ft.; culls, 7,242 ft. $39.

Lot 66—Ash, 1 inch, firsts, 1,832 ft.; seconds, 3,363 ft.; culls, 342 ft. $29.

Lot 67—Ash, 1 inch, firsts, 2,185 ft.; seconds, 2,434 ft.; culls, 152 ft. $31.

Lot 68—Ash, 2 inch, firsts, 7,678 ft.; seconds, 2,720 ft.; culls, 145 ft. $34.

Lot 69—Whitewood, ⅝ inch, firsts, 9,225 ft.; seconds 10,176 ft.; culls, 274 ft. $22.

Lot 70—Whitewood, 1 inch, seconds, 1,006 ft.; culls, 3,666 ft. $14.

Lot 71—Whitewood, 1 inch, seconds, 995 ft.; culls, 4,836 ft. $14.

Lot 72—571 pieces pine roofing boards, 1x8x12, T. G. planed two sides, 4,568 ft. 14½ cents each.

Lot 73—Basswood, 1 inch, firsts, 470 ft.; seconds, 1,159 ft.; culls. 636 ft. $17.

Lot 74—Red oak, 1 inch, firsts, 507 ft.; seconds, 1,149 ft.; culls, 445 ft. $25.

Lot 75—Ash, 1 and 1¼ inch, firsts, 489 ft.; seconds 728 ft.; culls, 48 ft. $27.

Lot 76—Sycamore, 1 inch, firsts, 825 ft.; seconds, 1,543 ft.; culls, 410 ft. $21.50.

Lot 77—209 pcs. pine roofing boards, 1x10x12, and 624 pcs. 1x10x14, 9,370 ft. 17 cents each.

Lot 78—Walnut, 2, 2½, 3, 4, 4½, 5, 5½, 6, 6½ and 7 in., firsts, 250 ft.; seconds, 2,707 ft.; culls, 4,575 ft. $31.

Lot 79—Chestnut, 1 inch, firsts, 213 ft.; seconds, 2,696 ft.; culls, 355 ft. $16.

Lot 80—Whitewood, 1 inch, culls, 10,508 ft. $14.25.

Lot 81—Ash, 2 inch, firsts, 5,510 ft.; seconds, 2,148 ft.; culls, 146 ft. $36.

Lot 82—Ash, 1 inch, firsts, 3,384 ft.; seconds, 2,402 ft.; culls, 85 ft. $35.50.

The next sale will be held on June 8th.

JOS. GARDINER, of Mount Pleasant, Ont. fell across a slab in Thomas Best's mill and broke three ribs and injured two more.

THE HENDERSON LUMBER CO. Limited.

DAVID H. HENDERSON, *President*; NORMAN HENDERSON, *Vice-President*; CHAS. H. WALTERS, *Sec-Treas.*

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CANOES

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Gold Medal, London Fisheries Exhibition, 1883.

J. Z. ROGERS,
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For Holding Logs upon a Saw Mill Carriage while being Sawn into Lumber.

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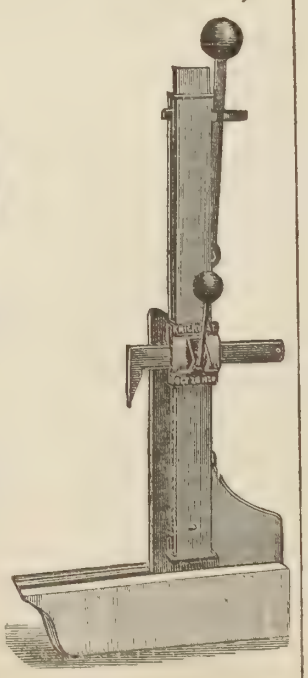

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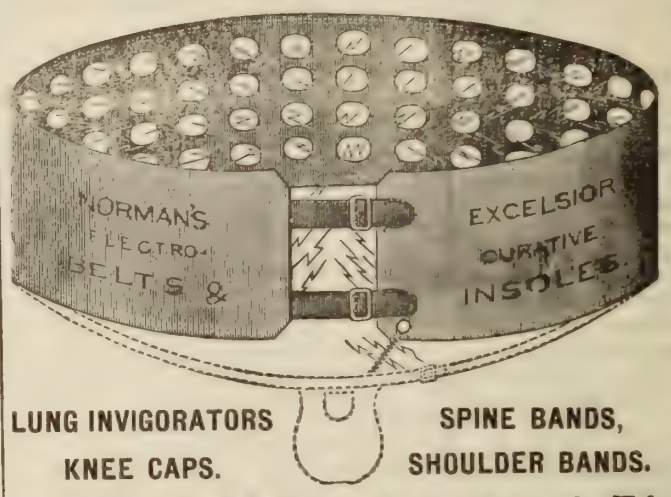

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To produce a new growth of hair on bald heads, in the case of persons advanced in years, is not always possible. When the glands are decayed and gone, no stimulant can restore them; but, when they are only inactive, from the need of some excitant, the application of Ayer's Hair Vigor will renew their vitality, and a new growth will result. L. V. Templeton, Newbern, N. C., writes: "After a protracted illness, with fever, my hair all came out, leaving me entirely bald. I procured a bottle of Ayer's Hair Vigor, and, before I had used all its contents, a thick growth of hair, nearly two inches long, covered my head." L. D. McJunkin, Perryville, Md., writes: "Baldness is hereditary in my family. Five years ago the hair on the top of my head was becoming weak and thin. I procured Ayer's Hair Vigor, the application of which invigorated the hair roots, and sent out a new growth of young hair. To-day my hair is as thick and vigorous as ever. I still use the Vigor occasionally to keep my scalp in a healthy condition."

AYER'S HAIR VIGOR.

AYER'S HAIR VIGOR.

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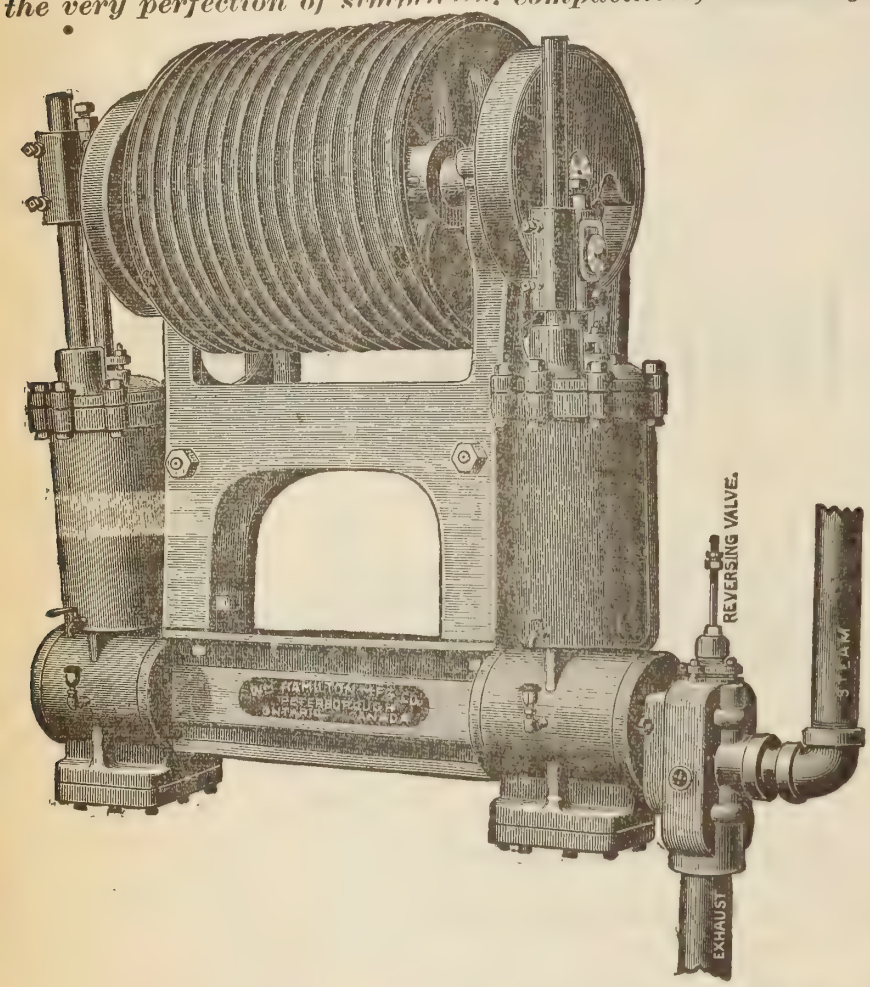
FOR STEAM FEED IN CIRCULAR MILLS WITH RACK OR ROPE.

This Engine has practically but two moving parts, aside from cranks and shafts. The whole array of eccentrics, valves, valve rods, connecting rods, cross heads, slides, levers, rock shafts, bell cranks, etc., is done away with, and the very perfection of simplicity, compactness, durability and cheapness attained.



The above engraving illustrates the Twin Engine, 10x16, for Rope Feed, for Saw Mill Carriages. The spool is 27 in. diameter, 30 in. face, is grooved 2 in. pitch for 1½ in. rope. The shaft is steel, 4½ in. diameter, with disk cranks. No connecting rods, eccentrics or valve rods to get loose and out of order. The ports are in the trunions, and worked by an oscilliation of the cylinders, and are held in their place in the downward motion by a steam cushion below. The sawyer's valve is a perfect balance, and by moving this valve the engine can be reversed, stopped or started almost instantaneously if necessary, as the sawyer has perfect control of it by his lever either to go fast or slow. Should the sawyer let go of his lever either by mistake or any other cause, it is balanced so that the valve will come to the centre and cut the steam off both cylinders and stop the feed. When standing, the lever is locked or fastended, so that is is impossible for it to start off itself. The engine stands upright below the carriage, and bolted to two upright beams, placed on the mill for the purpose. When a rack is preferred in place of the rope, we put on a steel wheel 30 in. in diameter, and the engine placed high enough to work into the rack on carriage bar, or if the beams come in the way, an idler wheel can be used between engine and rack segs; or, the engine can be placed at a distance and have a shaft rom it to the carriage; or it can be placed in the engine room, where it is under the control of the engineer for oiling, thence by shaft and pinion to carriage rack bars. These engines are well adapted for cutting long logs, or where the logs are mixed, the advantage of this feed will be apparent to mill men. When the carriages are used in two or more sections, the couplin and uncoup ling of each section is quick and simple.

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☞ ***We guarantee this to be the best Mill of his kind got up, and would ask any one wanting a good Band Saw-Mill to communicate with us. We would also call the attention of Mill Men to our new IRON GANGS, CIRCULAR MILLS and MILL MACHINERY. For further information, prices, &c., address the Manufacurers,***

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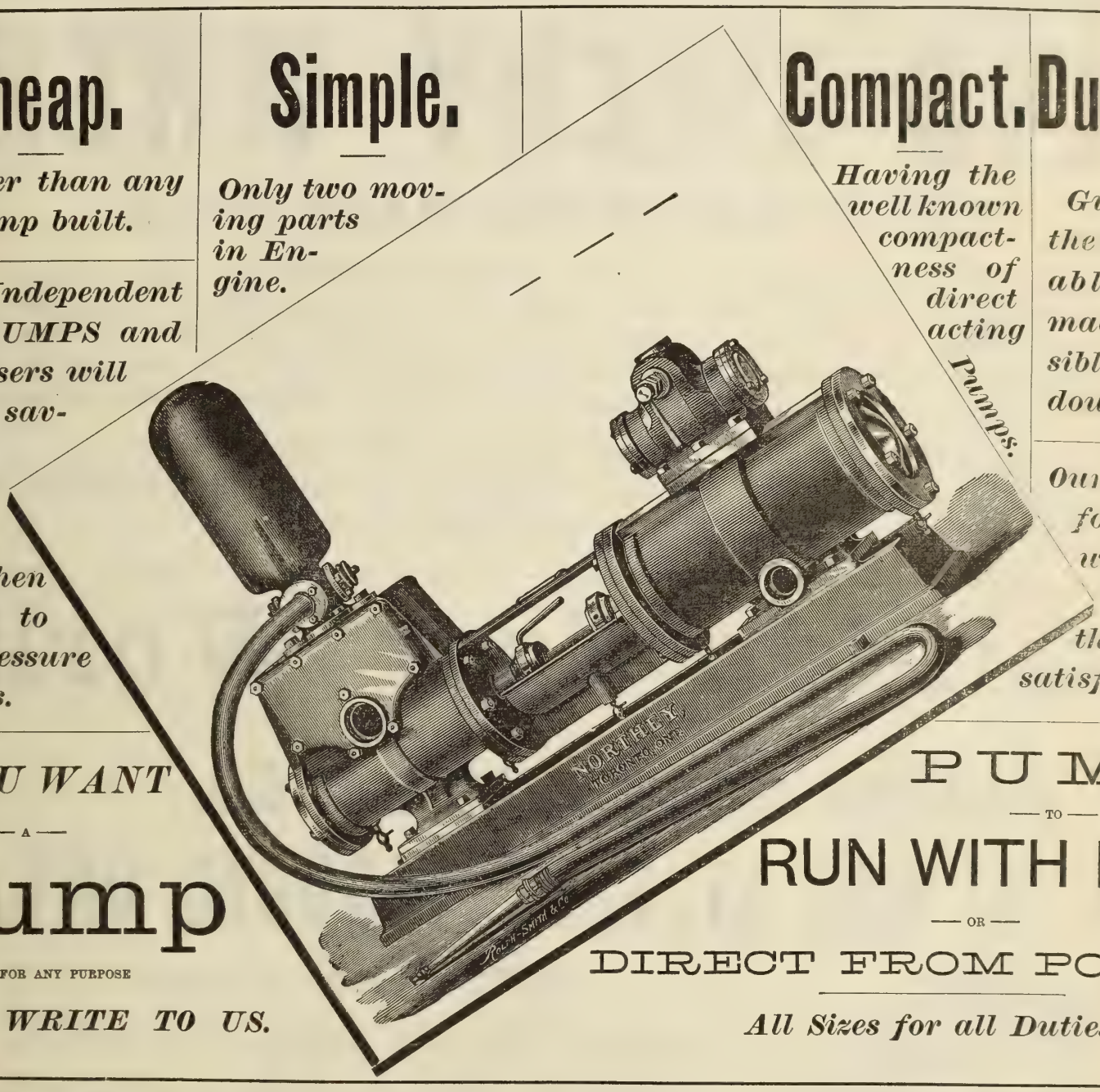

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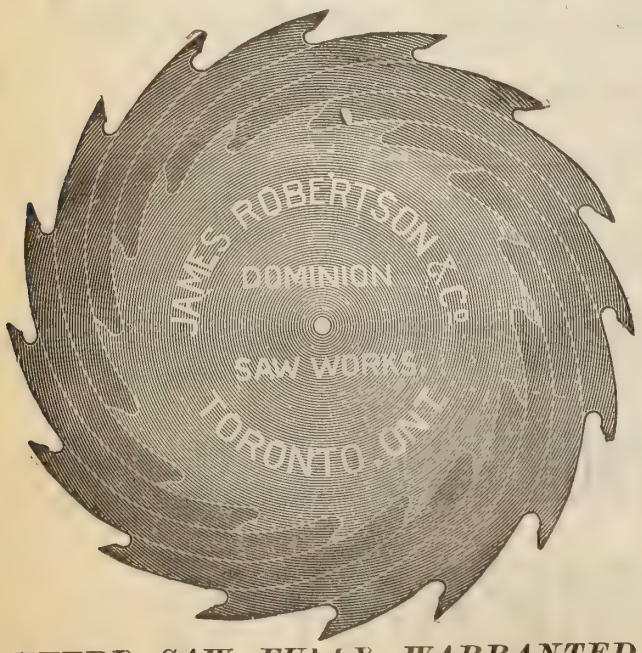

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HISTORY OF THE SAW MILL.

How surprised I was on seeing in a museum, a long time ago, such things as scissors, seal rings, necklaces, and pairs compasses, that were taken from Egyptian tombs 3,000 years old!

But, after all, men were men 3,000 years ago, and women were women. They had the wants, the needs, the vanities of men and women, and they had brains not unlike our own to supply them.

The most boastful Yankee (not that Yankees are more boastful than other people) in some of the rooms of the British Museum is obliged to confess that the ancients originated a great many good notions which we moderns have only improved upon.

For instance, there are few tools more ancient than the saw. All the ancient nations appear to have had it; certainly the Hindoos, the Egyptians, the Greeks and the Romans. The saw may have existed even before there were any men on earth.

There is a creature called the saw fly, with two saws in its tail, which it actually uses for sawing the stems, leaves and fruits, wherein its eggs are to be deposited. There is also a saw-fish, the long snout of which is a saw. It is said also that the original inhabitants of the island of Madeira found a ready-made saw in the backbone of a fish.

The Greeks had a pretty story attributing the invention of the saw to the accidental finding of the jaw-bone of a snake by one Talus, who used to cut through a small piece of wood. Being a slave, and finding that this jaw-bone eased his labor, he made a saw of iron, and thus gave mankind a new and most valuable tool.

The ancient saws differed from ours in two ways. The teeth were so arranged that the cut was made by pulling instead of pushing; and the teeth, instead of being set one to the right and one to the left alternately, were set so that ten or a dozen in succession were slanted one way, and the same number the other way.

The ancients had several varieties of the implement. The Greeks, for example, had cross-cut saws for two men, also saws for cutting marble into slabs. And they had a kind of tubular saw for hollowing out a marble bath-tub, similar in principle to the method now employed.

Among the pictures uncovered in the buried city of Herculaneum there is a representation of two genii sawing a piece of wood on a carpenter's bench very much like ours and using a saw with a wooden frame similar to those now employed. Still more strange, the frame saw tightened with a rope and stick, such as our street wood sawyers use, was probably as familiar to the Romans as it is to us.

A saw mill, however, by which wind, water or steam is made to do the hardest part of the work, was not known to any ancient nation.

Sawing by hand, next to digging a stiff clay soil, is about the hardest work that men ordinarily have to do. It is therefore not surprising that our ease-loving race began to experiment a good while ago with a view to applying the forces of nature to the performance of this toil.

A learned German investor who has investigated the subject very thoroughly states that the first trace of saw mill yet discovered is in the records of the German city of Augsburg, for the year 1337.

The reference is slight, and does not fix the fact with certainty. But there are two saw mills near that city which are known to have existed as far back as 1417, and they are still used.

Before that valuable invention, all boards and planks were split with wedges, and then hewn to the requisite smoothness with the axe.

The splitting of boards is still practiced in remote settlements, as I myself have seen, and it is recorded of Peter the Great, of Russia, that he had much difficulty in inducing the timber cutters of his empire to discontinue the method. At length he issued an edict forbidding the exportation of split planks. Even in Norway, covered with forests as it was, there was not one saw mill before 1530.

Nowhere in Europe, it appears, was the introduction of the saw mill so long resisted as in England. In 1866 a Hollander erected one near London; but it brought upon the poor man such an outcry and opposition that he was obliged to abandon it.

The sawing of timber by hand furnished occupation, at that time, and long after, to large numbers of strong men.

In every town there was saw pits, as they were called, for the convenience of the sawyers, one of whom stood at the bottom of the pit and the other on the log.

We can easily imagine that when every beam, plank and board, thick or thin, had to be sawed by hand, the sawyers must have been a formidable body, both from their numbers and their strength.

After the failure of the Dutchman in 1663, there was no serious attempt to start another saw mill in England for more than a hundred years

In 1767 an English timber dealer of large capital built a saw mill to be moved by the wind It was t' ought to be a great and difficult enterprise, and it attracted much public attention. Some years before an author had explained the advantages and economy of saw mills; then the society of arts gave the scheme of building one their approval, and, finally, the mill was actually built by an engineer who had studied the saw mills of Holland and Norway.

No sooner was the mill complete than the sawyers assembled in great force and tore it to pieces. The Government compensated the owner for his loss, as was just. Some of the roiters also were convicted and imprisoned.

A new mill was then built, which was allowed to work without molestation, and proved so profitable that others were soon introduced.

In no part of the world, probably, has the saw been more minutely and curiously developed than in Great Brilain, where they have saws so fine as to cut diamonds, and circular saws nine feet in diameter and a quarter of an inch thick.

They have have also veneer saws so accurately adjusted as to cut 18 slices of veneer from a rosewood plank an inch thick.

In London they will put a log of mahogany upon the mill and cut it into slices so thin that the sawdust weighs more than the veneer.

Yankees have beaten this performance. They take a piece of mahogany or rosewood, soften it by steam, and cut it into veneers with a knife, without making a grain of sawdust.

Daniel Webster tells us that his father had a saw mill after his removal to New Hampshire, at the source of the Merrimac river.

Daniel, who was by no means fond of labor at any part of his life, liked nothing better in his boyhood than to attend this saw mill, because when he had put his log in position and started the saw, he had 16 good minutes for rest or reading before the business required further attention.—*Journal of Progress.*

SPRUCE FOR MAKING PULP.

A very large quantity of logs, both spruce and poplar, are now coming into use for grinding up as pulp for newspaper work, cardboards and the like. When the first paper was made from wood pulp it was thought that poplar was the best and perhaps the only wood which could be used, but during the last few years it has been found that spruce wood made better and stronger pulp than poplar. Poplar will always be a much cheaper wood than spruce, because it grows very rapidly and has but few economical uses, outside of the grinding up for pulp and the making of excelsior. Poplar never grows very large but grows quite rapidly. A growth of poplar 16 to 18 inches through at the butt is considered very good growth, although some few specimens may be found of larger growth. After reaching that size in the average New England soils, it seems to lose vitality and finally die. Those who cut poplar for pulp wood cut down some very small trees, even down to few inches in diameter. It is commonly cut into four-foot lengths and sold by the cord, New Hampshire lots fetching from $4 to $5 per cord, probably averaging about $4 per cord. Spruce logs cut up in four-feet lengths are selling at the same time at from $6 to $6.50 per cord, delivered on the cars in various parts of New Hampshire. It is claimed by some that spruce wood does not make so white pulp as poplar, and that the chemicals for bleaching are somewhat more expensive in the case of the spruce, but it is much sought for on account of the strength of its fibre and the better character of the wood. Lumbermen are quite ready to get out a certain percentage of spruce for the wood pulp grinders, because they will take some seamy trees, where reasonably clear and of good growth. Such seamy trees are not profitable for sawing into any kind of lumber. There is a great difference in the color of spruce, that which is very white being much more desirable for the wood-pulp people. Trees of the same variety seem to differ in whiteness or color, probably owing to the soil upon which they grow. Hence some lots are really worth a dollar a cord more to manufacture into wood pulp than other lots, while both might be worth equal prices for manufacturing into ordinary lumber. The pulp business is destined to grow more rapidly in the future even than in the past, for the users of pulp and paper and cardboard are becoming multiplied every year. The inventive genius of the Yankee discovers many new application for a product like this almost every day, and the time is rapidly drawing near when a large quantity of spruce and poplar will be required to meet the demands of wood pulp grinders.—*Manufacturers' Gazette.*

MAKING ESTIMATES.

Powis Bale, in "Saw-mills," gives for cross cutting soft and medium woods a speed of 10,000 feet per minute at the points of the teeth and says he has yet to be convinced that any speed in addition to this serves any useful purpose, or is in any way necessary or desirable. In sawing very hard woods the speed of both the saw and the feed of the wood should be reduced, the former about one quarter and the latter one-half, or even less. He further says suppose a circular saw, say 30 in. diameter and 12 gauge, be put on a spindle and the speed gradually increased till it reaches at the periphery say 12,000 ft. or 13,000 ft per minute, it usually will become wavy and pliant, and run untrue; it therefore follows that not only is the extra speed entirely unnecessary, but it is positively detrimental, as more power is consumed, and more heat engendered in the bearings, spindle, and saw plate, extra lubrication is required, and the belts deterior ate more rapidly.

THE value of planed and finished lumber, sash, doors and blinds, sent from the United States into Manitoba, during the year ending June 30th, 1885, was but $72,000 and the value of undressed lumber was but $22,000.

WHITE PINE EXHAUSTION.

The ably edited *Northwestern Lumberman*, of Chicago, which has frequently critised the estimates given of the pine standing in Michigan and other states, with the intention of showing that they were unreliable, itself recognizes the fact that the forests are being depleted. It says :—

The readers of the *Lumberman* well known that, as a journal, it has never taken the extreme view in reference to the rapid exhaustion of the white pine supply. Yet it has not been unmindful of the fact that the forests of Michigan, Wisconsin and Minnesota could not eternally furnish food for the saw mills. It has also recognized the truth that on most of the area now covered with white pine there can be no second growth of this wood. Indeed it is doubtful if any other state than Maine has a soil or climate adapted to a second crop of pine trees sufficiently sturdy to make saw logs. Even in Maine the sapling pines attain but a limited growth, and are used mostly for the making of coarse box boards, and are not adapted to general lumber purposes. Hence, as each pine tree falls, there is one less in the myriads that stand in the forest, and its place cannot be filled. Even if it were possible to grow another crop of pine, it would not serve to fill the lack that would ensue before the saplings were ready for the market.

Until within the past half dozen years there was very little believed about the comparatively near approach of the end of the white pine supply. Even when it was announced, three or four years ago, that there will be little or no more pine floated out of Cass river, in the Saginaw district, and that lumbering on the Flint was drawing toward an end, western operators paid but slight attention to the statement. It was thought then, and still is, to a considerable degree, that there was, and remains, an inexhaustible supply in the forests of Michigan Wisconsin and Minnesota, and that practically, so far as this and the succeeding generation or two are concerned, the exhaustion of the white pine supply of the northwest is a matter that belongs to some remote future century.

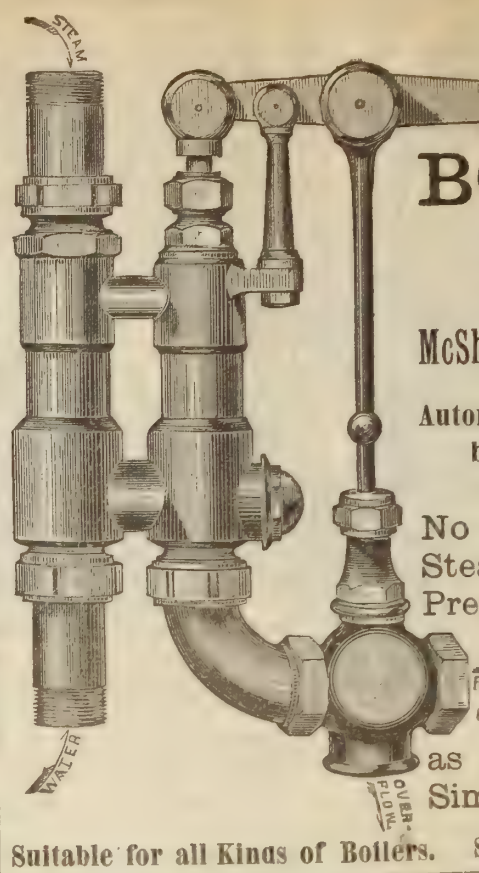
But this view is as extreme as the other that has been rife for twenty years past, which has fixed the limit of pine supply five, ten or fifteen years hence. The prodigious rate at which consumption of pine lumber has proceeded for the past fifteen years is at last visibly telling on the resources of the forests. Not that production has as yet been seriously effected by the coming exhaustion that casts a shadow on present operations ; for, though manufacturers and stumpage owners are beginning to shape their affairs so as to avoid a wasteful slaughter of pine in the future, and husband their holdings as much as possible, there is still manifested a disposition to crowd production a little beyond the consumptive and trade requirement. Undoubtedly this propensity will be exhibited until the supply has been so reduced as to permanently raise the price of both stumpage and lumber to a pitch that will induce a strict economy of forest resources. There are signs of coming restricted supply, however, that must be visible to any one who will open his eyes and look around. The more prominent of these are glanced at, as follows :

The heavier operations of lower Michigan are on the headwaters of the logging streams, quite in the middle of the state, and in the regions where the waters flowing into Lake Huron, and those that run into Lake Michigan, debate the ground for supremacy in drainage. The counties of Roscommon, Crawford, Missaukee, Wexford, Kalkaska, Osceola and Clare, are now the home of the vaster pine forests, while the counties that surround the interior group, though still possessing much pine, are losing their prominence as producers. Twenty years ago the interior counties named were a *terra incognita* to the loggers and mill owners along the lake shores. Now the pine has been so largely cut off on the headwaters of the Muskegon, the Manistee and the Pere Marquette, that log hauls and logging railroads are the rule, and not the exception, as formerly. Great companies are annually taking out 20,000,000 to 40,000,000 feet of logs on the headwaters of all the important streams of lower Michigan, and have reached up to the hardwood belt that covers the northern counties of the state. There are no longer vast stretches of untouched pine in lower Michigan. Nearly every section has been scarred and gored by the operations of the industrious and enterprising logger. How long will it be, under such insatiable conditions, before it will begin to be said that this, that and the other owner has exhausted his pine in the counties that have been named? For several years past mill concern after mill concern has cut its last pine tree on the lower portions of the Grand, the White and the Muskegon rivers, and has closed up its business on that account. Such notable instances as the retirement of the Beidler Manufacturing Company last year, and A. A. Bigelow & Co., this year, from the Muskegon saw mill business, wholly on account of the exhaustion of their stumpage supply, have been common along the Michigan shore within the past half dozen years. Many concerns are keeping themselves alive by buying more pine on the headwaters of the streams. Thus is being concentrated and intensified the final struggle on the backbone of the state. There the battle will end, so far as the lower peninsula is concerned. Not that there will not be scattered pine forests and some logging and sawing in lower Michigan for twenty or thirty, or even forty years to come, but the larger operations will be events of the past before the nearest of these limits of time ; the supply will have been so reduced that rush and competition for volume of business will be no longer possible.

The direction that the product of Michigan mills is taking for market is a noteworthy feature, as bearing on the diminution of the supply. Time was when the Saginaw district and the Huron shore furnished the eastern markets with lumber.

Latterly buyers for the eastern markets have found that the Saginaw and Huron shore supply is not adequate to their needs. Not that there is not enough lumber in those districts, measured by feet, but it is not properly classified for profitable handling ; besides, it is held in close hands, who wring all the speculation out of it. The yard trade in the Saginaw valley is also increasing, and will eventually require a large portion of the stock that once went east by lake. In view of the newer phrases of the Michigan lumber trade, we must conclude that the eastern demand has begun to spread over the supply that was once altogether directed to the westward. What does this mean but that the supply in the older districts is becoming inadequate to the eastern demand ? And must we not conclude, also, that the eastern requirement is year by year increasing, and that whereas probably over 200,000,000 feet of lumber is now sent to the east from mills on Lake Michigan and Lake Superior, the time is near at hand when 500,000,000 feet will take that direction ? In the meantime the western demand will increase in like proportion. This enlargement of the requirement is but slightly taken into account when men talk about the diminishment of the pine supply. It is safe to conclude that the end will draw near with accelerated speed as it approaches, because that, while the supply is growing less all the time, the demand is increasing. Whole mill cuts are now going to eastern markets from north shore and Green Bay ports. An increasing amount is being shipped from points on the east shore. Huron shore mill men already have to buy a part of their log supply in Canada. Muskegon, White lake and Grand river lumbermen are seeking new locations in Wisconsin and in the Lake Superior region. Much of this new enterprise is for the supply of the eastern trade, while that of the prairie states is constantly enlarging. These considerations are corpulent with meaning in reference to the rapid exhaustion of the white pine supply.

It cannot be denied that yellow pine, poplar, cypress and the Pacific coast woods will more and more come into use in the fields where white pine has hitherto been supreme. But all of these woods have a local territory of their own that will need an increasing supply. Aside from this is the fact that nothing has, nor can, fill the place of white pine. The longer it endures the test, and the more it is brought in sharp comparison and competition with other kinds of lumber, the better does its reputation become. So it is plain that nothing can prevent the enormous consumption of white pine lumber and the rapid diminution of its forest supply.



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T. McAVITY & SONS,

ST. JOHN, N. B.

THE MANAGEMENT OF STEAM BOILERS.

The following rules for the management of steam boilers are laid down by the Hartford Steam Boiler and Inspection Company :—

1. Condition of Water.—The first duty of an engineer, when he enters his boiler room in the morning, is to ascertain how many gauges of water there are in his boilers. Never unbank or replenish the fires until this is done. Accidents have occurred, and many boilers ave been entirely ruined from negligence of this precaution.

2. Low water—In case of low water, immediately cover the fires with ashes, or, if no ashes are at hand, use fresh coal. Don't turn on the feed under any circumstances, nor tamper with or open the safety valves. Let steam outlets remain as they are.

3. In cases of foaming— Close throttle, and keep closed long enough to show true level of water. If that level is sufficiently high, feeding and blowing will usually suffice to correct the evil. In cases of violent foaming, caused by dirty water, or change from salt to fresh, or vice versa, in addition to the action above stated, check draught, and cover fire with fresh coal.

4. Leaks—When leaks are discovered they should be repaired as soon as possible.

5. Blowing off—Blow down, under a pressure not exceeding twenty pounds, at least once in two weeks—every Saturday night would be better. In case the feed becomes muddy, blow out six or eight inches every day. When surface block-cocks are used, they should be often opened for a few moments at a time.

6. Filling up the Boiler —After blowing down, allow the boiler to become cool before filling again. Cold water pumped into hot boilers is very injurious from sudden contraction.

7. Exterior of Boiler—Care should be taken that no water comes in contact with the exterior of the boiler, either from leaky joints or other causes.

8. Removing deposit and sediment—In tubular boilers the hand-hole should be often opened, and all collections removed from over the fire. Also, when boilers are fed in front, and blown off through the same pipe, the collection of mud or sediment in the rear should be often removed.

9. Safety Valves— Raise the safety valves cautiously and frequently, as they are liable to become fast in their seats, and useless for the purpose intended.

10. Safety Valve and Pressure Gauge—Should the gauge at any time indicate the limit of pressure allowed, see that the safety valves are blowing off

11. Gauge Cocks, Glass Gauge—Keep gauge cocks clear, and in constant use. Glass gauges should not be relied on altogether.

12. Blisters—When a blister appears there must be no delay in having it carefully examined, or patched as the case may require.

13. Clean Sheets— Particular care should be taken to keep sheets and parts of boilers exposed to the fire perfectly clean ; also all tubes, flues and connections, well swept. This is particularly necessary where wood or soft coal is used for fuel.

14. General Care of Boilers and Connections —Under all circumstances keep the gauges, cocks, etc , clean and in good order, and things generally in and about the boiler room in a neat condition.

MARMORA.

DROWNED.—The Campbellford *Herald* says that a telegram was received at the Rathbun office, Campbellford, conveying the intelligence of the drowning of Philip O'Hara, a young man in the employ of the company, which took place in Crow River, at Marmora, on May 29th. The deceased was crossing a river in a boat, in company with Dan Murphy, intending to land on an Island midway in the stream ; but before reaching it the men were capsized and thrown into the water. Murphy started to swim ashore, but returned to the boat. O'Hara, who was able to swim, did not seem to do much to help himself, and sank a short distance from where the boat was overturned.

A Lady's Secret.

"I'd give a good deal if I had such a pure, healthy skin as you have," said a lady to a friend. "Just look at mine, all spots and blotches, and rough as a grater. Tell me the secret of your success in always looking so well." "There is no secret about it," was the reply, "Dr. Pierce's 'Golden Medical Discovery' cleansed my blood, and when that was done my skin, which was worse than yours, began to look smooth and healthy, as you see it now."

CANADIAN PACIFIC RAILWAY.

Ontario and Quebec Division.

CHANGE OF TIME.

To take effect Monday, November 2nd, at 1 a.m. Trains arrive at Peterborough as follows:

From the West.

12.31 p. m.—Mail from Chicago, Detroit, St. Thomas Galt and Toronto.
9.05 p. m.—Mixed from Toronto and Intermediate Stations.
10.56 p. m.—Express from Toronto and West.

From the East.

5.31 a. m.—Express from Montreal, Ottawa and Perth.
7.25 a. m.—Mixed from Havelock and Norwood.
11.48 a. m.—Express from Winnipeg via Carlton Junction.
6.42 p. m.—Mail from Montreal, Ottawa, Smith's Falls, and Perth.

Trains depart from Peterborough as follows:

Going East.

2.31 p. m.—Mail for Perth, Smith's Falls, Ottawa and Montreal.
9.10 p. m.—Mixed, for Norwood and Havelock.
10.56 p. m.—Express, for Perth, Smith's Falls, Ottawa and Montreal.

Going West.

5.31 a. m.—Mail, for Toronto, Galt, St. Thomas, Detroit and Chicago
7.25 a. m.—Mixed for Local Stations, West to Toronto.
12.31 a. m.—Express for Toronto and points west.
6.42 p. m.—Express for Toronto and Intermediate Stations.

NOTE—12.30 a.m. train from Winnipeg, runs daily, Tuesdays excepted.

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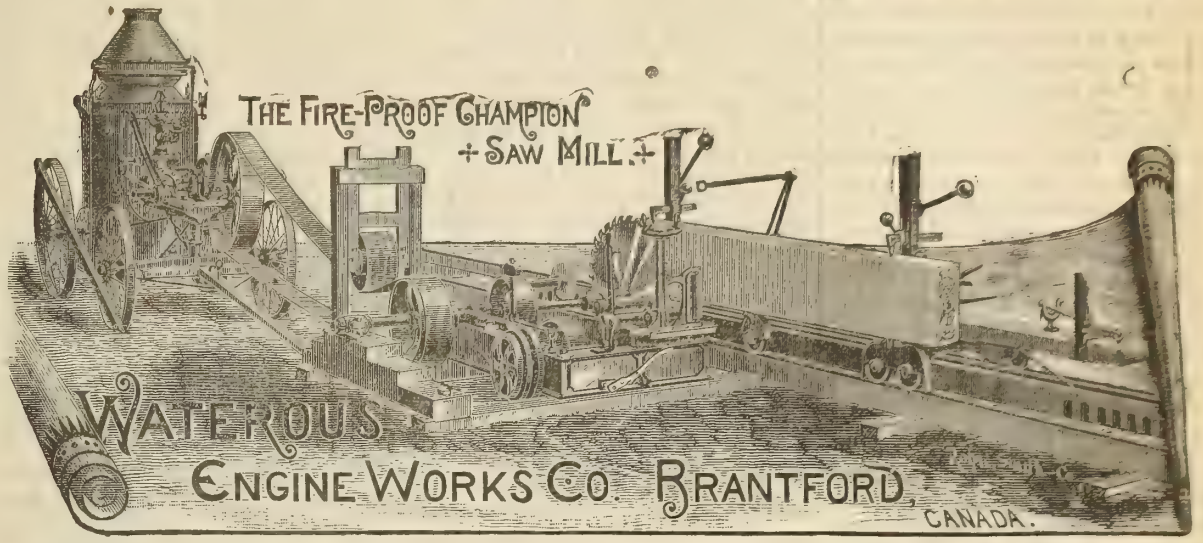

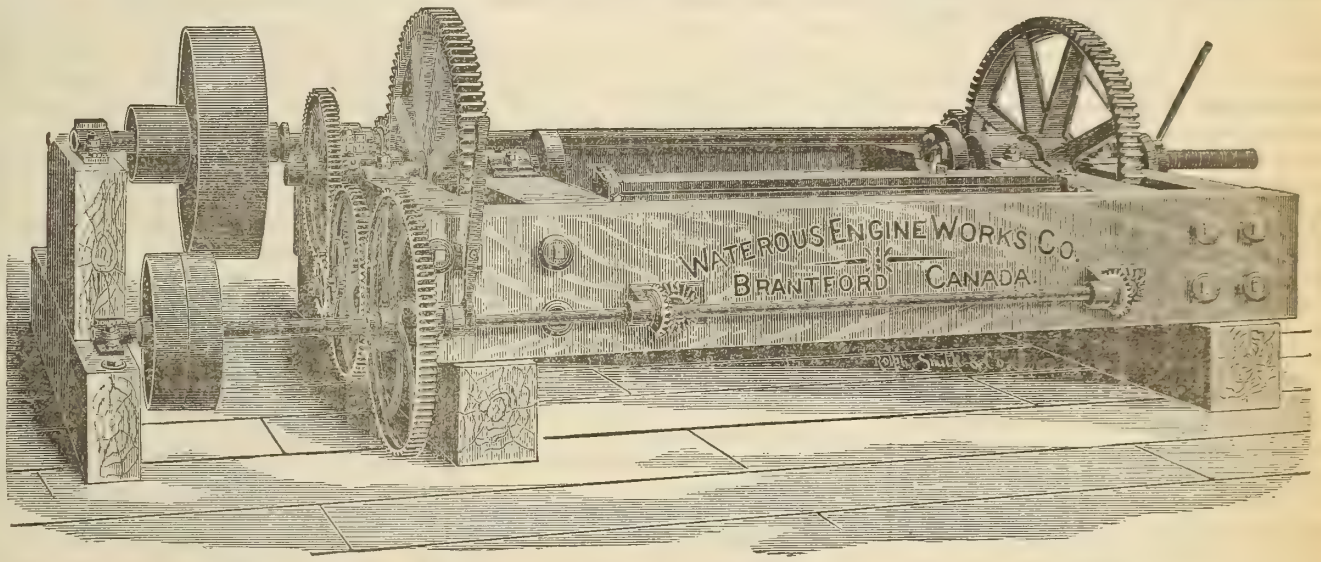

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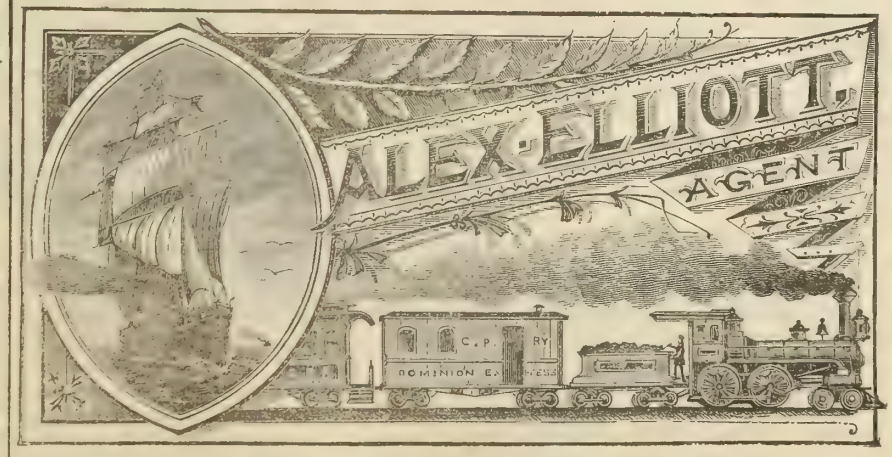

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J. J. TURNER, Sail, Tent and Awning Maker, Market Block, Peterborough.

DUNN'S BAKING POWDER

THE COOK'S BEST FRIEND

CANADIAN WOOD EXHIBITS AT THE COLONIAL EXHIBITION.

The *Timber Trades Journal* of May 22nd says :— Prominent amongst the exhibits at South Kensington stands the timber produce of the various countries represented. Specimens of the forest growth of Canada, Australia, India, and the Cape are conspicuous in their natural state as well as sawn and polished, attracting the attention even of those who, from the want of a more intimate knowledge, are unable to appreciate the important part they play in the world's history. We have heard visitors express their admiration of the beautifully polished surface of the fine log of Jarrah timber which adorns the Australian Court, and certainly they had reason, for a more splendid specimen of that durable tree could not have well be selected, and the way it has been prepared for display does credit to those who had the work to do.

It is not our purpose to discourse of the various woods in the order that they meet the eye of the visitor as he makes the range of the exhibition, but to take them rather one in each department, in the order of their utility, writing of those first which are in most common use. In this way our task will first embrace the woods from Canada, of which the different varieties, characteristic of the country are artistically grouped in convenient places for inspection. It is the vulgar idea that the wooded portions of Canada form enormous tracts of dark, gloomy-looking forests of pine, their sombre appearance unrelieved by any variety of tint. There never was a greater mistake made. The forests of Canada, on the contrary, are picturesque and pleasing to the eye, and in the season when the leaves begin to change the tints present many different shades and colours, lending to the wood an enchanting aspect, the same as a forest here would appear in Autumn, somewhat enhanced by the majestic proportions of the trees in the Dominion.

As with us here, the pine tracts are peculiar to themselves, and whole sections of this useful tree and its near relation, the spruce, cover the hillside in dark belts, contrasting with the other varieties, forming a background which adds to the beauty of the Canadian scenery. The enormous size and straightness of the pine trees, of which these boundless fir forests are composed, we have very little experience of here. Trees of immense girth we undoubtedly possess, and our ancient oak and elms afford us specimens that often attain considerable altitude; but the huge stem of a Canadian pine of equal circumference, 80 or 90 feet, without a leaf or branch, its lofty top crowned with the long and drooping fronds of needle-shaped leaves, is a sight seldom to be met with in the forests of the mother country.

There is not, of course, the same undergrowth in the timbered portion of the northern countries as there is in milder climes, but with this exception the difference in the appearance of the woods is not so marked. The forests of Cauada are composed of pine, spruce, Scotch or Norway fir, oak, ash, elm, maple, birch, beech, larch, cherry, walnut and other woods, and hardly a tree which we have named which does not come to our shores, though they do not always figure in the public sales.

Our readers are sufficiently acquainted with the merits of the white pine, or, as it is called over here, yellow pine, to need any description from us, but the various specimens supplied by Messrs. Burstall & Co. show of what a high finish it is capable in conjunction with its other preferential claims as an indispensable building material.

The chief of the timber districts, or, as they are termed "limits," of the Dominion, extend from the mountain shores of British Columbia, washed by the Pacific, containing immense forests, yielding some of the finest timber in the world, that are yet practically untouched, to the Province of Ontario, the shores of Lake Huron and Superior, the Georgian Bay country, embracing the Nipissing and Muskoka rivers to the district drained by the Ottawa, St. Maurice, and Saguenay, to the Bersimis (both noted pine regions), and further on to St. John and the lower ports, where the mighty river empties itself into the Atlantic.

From this vast territory, thickly wooded with every species of timber, there is little fear of our supplies running short.

The inroads which have already been made are undoubtedly sufficiently extensive to cause apprehension of a failure in the cut of pine, but the question of forest exhaustion is still too remote to be seriously discussed at present. Many of the forests in the lake districts, Ontario and other Provinces, are yet hardly touched, the land not being so suitable for agriculture, and from these regions sufficient pine will be drawn to make up for any deficiency that may be apprehended from the destruction of the older timber limits for many years to come. The importance of the forest supply of Canada to us here can hardly be estimated. Our annual consumption of pine and spruce is something marvellous, and it would be little short of a calamity if any failure took place in the forest resources of the Dominion.

We hear a good deal of the increasing scarcity of white pine, a tree which is said to be so valuable that it would be difficult to find a substitute for it were Canadian forests to become exhausted. But this can hardly ever happen, if ordinary care is exercised to prevent destructive fires, as it will grow and flourish on the poorest soils, and is a rapid grower. Mr. Small, in his account of Canadian forests, says that "intelligent lumberers consider that a white pine forest renews itself every twenty years." This must be an important consideration in estimating the forest wealth of Canada.

It seems that the wanton destruction of the forests in the Province of Quebec was complained of by the French Governors of Canada as far back as 1696, that is 190 years ago, but the record says that nothing was done by them to check it, and little has been done since. Is it not clear that nature has not again and again made good the ravages of man, and that still more pitiless enemy, the devouring element of fire, during the ages that have since intervened, and that she is still able to set the destroyers of her forests at defiance?

In addition to the thousand and one industries that cannot be carried on so well without the assistance of soft convertible timber, we have railroads and railways, which in the shape of sleepers, ties, platforms, stations, carriages, waggons, &c., add largely to the consumption of the forest produce.

The woods of British Columbia at the exhibition are particularly noticeable, a large ornamental erection of pine from that couutry, supplied by the Hastings Saw-Mill Company, Burrard's Inlet, being the first object that meets the gaze on entering the Canadian Court.

The woods from St. John were in a prominent position, a panel of each kind being scientifically arranged, the polished surface adorned with a neatly executed painting of the leaf,

We inspected the different specimens from New Brunswick, which include beech, ash, maple, birch, white and black hemlock, white pine, red pine, balsam fir, as well as black and white spruce. Amongst the woods not generally shipped to this country, but many of which, we think, could be used here with advantage, are the cherry, plum, bilbury, poplar, alder, hornbeam, butternut and willow, lime and basswood. Poplar is largely used in the States for a variety of purposes, and cherry is also in demand.

Ottawa, in addition to pine, is represented by neatly arranged specimens of sugar maple, red oak, figured beech, and from Burrard's Inlet, in addition to the pine specimens already mentioned, are some well-prepared blocks of red cedar and Oregon pine.

The specimens outside the court are sections of canoe, birch, tamarac, Ottawa best pine, Norway pine and red pine from Ontario, used as mining timber, the collection being sent by Mr. T. A. Keefer, of Port Arthur. There are several pieces of tamarac, black larch, aspen, poplar of very fine and smooth grain, another variety being the jack, or scrub pine. The suitability of many of these woods for use here depends on the cost. The home-grown woods, of which these would have to take the place, are plentiful, and, unless something were gained in size or price, their introduction would not be rewarded with success. A considerable objection to the softer kinds, such as poplar, tamarac, hacmatac, &c., is that they will not take the plane like the pine or deal, and in that respect present a marked contrast to the non-resinous woods of the north of Europe, all of which smoothen up equally to the red or yellow descriptions.

Hamatac ranks with our larch or juniper, and is the most durable of all the pine tribe. For shipbuilding purposes it is considered in the United States more durable even than oak, and it is well known and appreciated at Lloyd's in their classification of ships.

It is not to be expected that, within the limits of a single notice we can describe, even superficially, the various objects of interest in the wood department alone; and we have already occupied as much space as can be conveniently appropriated to the subject this week. What, therefore, has further to be said of this wonderful collection must be deferred to another number.

MICHIGAN HARDWOODS.

It is a very common thing to find in the columns of the contemporary press, says the Michigan *Tradesman*, exhaustive articles deprecating the rapid destruction of the pine timber in Northern Michigan, accompanied by startling statistics, showing that, at the present rate of denudation, the supply of pine will be practically exhausted in a few years. While in many instances these statistics and conclusions are very wide of the mark, there is pith in the main idea underlying them, and ample material for reflection. But the apostles of forestry in their eagerness to inveigh against the wholesale conversion of pine forests in lumber, too often overlook a species of waste which is infinitely more mischievous than the operations of the pine industry, viz., the waste of hardwoods by the logging operations of settlers. If this destruction were confined to legitimate lumbering processes the case would at least have mitigating features. But in many instances the waste is purely wanton; and wanton waste is under all circumstances to be deplored. The soil which grows hardwood timber is well known to be richer, and more perfectly suited for agricultural purposes, than that on which pine is commonly found. For this reason the hardwood lands suffer most severely from the hands of the settler. The fact that the ultimate value of Michigan hardwoods is but imperfectly and not generally understood, also favors the destruction. The average settler knows that the immediate revenue to be derived from his hardwood lands will be greater if he brings them under cultivation than if he leaves the forests inviolate; hence, he proceeds to get rid of the timber as quickly as possible, by gathering into log-heap and reducing it to ashes

The exigencies of agriculture, of course, are not to be ignored. It is absolutely necessary that a certain proportion of the land should be cleared and placed under cultivation. But American farmers too often labor under the mistake that the measure of successful husbandry is in the area of land under tillage. Many of them have yet to learn that a small farm, well cultivated, may be made more profitable than a large farm carelessly cultivated; and that it would be true economy to clear a much smaller proportion of their hardwood lands than is customary, leaving the timber on the remainder to increase in value, as it will inevitably do in the near future.

Northern Michigan possesses magnificent possibilities (which can be realized if she husbands her resources) for the manufacture of hardwood products. Situated in the central portion of the vast Northwest, between two great inland seas, which afford easy and cheap transportation to the markets both of the East and West, her facilities for the profitable disposal of her wares are all that can be desired. Her forests abound in an excellent variety of woods suitable for manufacture, and her numerous streams flowing through the heart of the hardwood regions, afford cheap and abundant power for manufacturing purposes. In short, the natural advantages of Northern Michigan for wood manufacture are unsurpassed, and only await the enlistment of extensive capital and enterprise to raise them to an important position. Already the good work has begun, Handle factories, bowl mills, spoke and hub factories, basket factories, etc., have been established at various points with favorable results. But the development of these industries is yet in an incipient stage. For the full realization of the manufacturing possibilities of Northern Michigan, we must look to the future. A large proportion of the smaller class of articles manufactured from hardwoods, now comes from Maine and other New England states. There is no good reason why the markets of the West and Northwest should not be supplied from the vast reserve of raw materials lying at their thresholds; and they certainly will be so supplied in the not distant future, if the settlers of Northern Michigan do not, in the meantime, render such a result impracticable, by the wanton destruction of the vast forest wealth which are indispensable to the establishment of an extensive manufacturing system in the line of hardwood products.

A LOG CARRIER.

There is being built and nearing completion at the shipyard of Capt. James Davidson, of West Bay City, a vessel which is a novelty in more ways than one.

In the first place she is the first vessel ever constructed specially for the purpose for which she is intended,—transporting saw logs from the place where they are harvested or put into the water to the mill which is to convert them into lumber, and in this respect she is an experiment, although the projectors and owners have the utmost confidence in the enterprise.

In the next place she is a novelty as well as a wonder from the fact that she will be the largest vessel which has ever been put afloat on the great inland seas on this continent. Her capacity is 3,500 tons and she will carry 700,000 feet of saw logs, or 2,500,000 feet of manufactured lumber, sufficient to load an ordinary tow of vessels plying between the Saginaw river and the distributing centres; or in other words, she will carry as much lumber as six ordinary lumber barges. She is 175 feet long, 51 feet beam and 12 feet depth of hold. The reason for her comparative slight depth of hold is the fact that no logs are to be put below the deck for transportation, but they will be loaded entirely on deck. She has on board machinery, and all the appliances for loading the logs expeditiously; and hence can be loaded and unloaded in an incredible short space of time. She is a veritable floating monster or will be when she is launched next week. She has five centre gunwales, from bottom to deck, all edge-bolted, the same as a centre board box and diagonally braced on each side of gunwale and fore-locked on gunwale. The name of this laviathan of the lakes is to be the Wahnapetae, which is the name of the river in the Georgian Bay country from whence she is to transport logs to West Bay City and Tawas. Her cost is $55,000, and she belongs to Emery Bros., who own pine in the Georgian Bay country and projected the enterprise.

There is also being built at the same yard, and nearly completed, and which will be launched about the same, a large lake tug, to tow the above vessel. She is a beauty, and will cost $17,000. She is to be called the Temple Emery, after one of her owners.—*Lumberman's Gazette.*

Minnesota Lumber Trade.

A dispatch from Minneapolis, May 20th, says:—The receipts of lumber in Minneapolis the last week amount to 132 cars and in St. Paul 365 cars. The shipments from Minneapolis reached 233 cars and from St. Paul 229, substantially the amount received and shipped last year. The farmers in the northwest, now that their seeding is done, are preparing to make such improvements in the building line as their funds will permit. The bulk of the trade, however, continues to be from the cities. The local trade is exceedingly good in both St Paul and Minneapolis. None of the Mississippi mills at St. Paul, Minneapolis and above have yet started, though all the drives are coming on well except the main river drive, which is coming slowly. The Minneapolis mills will probably start about the first of June, though there are but few logs yet in the boom.

Chips.

It was estimated that the strike of the yard hands in Chicago entailed a loss of $10,000 on the laboring men of Muskegon, Michigan.

A. T. Stone recently shipped 110 000 maple trees from Manton, Mich., for resetting on his tree claim in Dakota.

Gilmour's big mill at Trenton commenced operations on May 3rd. The drive of logs down the Trent is expected here this month.

It is said that the Ontario Lumber Company are making preparations to rebuild Dollar's mill. The mill will be completed this fall.

The first drive of logs down the Moira has all arrived at the Bay of Quinte and booms of them are being taken to Trenton and Deseronto.

It is reported from Manistee that Milmo & Stokoe, of Jeanerette, La., are trying to introduce cypress lumber and shingles in that market.

Late hemlock and hardwood land purchases within a few miles of the mouth of the Menominee, in Wisconsin and Michigan, are said to amount to 12,000 to 15,000 acres.

The oldest and the largest tree in the world is a chestnut near the foot of Mount Etna, Italy. The circumference of the main trunk is 212 feet.

Do not force a boiler. If you do you are liable to soar upwards some fine day, and brickbats, hot water, steam and pieces of the overburdened boiler will go with you.

The gang board or plank has an ancient history. It was the plank of the ship that passed from stem to stern across the seats of the rowers, and along which they passed, and upon which the mast was laid when it was unhipped.

A simple method, which is very closely correct, is as follows: The sum of the diameter of the roll and the eye in inches, multiplied by the number of turns made by the belt, and this product multiplied by the decimal .1309, will be the length of the belt in feet.

On May 29th, at Sandy Cove, Ont., a boy named Greaves, son of Wm. Greaves, was drowned near Thos. Greave's saw mill. The men at the mill went to the rescue, but were too late, and while they were away the mill took fire and was burned, together with a large quantity of lumber and logs.

Messrs. McArthur & Thompson's drive containing over 14,000 logs, says the Minden *Echo*, has passed this point and now hurries onward with rapid pace towards their destination. We understand these enterprising lumbermen will be on the market next season, buying all kinds of timber and railway ties.

Quinine, an important article of medicine, much used in fevers, ague, &c., is obtained from Peruvian bark, cinchona, or Jesuit's bark. It obtained its name cinchona from the Countess del Cinchon, wife of the Conde del Cinchon, Vicerory of Peru, who first sent the bark to Europe, and Jesuit's bark because it was introduced into Spain by the Jesuits, who had it sent to them by their brethern in Peru.

The Port Arthur Lumbering Company, of Port Arthur, Ont., cut 750,000 feet of logs at its limit on Cloud river, the past winter, employing 30 men in the woods. The same company last season cut 3,000,000 feet on Pine river, but owing to low water the logs were hung up. An effort will be made to drive out these logs this spring. Hammon & McDougall, at Fort William, near by, last winter, got out 30,000 ties, 300 piles and 1,500 cords of wood, employing 60 men at Fort William and Fire Steel river.

LUMBERMEN AT WAR.

There is trouble among the lumbermen of Isabella county, Mich, over-running logs in the Chipewa river. Recently Judge Hart, of that county, granted an injunction forbidding Leaton & Upton from obstructing navigation at Pares Brothers' dam at Mount Pleasant, which prevented the running of 50,000,000 feet of logs A second injunction to interfere with the log drivers was granted, but has since been dissolved Last week the ill feeling between the Saginaw lumbermen and the Isabella mill owners broke out in violence. The log drivers took forcible possession of the Woodin dam, and Woodin's men attempted to interfere they threw two of them into the river. In consequence three of the gang have been arrested on the charge of attempted murder. The hard hard feeling is spreading all over the vast lumber region that feeds the Muskegon and Seginaw mills This bitterness was evidenced in what happened at Mount Pleasant one morning, when a dynamite cartridge was exploded under the dam of Harris Brothers. Great timbers were torn up and thrown one upon the other and the water was rapidly lowered. This dam was used as a feeder to float down the logs. The injury to the dam is several hundred dollars, while the loss of the log drivers will be up in the thousands.—*Timber Trade Journal.*

SPEED OF CIRCULAR SAWS.

It highly entertaining to run accross the estimates made years ago of the pine standing in Michigan, In 1869 the Hon. John F. Drigg, in "an elaborate and carefully prepared statement," put the figures at 15,000,000 000 feet less than there are standing to-day on the upper peninsula. Three years later C. B. Headley, considered to be well posted, went the honorable gentleman 2,000,000,000 better. Mr. Headley thought that the maximum cut in the Saginaw valley would be reached in 1873. By 1873 the production was 619,000,000 feat in round numbers, and in nearly 10 years of the prophesy the figures run up to 1,000,000,000. In 1872 Colonel Ben Wait said there were 43,000,000, 000 feet of pine in the state. Since Mr. Wait set those figures as much pine has been cut in Michigan as he named, and doubtless, if asked he would reply that there is now standing nearly, if not quite, as much more. A dozen years ago Mr Wait was the most liberal estimator whose figures got into cold type, but as seen, even he was not liberal enough by 100 per cent.—*North Western Lumberman.*

Forest fires have begun to rage this early in the season, says the *Northwestern Lumberman*, having broken out in Michigan and Wisconsin. Notwithstanding the large amount of property destroyed annually by such fires there has been no way devised to prevent them. Hunters, land-lookers and others, tramping through the forests will not use due care; and the boy who makes a pile of brush and burns it, more for the fun than any other reason, is rarely mindful of the results. Lumbermen cannot charge these fires to the carelessness of others wholly, for following their operations they leave scattered over the ground twigs and brush that when dry make fuel that catches fire quickly, and burns fiercely. It strikes us that standing pine is now worth so much that it might possibly prove a big investment for the owners of it to use at least as much precaution to protect it from destruction as they would other property of equal value.

Exportation of Canadian Pine.

Ottawa, June 5.—Mr. R. A Loveland, of East Saginaw, had an interview to day with the Commissioner of Customs in reference to the exportation of a large quantity of Pine logs cut by the Emery Lumber Company during the past winter on French river, which enters into Georgian Bay. From information conveyed by that gentleman, it appears nothwithstanding the increased export duty the Americans still consider it possible to carry on a profitable business in that direction.

Special despatches received at Milwaukee, Wis., state that fires are raging in the timber lands along the Escanaba River, involving a loss of thousands of dollars. Forest fires are also burning at Junction City and in the vicinity of Sturgeon Bay, and are raging fiercely along the lines of railroad north and south of Phillips, Wis.

Perhaps the most extraordinary that success has been achieved in modern science has been attained by the Dixon treatment for Catarrh Out of 2,000 patients treated during the past six months, fully ninety per cent. have been cured of this stubborn malady. This is none the less startling when it is remembered that not five per cent. of the patients presenting themselves to the regular practitioner are benefitted, while the patent medicines and other advertised cures never record a cure at all. Starting with the claim now generally believed by the most scientific men that the disease is due to the presence of living parasites in the tissues, Mr. Dixon at once adapted his cure to their extermination; this accomplished the Catarrh is practically cured, and the permanency is unquestioned, as cures effected by him four years ago are cures still. No one else has ever attempted to cure Catarrh in this manner, and no other treatment has ever cured Catarrh. The application of the remedy is simple and can be done at home, and the present season of the year is the most favorable for a speedy and permanent cure, the majority of cases being cured at one treatment. Sufferers should correspond with Messrs. A. H. DIXON & SON, 305 King street west, Toronto, Canada, and enclose a stamp for their treatise on Catarrh.—*Montreal Star* 1y122.

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Now on Georgian Bay. Gross tons, 55.99; Length, 70 feet; Breadth, 15 feet; Depth, 8 feet. Was Re-built last Summer. Apply to

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VALUABLE
Timber Limits
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50,000 SAW LOGS
ON SEVERN RIVER

The undersigned being desirous of confining their operations to their Lakefield Mills on the Trent waters, offer for sale the following limits:—

Township of Hindou, 70 square miles.
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An area of 137 square miles.

These limits are estimated to contain 180 million feet of Logs, well watered, and afford means of short hauling from all points, and quick and cheap driving to Georgian Bay. Are offered for sale together with plant, depots, farms, 1,200 acres deeded lands and 50,000 logs, nearly all of which are on the main river, a large proportion of which are 16 feet long. Apply to

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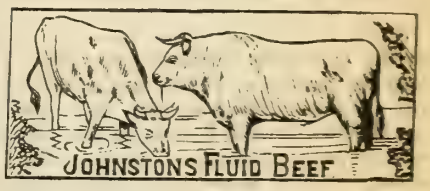

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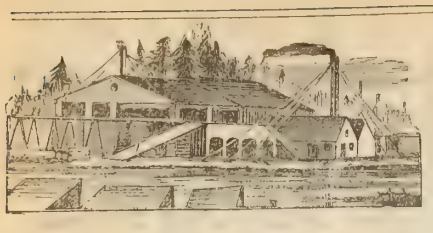

THE CANADA

LUMBERMAN

DEVOTED TO THE LUMBER AND TIMBER INTERESTS OF THE DOMINION.

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The CANADA LUMBERMAN is filed at the Offices of MESSRS SAMUEL DEACON & Co., 154 Leadenhall Street, London, England, who also receive advertisements and subscriptions for this paper.

PETERBOROUGH, Ont., JUNE 15, 1886.

A GROWL FROM MONTREAL.

THE Montreal *Herald* is dissatisfied with the action of the Dominion Parliament in increasing the log export duty. It claims—and quotes from the Trade and Navigation returns to sustain its claim—that there has been no reckless export of timber in the rough, and that, therefore, the increase was unnecessary, or "silly," as the *Herald's* choice phrase reads. But the *Herald* has evidently ignored recent events and must have shut its eyes to current news. United States lumbermen have purchase largely of limits in Canada, but they have made no preparations towards erecting mills. Instead, we hear of barges and steamers being built on an extensive scale, for the purpose of carrying the logs from the Canadian shores to Michigan, to be there sawn into lumber. These purchases and preparations for exporting the logs are much more extensive than they have been on any previous year and all indications go to show that they would have increased had not the Parliament stepped in to protect the Canadian forests and the interests of the Canadian lumbermen. If the United States lumbermen wish to work Canadian limits let them build mills on this side of the line, or at any rate let the Canadian manufacturers be placed in such a position that the foreigner, who does not give us the benefit of the labor of manufacturing, shall not have an advantage over them on account of the operation of the tariffs. This is what has been done, and efforts to undo what has been accomplished will have little chance of being successful.

GOING TO EXTREMES.

WHILE approving of the action of the Dominion Parliament in increasing the export duty on logs, the Montreal *Star* wishes it to go farther and impose an export tax on sawn lumber. It is not at all likely that the *Star's* advice on this point will be accepted or acted upon. One reason why the export duty on logs was increased was because the Canadian manufacturers were, under the former tariff, placed at a disadvantage as compared with the American exporter of logs, and it was thought desirable to relieve the manufacturers from this disadvantage.

At present the Canadian lumbermen are compelled to pay the duty imposed by the United States custom laws and, weighted with this burden, compete with the lumber producers of that country. If they were compelled to pay the Canadian Government for the privilege of taking the lumber out of this country, and to pay the United States for the privilege of taking it into that country, they would be unable to compete with the lumbermen who had no customs duty to pay at all. The lumber industry of Canada is too valuable to be stamped out by ill-considered legislation.

An export duty would not only effect the trade with the United States, but with other countries. The Canadian lumber or timber dealers to push trade, have to compete with other exporters of lumber wherever they send it, and to place a duty on the export of the material would result in handicapping them, and crippling the business and the export trade of the country.

The idea of the *Star* is to build up on this side of the line factories for making sash, doors, etc., but it leaves out of account the trade done with other countries besides the United States, and does not stop to consider that, in giving protectection to sash and door factories, it would not exclude foreign manufacturers from our own country—the powerful argument of the protectionist—but would cripple or extinguish an extensive industry already existing in the country with the hope of creating another.

It is not probable that the suggestion made by the *Star* will be further urged. It would not be a wise policy, and that fact is so easily seen that it will fall to the ground.

STRIKES AND THE LUMBER TRADE.

The present unsettled condition of affairs in the building trades in Boston, says the *Commercial Bulletin*, has naturally powerfully affected the lumber business, the prosperity of which is dependent upon the building business. At the opening of the season the prospects for a large demand for lumber were very bright, as there promised to be a very active building business. The improved outlook for general trade appeared to have effected real estate owners and operators very favorably, and the architects were kept busy with enquires and orders. The permits for building taken out for the first few months of this year were considerably in excess of those for last year. * * * There would have been a considerable amount of tearing down and rebuilding in the business district also. The prospects for the erection of small and medium class dwelling houses in the suburbs and suburban towns were good.

The lumber dealers, wholesale and retail, thus looked for an excellent business in this market and at profitable rates. This latter expectation was based upon the fact that the cut of pine and spruce in New England, and of pine in the west, would only be of average proportions at the most. The cut and supply of hardwoods was placed at only an average amount also, and as the prices of southern pine were down to a very low level, only a change in the direction of higher figures was expected. The prospects of a strike on May 1st by the builders's workmen for eight hours and an advance in wages put a much different face on the condition of affairs.

The buildings which were under way were hurried to completion, and no new work of importance was undertaken. The only exception was in the building of small and medium class dwelling houses. The men employed on this class of houses have generally not struck. The building of these houses has therefore been continued in the suburbs and suburban towns, and indeed all over the state. The lumber used is coarse lumber, that is New England lumber, principally spruce. For this there has been a good demand, particularly for framing stock, and the northern mills have been, and are now, well supplied with orders. The demand for laths, clapboards and shingles has not been as large as if general business was good, but it has been of very fair proportions, and prices have ruled high.

TIMBER CULTURE ADVOCATED.

The March number of *The Century* contained an article on "Timber Famine and a Forest School," from S. W. Powell, who said: "Savages live lavishly as long as their stock of food lasts, although they know they will have to starve afterwards. We say they can never climb out of savagery until they learn to save and to provide for coming want. Yet with respect to the forests—which are, no doubt, the most indispensible product of the soil—we have acted very much as the Comanche does with respect to his store of food.

"The value of our forest products is not less than $800 000,000 a year. Our sto e of white pine is rapidly approaching exhaustion, and other valuable species will be as ruthlessly wasted when the pine is gone. When the resulting timber famine comes, it will for several reasons be a more serious calamity than would be the failure for 10 consecutive years of any other of our crops.

"Failure, or even great scarcity, of working timber involves the derangement of total ruin to a vast number of important industries which wholly or in part depend upon the forest for their raw material. Some of these are metallurgy, building, wood-turning, tanning and the manufacture of articles made of leather, the making of wagons, carriages, furniture, Musical instruments, sewing-machines, etc. In short almost everything one uses needs wood directly or indirectly for its production.

"Destruction of the forest, especially upon steep hillsides, causes irregularity in rain fall and other climatic changes very harmful to agriculture, commerce, manufactures, and health besides the loss from floods, of which during the last few years we had such sad experience.

"But we shall never keep the hillsides wooded merely as preventive measure. We must learn to make timber culture in such localities profitable; and that can never be done without skilled labor and such professional training as the forest schools of Europe offord. * * * * We are rapidly nearing a terrible reckoning for the breach of natural law involved in our wasteful treatment of the woods.

"We have a great deal of second growth woodland which although it may be of value as a means of regulating climate and the flow of waters in springs and streams is producing very little of the timber which we are beginning so sorely to need. If we had a forest school, with a large tract of woodland under its case, it would be easy for farmers' sons to learn in a few weeks of observation, study, and practice how to do the pruning and thinning necessary to change these unsightly and nearly profitless wood-lots into rich and permanent sources of gain. If the proposed Adironback reservation is made, as it should be, to yield a large revenue instead of being a heavy and increasing burden and peril to the public, a thoroughly equipped forest school will be one of the first requisites."

PROTECTING CANADIAN LUMBERMEN.

A Detroit despatch to the New York *Times* says:—Lumbermen in the Saginaw valley section of the State are much exercised over the news from Ottawa, Ontario, that the Canadian Government has advanced the export duty on pine saw logs from $1 to $2 per 1,000 feet. The effect of this advance in the export duty will be to materially injure the saw mill industry of Eastern Michigan. Parties in this State own about 1,700,000,000 feet of pine timber in the Georgian bay district, the great bulk of which was purchased in the expectation of cutting the logs and shipping them to Alpena, Tawas, the Saginaw river and other ports for manufacture. The Emery Lumber Company alone owns 100,000,000 feet and cut last winter 55,000 pieces, scaling abou 15,000,000 feet, which it was expecting to bring to east Tawas and Saginaw this season. Ralph H. Loveland, of east Saginaw a member of the Emery Company, started for Toronto immediately upon the receipt of a despatch announcing the decision of the Minister of Customs, to look after his company's interests, and others will follow at once, Mayor Hill, of Saginaw City, among the number. It is, of course, generally conceded and the object of the Canadians is to prevent the exportation of saw logs to American points for manufacture, and compel Americans who have purchased timber limits in Canada to erect mills in Canada.

SPEED OF CIRCULAR SAWS.

It highly entertaining to run accross the estimates made years ago of the pine standing in Michigan, In 1869 the Hon. John F. Drigg, in "an elaborate and carefully prepared statement," put the figures at 15,000,000 000 feet less than there are standing to-day on the upper peninsula. Three years later C. B. Headley, considered to be well posted, went the honorable gentleman 2,000,000,000 better. Mr. Headley thought that the maximum cut in the Saginaw valley would be reached in 1873. By 1873 the production was 619,000,000 feat in round numbers, and in nearly 10 years of the prophesy the figures run up to 1,000,000,000. In 1872 Colonel Ben Wait said there were 43,000.000,000 feet of pine in the state. Since Mr. Wait set those figures as much pine has been cut in Michigan as he named, and doubtless, if asked he would reply that there is now standing nearly, if not quite, as much more. A dozen years ago Mr Wait was the most liberal estimator whose figures got into cold type, but as seen, even he was not liberal enough by 100 per cent.—*North Western Lumberman.*

CANADA ON STRIKE.

The Yankee fishermen are highly indignant because the Canadians are determined to protect their fisheries, and the Michigan lumbermen are highly indignant because the Canadian Government has placed an export duty on saw logs, which will necessitate the establishment of saw mills in Canada. The trouble with these Americans is that they have always been accustomed to think of Canadians as slow-going innocent country seople, easily imposed upon and willing to always remain hewers of wood and drawers of water for the Americans. They will soon understand that Canadians are wide-awake practical people, quite able to take care of themselves and that it takes more than an act of the United States Congress to decide any matter in which Canada is concerned. The right place for the saw mills is in the district where the lumber is cut. Northern Ontario is especially well provided with water power and there is no reason why mills should not be erected there as well as in Michigan.—*Montreal Star.*

PHOSPHATE AND LUMBER.

OTTAWA, June 4.—A deputation consisting of from fifteen to twenty phosphate and lumber merchants, headed by Mr. Alonzo Wright, M. P., waited on the Minister of Public Works this morning, in reference to the improvement of the River Lievre, or which a vote of $10,000 had just been made by Parliament. They showed to the Minister that the increase in the phosphate trade alone was over $1,500,000, and that the proposed lock and dam at Little Rapids, backing the water and rendering the river navigable up to the high falls, would be a great addition in the way of increasing the trade.

The Minister assured them that the intention of the Government was to benfit that trade as much as possible, and that a proof of that intention was given by the Government asking Parliament for the money voted. The plans and specifications would be immediately prepared and tenders invited.

HANDICAPPED.

Under existing regulations the lumber trade of this part of the Dominion is seriously handicapped. Besides the heavy timber dues now enforced, the export of dressed lumber to the other side is virtually paralized by the heavy duty imposed by the United States customs. According to the Canadian tariff, the duty on all kinds of lumber imported, rough or dressed, is $2 per thousand feet, whereas, if a Canadian firm ship dressed lumber to the States they have to pay at the rate of $6 per thousand, all lumber other than rough being tariffed as finished material. This state of things naturally tends to cripple the lumber industry and prevents competition, besides cutting out all labor of dressing lumber. Again, the high rate of rail way freight is ruinous to shippers.—*The Miner*

NATURAL SEEDING OF FORESTS.

It is unquestionably true that large areas in the Northern, Eastern and Middle Atlantic States, now almost destitute of trees, are better adapted to the growth of forests, and would yield a larger income to the owners if devoted to that purpose than to any other. The natural seeding of forests has an important bearing on this subject. To aid nature in this work is an easy way for its accomplishment. Nature is prolific in the abundance of seeds that she provides for the renewal of all the trees and plants, but she cannot unaided quickly sow the seed of the better kinds of timber trees over large tracts of land that have been stripped of seed-bearing trees, though some of the less valuable trees, like grey birches, are easily distributed over such tracts. John E. Hobbs, of North Berwick, speaking of the common belief in the rotation of hard and soft-wooded trees, and that one always follows the other naturally, says there is but little foundation in fact for this belief. This rotation often occurs and is effected in two ways: In one way by moving e ther of the varieties from a tract of land, which is afterwards seeded by the other variety that happens to be more favorably situated for doing it. In this way it is quite easy for a farmer to change the character of his forests, if when removing them he leaves such trees standing to reseed the land as he prefers for a subsequent growth. In the other way the rotation is caused by live stock. Cattle, sheep, horses and goats eat almost all varieties of young deciduous trees, and would prevent their growing when suffered to roam at large over the forest land. If live stock be left out of the question, the following may be given as the rule for the natural seeding of forests: Land from which a forest has been removed is reseeded by trees which are most favorably situated for furnishing the seed, unless it has been done with seed matured in the forest immediately before its removal, the wind being the chief agent in sowing the seed. When some forests of white pine trees are cut down a dense growth of the seed of the same kind of trees springs up at once, and when others are cut many years elapse before enough trees grow up to cover the ground. The tenacity of life of the seeds of the white pine, says Mr. Emerson, is remarkable. They will remain for many years unchanged in the ground, protected by the coolness and deep shade of the forest above them. But when the forest is removed and the warmth of the sun admitted, they immediately vegetate. A few pines scattered through a forest of deciduous trees fill the ground with seed, in a series of years, so completely that when the forest is cut down it not infrequently happens that a pine forest springs up its place. As some white pine forests are and others are not immediately renewed, it is possible that the seeds may not posses that tenacity of life which is claimed for them. Again, this difference in the time of renewal may be accounted for by the fact that the white pine does not mature seeds every year. In some years the mature cones in a white pine forest are very abundant. In other years there are scarcely any to be found. Therefore a forest which is cut down in the year when the cones are abundant is renewed at once, but if cut in the year when there are none or few to be found, the natural reseeding is either precluded or at least doubtful. This desirable result could have been effected if a sufficient number of seed-bearing trees had been left standing to reseed the land, and after it has been done these trees can be removed with benefit to the young growth, for young trees require the same advantages of air and sunshine as Indian corn, and grow much faster under full exposure than in the shade. Another authority states that the method of reseeding forests by leaving nurses standing over the area to be reseeded, though practical with modifications to several species of deciduous trees, has been almost entirely abandoned in Europe with the pine, on account of danger to the nurses through windfall, and of the injury done to the young growth by their removal. Instead of this, narrow strips are cleared and other strips are left standing by the side of the first, from which the reseeding is expected. This subject of natural seeding of forests under proper conditions furnishes a solution for a cheap method of covering certain sections of land with forest growth.—*Manufacturers' Gazette.*

THE QUEEN AND THE CANADIAN SECTION.

From the London. Eng., *Canadian* Gazette of May 27th we take the following notes regarding the Colonial Exhibition :—

The s.s. *Ulunda*, with 800 tons of exhibits from Canada, reached the London Docks on Tuesday last, and so excellent were the transport arrangements under the charge of Messrs. T and E. Kenny, that active work in the unpacking and arrangement in the various courts was possible as early as 4 a. m. on Thursday morning. The new exhibits comprise the Dominion Government's interesting ornithological collection to form part of the Natural History court; a variety of excellent photographs and pictures, which already add brilliancy to many portions of the Canadian section; silk and other textile fabrics of much merit; Canadian machinery of the famous Corliss tpye; and also considerable additions to the furniture, metal, educational, and agricultural exhibits, such as will,it is hoped, enable the Canadian section to assume a complete form in the course of the present week.

The commercial interests of Canada are already beginning to benefit by the display. During the past week very large orders are reported by various Canadian firms, including organs, spring matresses, and various manufactured goods. Representatives of the London School Board are among recent enquirers, with a view of large purchases of school desks, seats, appliances, while deputations with a similar object have come from as far north as Halifax in Yorkshire.

The Exhibition Conference Committee has drawn up a preliminary programme of papers to be read at the Exhibition during the season. Among the contributions we notice that those touching upon Canada will include one by Professor Fream on Canadian agriculture, and another by Prafessor Macoun on the botany and vegetable products of the Dominion, while Dr. Selwyn and Mr. Alexander Begg are also to read papers. Mr. Begg will treat of "The Great North-West."

The record of the Exhibition opened well in the way of numbers, and last week full sustained the high figures previously reached. In the course of the week as many as 140,533 passed the turnstiles. For the corresponding period, dated from the opening, in former exhibitions the official returns were: 1885, Inventions, 87,870; 1884, Health, 91,436; 1883, Fisheries, 74,871. A comparison of the totals at each exhibition in the period to date shows:—1886, Colonial, 386,111; 1885, Inventions, 255,110; 1884, Health, 209,596; 1883, Fisheries, 275,841.

On the morning of Friday last the Queen, accompanied by the Prince of Wales, Princess Beatrice, and the Duchess of Albany, visited the Canadian section in the course of an informal inspection of the Colonial portions of the Exhibition. Entering at the agricultural court from the West Indian section, the royal party was received by the Canadian Executive Commissioner and Lady Tupper. After presentation by the Prince of Wales, Lady Tupper handed to Her Majesty a bouquet of Marechal Niel roses, lillies, ferns and other flowers. Lady Tupper also took this opportunity to express great regret that circumstances had prevented the presentation to Her Majesty of the bouquet sent by the Montreal Horticultural Society. The Marquis of Lorne, who had previously been in the building, here joined the party, and presented Dr. Selwyn to Her Majesty. Both Queen and the Prince of Wales expressed admiration at the arrangement of the agricultural trophy, and evinced much interest in the display of fruits, grains and general agricultural products. Proceeding for a short distance down the south aisle of the central gallery, Her Majesty accompanied by the Prince of Wales, whose arm she took, made a detour through some of the Australian courts. On again entering the central Canadian gallery, from the South Australian portion of the central annex, attention was specially drawn by Sir Charles Tupper to the large map of the Dominion, and to the completed line of the Canadian Pacific—in the progress of which the Queen and her eldest son have been known to take a keen interest. Some time was then spent in an examination of the game trophy, special interest being excited by the Hubbard natural history collection, and by the fur exhibits of Messrs. Renfrew of Quebec, and of the Hudson Bay Company. Here Her Majesty was pleased to purchase an elegant lady's sable set from the exhibit of Messrs. Renfrew, and a silver fox skin from the Hudson Bay collection. Passing through the interior of the trophy, a handsomely framed photograph of Sir John Macdonald arrested attention, and Her Majesty expressed great satisfaction at the Canadian Premier's recovery from his recent illness. In the mineral court, which was next reached, the royal party much admired the agates from the head of Lake Superior comprised in Mr. Keefer's collection, the magnificent amethyst exhibited by the Executive Commissioner from Amethyst Island, and the specimen of gold from the Blue Nose lode belonging to the Nova Scotian Government. In the western gallery the machinery in motion claimed considerable notice, as well as the photographic views of the Windsor hotel and ice palace of Montreal prepared by Messrs. Notman of the same city. The educational court was next entered. In the Ontario portion Dr. May was in waiting, and reaching that allotted to the Province of Quebec, Lord Lorne presented the Hon. Mr. Ouimet, Superintendent of Public Instruction for the Province of Quebec, and Mr. Joseph Mannette, who is connected with the library collected by the Dominion Government. Her Majesty here noted with interest the evidences given by the exhibit of the great advance made during recent years in the education of the Dominion, and from this court entered the New Zealand section, expressing he great gratification at the parts of the Canadian display that had come within her notice.

It is estimated that there are three million feet of pine timber tributary to Thunder Bay, intersected by the Pigeon, Pine, Jarvis, Cloud, Carp, Slate, Sturgeon and Kaministiquia rivers. About three-fourths of this amount is white pine. W. H. Carpenter's limits embrace 25,000 acres of timber lands, of which there are 200 million feet of pine, and about the same amount of tamarac and spruce, cedar and poplar.

A "Pointer."

When Col. Sellers gives you a "pointer" in stocks, my friend, leave them severely alone, but when your own feelings tell you that you have palpitation of the heart, asthma, bronchitis or catarrh which unless checked are apt to run into consumption, heed the admonition before it is too late. All the diseases enumerated, and others, arise from impure blood. Put the liver in action, the largest gland in the human body, and you will speedily regain your lost health, and your bad feeling will disappear. Dr. Pierce's "Golden Medical Discovery" will accomplish the work speedily and certainly. Of your druggist.

J. D. Tully, druggist, will gladly inform anyone enquiring as to the wonderful merits of West's Pain King. The standard remedy for flox, dysentery, summer complaint, cholera morbus, cholera, colic, etc. Price 25 cents.

If any of our readers that are afflicted with rheumatism have never tried West's World's Wonder or Family Liniment, we advise them to do so at once, and be convinced of its extraordinary merits. It is a never-failing remedy for cuts, sprains, bruises and all complaints requiring external treatment. Price 25 cents and 50 cents per bottle. Sold by J. D. Tully.

BEWARE

OF WORTHLESS IMITATIONS

As there are many inferior goods, corded with jute, hemp, etc., offered and sold as Coraline by some unprincipled merchants trading on the reputation of our **genuine Coraline,** we warn the ladies against such imposition by drawing their attention to the necessity of seeing that the name

'CROMPTON CORSET CO.'

is stamped on inner side of all Coraline goods,

Without which none are genuine.

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Benefit Society

OF NEW YORK,

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The Security Mutual Benefit Society of New York is one of the few assessment life insurance companies that has attained conspicuous success. "Slow and Sure" has been the motto of its managers, and they have preferred to build up a solid foundation with

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A GIFT Send 10 cents postage, and we will mail you *free* a royal, valuable, sample box of goods that will put you in the way of making *more money* at once than anything else in America. Both sexes of all ages can live at home and work in spare time, or all the time. Capital not required. We will start you. Immense pay for sure for those who start at once. Stinson Co., Portland, Maine.

WOOD POWDER.

Dynamite, so long used as an explosive in the engineer corps of the Belgian army, has lately, on account of the numerous difficulties attending its use, been replaced by wood powder, made at Canbille, near Peer, in the Province of Limburg.

The powder is simply sawdust, treated with a mixture of nitric and sulphuric acids, and afterward formed under powerful pressure into cylindrical or prismatic cartridges. These cartridges are prepared for commercial use by covering them with paraffined paper, which protects them from moisture.

The instantaneous production of the gases arising from the primer and the explosive, and the simultaneous action of these gases in every direction cause the air in contact with the face surface of the cartridge to act to some extent as a light tamping, and the power of the explosion is directed to the other face.

In comparative experiments made upon a rail with wood powder and dynamite with cellulose, it was ascertained that for equal weights charges of the first substance were at least as powerful in those of the second, and that the results were more constant, more regular.

In the experiments for rupturing double-T beams, the maximum effects were produced when the cartridges were placed in the angles upon one face of the beam.

Below are the results of the different experiments in the rupture of double-T beams of wrought iron, with equal weights of wood powder, of dynamite with cellulose, of gun cotton, and of paleine of 40 per cent. :

Nature of Explosives.	*Price per Kilo.....*	*Trials.....*	*Complete Rupture.....*	*Sufficient Rupture.....*	*Insufficient*
	Fcs				
Wood powder	3.50	10	8	2	....
Dynamite, with cellulose	4.50	8	4	1	3
Gun cotton	5.00	*5	1	....	3
Paleine	6.25	6	3	2	1

*One wholly failed to explode.

But it is especially with reference to transportation with an army that wood powder possesses remarkable advantages. It is well known what precautions are essential in order to protect dynamite cartridges in pack trains from projectiles which might strike them and cause explosion. With cartridges of wood powder this danger need not be feared, since when they are placed against iron plates, and struck by bullets fired a distance of fifty motres, they do not explode.—*Quarterly Journal.*.

THE AVERAGE LIFE OF BUILDINGS.

"How long does it take for a city to rebuild itself?" said the building inspector. "Well, that depends upon the progressiveness of the city. I should say about seventy-five years. That is the average life of a building nowadays. There are very few houses in this city that were standing seventy-five years ago. The old houses on north Capitol street, built by George Washington, are older than that, and there are other old buildings in the city. The Capitol s an old building, but I am speaking of private houses. The buildings erected by the Government, under careful supervision and at a great expense, of course, are more durable structures than those erected for private residences. The building which is being erected by Mr. Abell on F street will cost more per foot, I suppose, than most Government buildings. No, it may not be a good investment, but it is not being put up as an investment, it is a monument. The new State, War and Navy Department building is, however, just as well built as that That building will be standing a thousand years hence. It may, of course, need some repairs befor that time, and roof, of course, may have to be rebuilt. No material or work is allowed to go into these buildings unless it is up to the standard. The army engineers who have charge are very strict. Of course a private individual would not put up such a building. It would not pay. Yes, good brick ought to be as durable as stone. It depends a great deal upon the manner in which the bricks are laid Good mortar becomes harder with age. When dry bricks are laid during the warm months the brick will absorb all the strength of the mortar. Brick laid at such a time ought to be wet. A wall erected in April or May or October and November of sufficient thickness, ought to last for two or three centuries."—*Washington Star.*

THE LATE H. B. RATHBUN.

The Belleville *Intelligencer* of June 1st says :—The sad tidings of the death of Mr H. B. Rathbun, of Deseronto, reached Belleville this morning. Mr. Rathbun has been in ill health for some time past. Last winter he went to California for the benefit of his health. From California he took a tour through the Southern States and returned home but a short time ago. He found rest this morning about 4 o'clock. The deceased was born at Auburn, N. Y., and was 74 years of age. He came to Canada in 1854 and located at what was then called Mill Point, but is now known as Deseronto. At the time of his arrival the place had but one house. He began lumbering operations and from modest beginnings gradually extended his business until the name of Rathbun became a symbol of solidity and integrity throughout the Dominion and the adjacent states of the neighboring Republic. Through his thrift and enterprise Deseronto has developed from what it was when he found it to a thriving village of upwards of 3,000 persons. The operations of the Rathbun company have become so extended that to-day they have branches in Napanee, Picton, Belleville, Gananoque, Toronto, Oswego, Albany, New York, Liverpool and Glasgow All these agencies are supplied from the mammoth works at Deseronto, which are the back bone of the place. Besides these large lumbering operations there has been equipped a small fleet of bay steamers, a railway into the back country, a shipyard, a large flouring mill, and innumerable minor undertakings, all the out growth of his early enterprise and the energy and ability of his son E. W. Rathbun. Some twenty years ago the deceased retired from active business pursuits and surrendered the management of his vast business interests to his four sons, the eldest of whom is Mr. E. W. Rathbun. The result has proven that the son is worthy of his sire.

The late Mr. Schuster, the City Missionary, had a staunch supporter in the deceased, who recognized the good work that was being done, and encouraged it with his ample means. A family of four sons and three daughters survive him.

FORESTS AND FIRES.

In the Quebec Provincial Legislature on May 31st, Mr. Poupore moved for all correspondence respecting the enforcement of Vic. 46. respecting the sale and management of timber on public lands. Mr. Poupore stated that a large quantity of pine and other valuable timber was annually destroyed by people recklessly setting fire to it all seasons of the year. He trusted that the government would enforce the act and inaugurate a system to protect our forest reserves. He suggested to the Commissioner of Crown Lands that the limit holders should be charged a certain fee to aid a fund to establish a force of men to protect the forests from reckless people. He expressed the opinion of the lumbermen of the province to pay this fee. He did not wish to be considered as opposed to colonization, but his object was to protect the timber from reckless squatters, as distinguished from *bona fide* settlers. The squatters went on the ground in lumber regions, started taverns, and to clear a few acres in the spring they set fire to the timber and burned a million dollar's worth of valuable property. He hoped the Government would amend the law to prevent this state of things. The timber trade was one of the most important scources of revenue to the province and as a practical lumberman he would wish to see the law enforced.

Hon. Mr. Lynch said he had no objection to bringing down the correspondence if Mr. Poupore would also ask for the orders-in council respecting the enforcement of this law. He felt the great importance of doing everything possible to protect the timber reserves of the province It was a question on which the future prosperity of our province depended, and its importance could not be over-estimated. The province of Quebec has been especially blessed by nature with a wealth of soil, of timber and of minerals, all of which are capable of vast development It is the desire of the Government to in every way promote immigration and colonization in suitable districts, but they did not ask a man to settle in a district which did not offer every advantage to himself and children. He was greatly pleased with the remark made by the Lieutenant-Governor on Arbor day when his Honor said that they should place the settlers on the land which offered the fullest advantage to them and preserve the forest limits, so they might be found more valuable and more useful a hundred years from to-day. He could look back with pleasure to the fact that this law which divided the lands into lands for settlement and forest reserves had been placed on the statue book by him. He regretted that his invitation to the lumbermen of the province to assist him in carrying out his law had met with a poor response. He was, however, prepared to go so far as to make the lumbermen contribute to the protection of the forests assessing a fee on them.

After similar remarks from Dr. Duhamel the motion, as amended by Hon. Mr. Lynch, was agreed to.

A UNITED STATES VIEW

The Bay City *Lumberman's Gazette* says: William Little, of Montreal, advocates the increase of the export duty on logs from Canada to $4 per thousand feet, $2 to counterbalance the United States duty on lumber and $2 more for national protection. He says, in order to foster Canadian manufactures, it would be best to have a rate of export duty almost prohibitory, but he would not propose that. Michigan mill men who are arranging to import logs from the Dominion ought to feel grateful to Mr. Little for not advocating a prohibitory rate and proposing only a mere pittance of $4. With that rate of export tax the Canadians would keep their logs at home by a large majority. If the Canadians want the timber more than they want American money, and the development of their country, they should follow Mr. Little's advice. The money which being invested in timber limits in Canada would have been put into Southern timber lands and saw mills in the south, the duty on lumber imported into the United States would be retained, and Canada would be left to the slow growth of the past. If her forests in their primitive condition are of such great value in themselves and she desires to retain them intact, she can do so by imposing such an export duty on logs as Mr. Little recommends. With any greater rate of duty than is now imposed Canadian logs will not be brought to Michigan for sawing nor will Canadian lumber be in much demand, while southern pine lands are obtainable at $1.25 to $2.50 per acre. Southern pine is calculated to take the place of Canadian lumber in the American market and all that is needed to enable it to do so is the greater development of the industry and an improvement in railroad enterprise in the south.

OUR TIMBER SUPPLY.

Hon. Mr Carling's scheme to establish experimental stations this summer will not come into operation permaturely. Among the things which it proposes to deal with in forestry, and while the usefulness of experiments in that direction are primarily intended to benefit the prairie Provinces of the Dominion, they must before many years have passed be acted upon in the older sections of the country. It is true we have an abundance of timber just now ; but the foreign demand is increasing and the value of our forest possessions are rapidly being exchanged. They must before long become of enormous value. A glance over the geography of the world shows that but one other country possesses so large an area of Forests as Canada, and that country is Russia. At the present rate of consumption the United States, with 16 000 saw mills, has but twenty seven year's supply, outside of private possessions, and the trade now springing up with that country is but the beginning of what must become a very great branch of our foreign commerce in a few more years. The planting of hardwood trees on land not otherwise very useful cannot be begun too soon. France since 1848 has converted nine millions of her waste acres into forest, and the wisdom of that course is now abundantly demonstrated. Each acre, which before being planted with trees produced about $175 annually, is now valued at over $600 The people of Canada, when they have looked into this matter, will see the propriety of taking any proper steps which have for object the development of forestry. There's millions in it.—*London Free Press.*

SERIOUS BUSH FIRES.

The Nipissing *Times*, published at North Bay, says :—The bush fire which was referred to when going to press last week, originated about a half a mile above the village. A northwest wind was blowing at the time, which caused the fire to make rapid headway towards the village. The hose, not being of sufficient length, was useless. A large number of the villagers and men from the C. P. R shops, hastened with pails and axes to stop the progress of the flames, which would in a short time have got beyond their control. Water was conveyed to the spot by locomotives. After two hours hard labor the progress of the fire was checked.

The Renfrew *Mercury* says :—After the long continued dry weather, bush fires in many parts of the country became alarmingly dangerous last week. At North Bay the village bell was kept ringing continually on account of the fires in the vicinity. At Renfrew, a fire spread from Mr. J. Murphy's farm at the Pinnacle, through Mr. E. Mayhew's limits, which were entirely devastated of a fine growth of young pine, and the fences burned down, and then on to Mr. Ward's property, where it also destroyed a considerable portion of fencing and menaced the barn. A number of friends from the village went out to assist in fighting back the flames and succeeded. Many of them were laid up next day—Sunday. Mr. Murphy's bush was also destroyed. The fire through Mr. Mayhew's property caused a great commotion among a lot of partridges. On Saturday morning the Wilberforce side of Eganville had a narrow escape from destruction also. A slight change in the wind fortunately averted the disaster. Boys had carelessly started a fire.

About two weeks ago says the Eganville *Enterprise*, set out fires in the vicinity of Pogue Lake, says a man just down from the woods, and the high winds which prevailed since that time have carried the fire down to Brennan's creek, a distance of over ten miles, the breadth of the burnt district being over three miles. Mohr's limit suffered greates, the fire totally destroying it. McLachlin Bros.' limit caught in several places, burning all the provisions the men had for the drive. On Saturday during the high wind the barns and outbuildings on the farm of Mr. Stephen Ryan, Reeve of South Algoma, took fire from the bush and were totally destroyed. A number of settlers in South Algoma and Hagarty have had their fences and crops burnt On Saturday evening they had a good shower of rain, and only for this a good deal more damage would have been done. The Polish settlers were removing their furniture and effects from their houses and burying them, but the timely rain saved their buildings.

A Russian Pole was arrested at the instance of McLachlin Bros. and brought before Justices Kinders and O'Grady, charged with setting fires to their limits, and was by them committed to goal for thirty days.

BEATTY'S wharf, house and dock and the Parry Sound Lumber Company's storehouse, at Parry Sound, containing a quantity of flour, oats, etc., were destroyed by fire on May 29th. A strong wind placed the lumber yards of the Parry Sound company in jeopardy, but strenous exeretions on the part of the employees saved the property. Loss covered by the insurance.

W. C. RANSOM, deputy commissioner of railroads in Michigan, estimates that there will be 390 miles of new road constructed in that state this year.

FORESTS FOR FOREIGNERS.

A MEASURE for the public good can rarely be adopted without causing inconvenience to somebody. It appears that the very judicious and beneficial action of the Dominion Government in increasing the export duty on saw logs is no exception to this general rule. The *Globe* constitutes itself the advocate of these sufferers, and in an editorial article zealously urges their cause. Its clients are two bodies with somewhat different, though allied interests, being the saw mill men of the United States, and Mr. Mowat and his colleagues.

We are informed by the *Globe* on behalf of the foreign interest that "mill-owners from the United States have lately purchased large timber limits on the North Shore of Lake Huron, &c.," that these men will consider the increased export duty a fraud upon them, and may, therefore, induce their Government to retaliate. The country will not agree with the *Globe* in prefering the interests of these foreigners to those of Canadians. Why should our saw mills be closed, or in newer districts remain unbuilt, in order that foreign mill-owners may secure the profit and foreign mill hands earn the wages gained by the conversion of our saw logs into lumber? As to fraud, the idea is absurd, for it is no oppressive duty, but merely a reasonable measure to redress the unfairness of the imposition of a duty on Canadian lumber taken into the States, while their lumbermen wish to obtain our logs free. Now that our neighbors have made preparations to carry on these operations on a larger scale, it has become necessary to redress this inequality so unfair to our country. The cry for retaliation is just as unfounded, for it is Canada that is simply protecting itself by meeting an unfair discrimination, and putting matters on an equality. The *Globe* occasionally pretends to have an especially friendly feeling for the Canadian "workingmen." In its course in this matter we have another proof of its impudent hypocrisy in this claim. Now, as always, it prefers the interests of foreign workingmen to those of Canada. It is bitterly aggrieved because this means has been taken to prevent the workingmen in the United States saw mills from snatching from Canadian workingmen in Canadian saw mills the profit of turning Canadian saw logs into lumber.

The case on behalf of Mr. Mowat and his colleagues, as put by the *Globe*, is no stronger. It is not to be desired that facilities should be afforded them of stripping Canadians of the profits of manufacturing lumber in favour of foreigners, merely to assist Mr. Mowat to obtain money from those foreigners to satisfy the greed of his followers, and enable him to keep up his extravagant expenditure out of capital. If the raised export duty has the effect of putting some check upon such wasteful sales this will be only an additional benefit derived from it. It is well that the property of Ontario should not be sacrificed by such improvident sales, and it is also well that the Adminstration should not be encouraged in extravagance by having the easy expedient of selling some more of the Provincial real estate whenever it cannot make both ends meet out of current revenue. When there is a demand for our more distant timber to convert into lumber there will be a sale for it, and it is only an improvident policy to force premature sales. This is especially the case when our property is thus sacrificed on the worst possible conditions, netting us merely the bare purchase money and dues, making an inroad on our natural resources, taking from our own people the advantage to be derived from the trade, and conferring all its benefits upon foreigners. An additional light is thrown upon the impolicy of such sacrifice sales, when we reflect that some of these purchasers from the United States have possession in their own country of timber lands which they are avowedly holding in reserve for the inevitable future rise in prices, and they are buying our timber expressly to hold backtheir own until our available forests are exhausted. Why should Ontario thus play into their hands, instead of securing for itself the benefit of such rising values?

While we cannot agree with the *Globe* in its advocacy of the claims of its foreign and domestic clients, we must congratulate it on the terse truthfulness with which the tenor of its editorial is described in its heading "INVITING RETALIATION AGAIN." This is precisely the *Globe's* position in this article. It is a deliberate appeal to the United States to inflict some injury on Canada, under the pretence that it is a fraud for Canada to protest its property, its industries and its working men from unfair and onesided conditions. The *Globe* can never forgive Canada for being Conservative and for refusing to entrust the management of its affairs to the *Globe* and its friends. Therefore it welcomes and sympathises with any ally that is opposed to Canada and its people. It makes a hero of Riel and his fellow rebels and murderers because they fought against the authorities of Canada and killed loyal Canadians. So in commercial contests it always takes the side of foreign manufacturers and foreign workingmen against Canadian manufacturers and Canadian workingmen. It is therefore only consistent in its present invitation to the United States to inflict some injury on Canada under the false pretence of retaliation.—*Peterborough Review.*

EXPORT DUTY ON SAW LOGS.

THE raising of the export duties on logs s a wise step and will meet with general approbation. Our Finance Minister has proposed and carried a resolution to increase these duties to the following amounts:—pine logs $3 per thousand, spruce logs $2 per thousand, and shingle bolts $1.50 per cord. This will do away with a crying evil. It is bad enough that our forests should be so rapidly exhausted even though our own lumbermen were deriving a profit from the operation. But it was much worse to see our land stript of our forest wealth to enrich foreign mill-owners while the owners of our own saw mills lost the profit. And there were evident preparations for this being carried on henceforth on a gigantic scale. Lumbermen from the States have made enormous purchases of limits, and there was no attempt to conceal the policy that was being adopted of looking to Canada for logs.

As to the difficulty that has been suggested of collecting these duties, a few seizures will settle that question, for saw logs cannot be easily smuggled.— *Peterborough Review.*

Health is Wealth!

Dr. E. C. West's Nerve and Brain Treatment guaranteed specific for Hysteria. Dizziness Convulsions, Fits, Nervous Neuralgia, Headache, Nervous Prostration caused by the use of alcohol or tobacco, Wakefulness. Mental Depression, Softening of the Brain resulting in Insanity, and leading to misery, decay and death, Premature Old Age. One box will cure recent cases. Each box contains one month's treatment. One dollar a box, or six boxes for five dollars; sent by mail prepaid on reseipt of price. We guarantee six boxes to cure any case. With each order received by us for six boxes, accompanied with five dollars, we will send the purchaser our written guarantee to refund the money if the treatment does no effect a cure. Guarantees issued only by J. D TULLY, Druggist, Sole Agent for Peterboro'

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OFFICE AND YARD, Foot West 21st Street, New York City.

REGULAR SALES will be held during the year 1886, as follows:

Tuesday,	*April 6th,*	*Tuesday,*	*August 10th,*
do	*May 11th,*	*do*	*September 7th,*
do	*June 8th,*	*do*	*October 5th,*
do	*July 13th,*	*do*	*November 2nd,*

and Tuesday, December 7th.

Sales commence promptly at 10.30 a.m Wm. Norman, Auction'r

At each of these sales we shall offer a full and complete assortment of the best grades of

HARDWOODS AND PINE LUMBER

Dealers and consumers will find it to their profit and advantage to attend. Catalogues giving the inspection of each lot offered can be had at the yard on the day of sale, or will be mailed on application. Address

New York Lumber Auction Co'y (Limited)

Foot of West 21st Street, New York City.

Constipation

Causes, directly or indirectly, fully one-half the sufferings which afflict mankind. It is usually induced by inactivity of the liver, and may be cured by the use of Ayer's Pills. C. A. Schomerus, Great Bend, Kansas, writes: "I have used Ayer's Pills for Costiveness, with the most beneficial results." J. Windholm, Newark, N. J., writes: "Ayer's Pills cured me of chronic Constipation." Martin Koch, Huntington, Ind., writes: "Last year I suffered much from Biliousness

And Headache

After using one box of Ayer's Pills I was quite well." C. F. Hopkins, Nevada City, Mo., writes: "I have used Ayer's Pills, and think they are the best in the world. They have cured me of Sick Headache and Neuralgia." W. L. Page, Richmond, Va., writes: "I have been a severe sufferer from Headache. Ayer's Pills afford me speedy relief." A. J. Forster, Dauphin st., Mobile, Ala., writes: "For a number of years I have been troubled with Constipation and Headaches. After trying a number of so-called Liver Invigorators, without benefit, I was at last

Cured by Using

Ayer's Pills." Rev. Francis B. Harlowe, Atlanta, Ga., writes: "For years I was subject to Constipation, from which I suffered increasing inconvenience, in spite of the use of medicines of various kinds. Some months ago, I began taking Ayer's Pills. They have entirely corrected the costive habit, and have vastly improved my general health." Hermann Bringhoff, jewelry engraver, Newark, N. J., writes, "Costiveness, induced by my sedentary habits of life, at one time became chronic and exceedingly troublesome. Ayer's Pills afforded me speedy relief, and their occasional use has since kept me all right." Ed. O. Easterly, Rockford, Ill., writes that he has been cured of chronic Constipation by the use of

Ayer's Pills.

Sold by all Druggists.

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass., U. S. A.

Market Reports.

TORONTO.

From Our Own Correspondent.

JUNE 9.—Another large tow of lumber left our docks this morning, consisting of over 1,500,000 feet, via Ogdensburg for Boston, and the docks are nearly clear of lumber, and at all the mills north of here there are nearly clear mill yards leaving ample room for piling this season's cut. It is generally conceded that bill lumber must soon take a step upward. There are two potent reasons for this belief: 1st, the fact that last years cut is cleared out, or nearly so. 2nd, quite a number of mills that run on bill stuff last season, are this year cutting stocks for shipment to the American side, and trade with the western part of our province increases yearly. The small mills in the west for many years past furnished considerable lumber for home use, but that is now a thing of the past. Trade here also continues brisk, all the yards keep fully employed, but the two first reasons given are sufficient to warrant the belief that dimension stuff, cut to order, must advance before the season closes.

Our wholesale lumbermen have at last come to the conclusion that unless they were willing to have their last dollar filched from their pockets by the railroad companies, that they must be up and doing, consequently a deputation of the prominent dealers left here this evening for Montreal, to place their grievances before the heads of the G. T. and C. P. railroad companies. The universal opinion held by all our lumbermen is that lumber should be carried by the M feet and not by weight. All dealers would then know exactly where they stood. At the present time they frequently sell cars at less than cost, after the excess freight has been deducted. In addition to this the new orders issued from day to day by the N. & N. W. R. R. are so vexatious in their character that lumbermen are fairly sick of the whole business. It really seems as if the present management was determined to strangle the ntire lumber traffic by all possible means in their power. It is true that there is a certain portion of the lumber cut that must come over their line, but there is also large cut that will take the water routes this season that would otherwise of passed over their rails. If the present manager is satisfied that his road will have all they can do well and good; if not, he is guilty in pursuing such a suicidal policy, time will tell. Lumbermen will, however, resist to the utmost any attempts at collecting excessive charges such as that now demanded. Railroad companies must be made to understand that they are amendable to the same laws that govern other common carriers. Where is the common sense or justice in saying, if you load on 20,000 pounds of lumber on our cars we will charge you for carrying 24,000 pounds, and if your load on 28,000 pounds we will charge you on that weight and 25 per cent. additional on 4,000 pounds. It is so absurd in its character that it will not bear one moments discussion, and if any other class of men except railroad managers were to attempt to perpetrate such a gouge, four prison walls would be thought by most people the most fitting place to enclose them, and it will be to the ultimate advantage of all roads governed by such men to remember that there is a limit to the endurance of even lumbermen.

Mill cull boards and scantling	$10 00
Shipping cull boards, promiscuous widths	12 00
" stocks	13 00
Scantling and joist, up to 16 ft	13 00
" " " 18 ft	14 00
" " " 20 ft	15 00
" " " 22 ft	16 00
" " 24 ft	17 00
" " " 26 ft	18 00
" " " 28 ft	19 00
" " " 30 ft	20 00
" " " 32 ft	21 00
" " " 34 ft	22 50@22 50
" " " 36 ft	24 00
" " " 38 ft	27 00
" " 40 to 44 ft	30 00
Cutting up planks to dry	20 00@25 00
" " boards "	20 00
ound dressing stocks	16 00@18 00
Picks Am. inspection	30 00
Three uppers, Am. inspection	35 00@40 00

B. M.

1½-inch flooring, dressed	25 00@30 00
1½ " " rough	14 00@15 00
1¼ " " dressed	23 00@25 00
1¼ " " undressed	14 00
1 " " dressed	16 00@20 00
1 " " undressed	12 00@14 00
⅞ Beaded Sheeting, dressed	18 00@20 00
Clapboarding, dressed	12 50
XXX sawn shingles, M	2 75@ 2 90
Sawn Lath	2 25
Red oak	20 00@25 00
White "	25 00@30 00
Basswood, No. 1 & 2	18 00@20 00
Cherry, No. 1 & 2	50 00@60 00
White ash 1 & 2	25 00@30 00
Black ash 1 & 2	20 00@25 00

WOOD-WORKING PATENTS.

The following list of patents relating to the wood-working interests, granted by the United States Patent Office, June 1st, 1886, is specially reported by Franklyn H. Hough, solicitor of American and Foreign patents, 925 F. Street, N. W., Washington, D. C., who will furnish copies of patents for 25 cents each:

342,939— Lumber cutting machine —H. S. Smith, Brooklyn, N. Y.

343,096— Saw, drag—W. H. Yagel, Deer Lick, Ohio.

342,918—Saw mills, transfer apparstus for—G. W. Loggie, Portland, Oregon.

342,057—Sawing machine feed table—D. J. Murray, Warsaw, Wis.

PATENTS ISSUED JUNE 8.

343,411— Chuck, lathe— J. H. Westcott, Oneida, N. Y.

343,443—Lathes, beading attachment for—N. A. Dickinson, Chester, Conn.

343,217—Mortising and boring machine—H. A. Axtell, Montague, Mass.

342,457— Saw mill feed mechanism —H. I. Hipp, Columbia, S. C.

343,254—Saw, hand—C. Richardson, Newark, N. J.

343,358—Saw tempering apparatus—W. B. Barry, Indianapolis, Ind.

343,203—Saws, device for jointing circular—K. Shives, Dunsinane, New Brunswick, Canada.

CHICAGO.

The *Northwestern Lumberman* of June 5th says:—Receipts this week were quite liberal. The Monday morning fleet was thought to have been the largest that had been seen on the market this season. Every day since Monday there has been a fair number of offerings. While the market has not shown great activity, the cargoes for sale have gone off with reasonable celerity. The yard men still hold a little aloof, and purchase only after considerable talk and hammering, an attitude that prevents a quick market. Yet prices have been fairly maintained at about former figures. If short, green piece stuff has been sold below $9.25 for decent cargoes, nobody will acknowledge it. Dry dimension is worth from $10 to $10.50, according to composition of cargo as to quality and length. The greatest inquiry is for green dimension. Boards and strips are not so urgently required, as prices are thought now to be too high to warrant heavy purchases.

Shingles are quoted five cents a thousand lower than they were last week, though commission men deny that there has been any decline. The yard dealers, however, assert to the contrary. Since the market is described as more active than last week, it is likely that sufficient concession has been made to stimulate buying.

The market as a whole may be described as moderately alive, with prices held up by main strength on the part of the commission men. Even this would not suffice if the manufacturers should load the market with a rush of cargoes. But the policy this season will probably be like that of last year—shipments will be gauged by the urgency of demand.

The following list represents the range of prevailing prices:—

Dimension, short green	$ 9 25
" " dry	10 00@10 50
Boards and strips, No. 2	10 50@12 00
" " " medium	13 00@15 00
" " " No. 1	16 00@19 00
Shingles, standard	1 75@ 1 80
" extra	2 00@ 2 10
" cedar, standard	1 65@ 1 75
" " extra	2 00
Lath, green	1 25
Lath, dry	1 40

Just now the yard men are discussing questions of trade with much interest, because they cannot see how they are to put in stock and keep business moving when there is so little margin between cargo and yard prices. The chief interest now centres in cargo and millyard values. Nothing more than a steady summer trade is expected from now until August. All realize that the late labor disturbance gave a stunning blow to the spring and early summer trade, and have given up the idea that there can be an extraordinary trade this season. What concerns the dealers now is to know how to put in such stock as they require for the fall trade without danger of losing money. They insist that cargo prices must go down, or they will buy but sparingly. Prices have weakened within the past few days, but they screw down hard, with little indication of a break. It is likely that the experience of last year will be repeated.

Prices will be yielded just enough to work off the offerings, and no more. In this way the yards will be gradually stocked up, and in the fall it will be found that the cargo market has been held steadily all the season, while the yard men have gained no great advantages in their purchases.

These has been no marked change in yard prices within the week. Individual yards are making prices to suit the stocks and financial conditions of each. The price list is little regarded in making sales of lumber above the common grades. Dimension that is dry enough to ship is held with tolerable firmness. Wide inch lumber is also fair property, at steady prices. But strips, from C upward, and the most of high grade lumber, is selling slowly, and prices are made to the customer that will induce him to take the lumber.

The trade in good lumber has taken a peculiar turn this year. The large relative inquiry for it last season, and the apparent short supply of it, induced nearly every dealer to search for and procure an unusual supply. Yards that had been in the habit of carrying but little good lumber, laid in all that could be bought last season. The result was that the trade was loaded down with good lumber, though probably much of it was not well graded, and was less saleable on that account. Every holder imbibed the idea that he must realize larger profits on his choice stock, in order to make up for his losses on the cheaper classes. But to his chagrin he has found that the demand has not been equal to the supply. Manufacturers and housebuilders have called for cheaper lumber than ever. Sash and door makers have been forced to buy cheaper lumber to meet the competition of low prices. It has thus been found that there is a limit to the demand.

Some yards, the business of which is largely local, report a good trade. Yards that supply the builders of the smaller class of structures in the city and suburbs, are having a better trade than the yards that look for heavy contracts. The reason for this is obvious. The labor troubles checked the building of large structures, while the building and repair of small houses was not seriously affected. Within the past week there has been a marked increase in the number of building permits issued. Permits for several large buildings have been issued within the past three days, showing that confidence among investors and contractors is becoming restored.

Receipts of lumber and shingles for the week ending June 3rd, as reported by the Lumberman's Exchange:—

RECEIPTS.

	Lumber.	*Shingles.*
1886	51,665,000	30,277,000
1885	55,922,000	26,090,000

FROM JAN. 1, TO JUNE 3, INCLUSIVE.

RECEIPTS.

	Lumber.	*Shingles.*
1886	316,547,000	133,570,000
1885	299,051,000	98,775,000
Increase	17,496,000	34,795,000

STOCK ON HAND MAY. 1.

	1886.	1885.
Lumber & timber	312,215,417	334,729,669
Shingles	333,941,450	164,710,350
Lath	46,446,385	18,664,887
Pickets	3,300,648	1,779,573
cedar posts	136,499	132,500

EASTERN FREIGHT RATES.

FROM CHICAGO AND COMMON POINTS ON CAR LOAD LOTS OF HARD AND SOFT LUMBER.

To New York	25c.
Boston	30c.
Philadelphia	23c.
Baltimore	22c.
Washington	22c.
Albany	24c.
Troy	24c.
Buffalo and Pittsburgh	15c.
Shenectady	24c.
Wheeling	15c.
Suspension Bridge	15c.
Salamanca	15c.
Black Rock	15c.
Dunkirk	15c.
Erie	15c.
Toronto	15c.

ALBANY.

Quotations a the yards are as follows:—

Pine, clear, M	$55 00@60 00
Pine, fourths	50 00@53 00
Pine, selects	42 00@47 00
Pine, good box	22 00@33 00
Pine, common box	13 00@15 00
Pine, 10-in. plank, each	00 45@00 47
Pine, 10-in. plank, culls, each	00 25@00 27
Pine boards, 10-in	00 30@00 32
Pine, 10-in. boards, culls	00 16@00 20
Pine, 10-in. boards, 16 ft., M	28 00@32 00
Pine, 12-in. boards, 16 ft	28 00@32 00
Pine, 12-in. boards, 13 ft	28 00@00 00
Pine, 1¼ in. siding, select	40 00@43 00
Pine, 1¼-in. siding, common	15 00@18 00
Pine, 1-in. siding, select	40 00@42 00
Pine, inch siding, common	13 00@15 00
Spruce, boards, each	00 00@00 16
Spruce, plank, 1¼-in., each	00 00@00 20
Spruce, plank, 2-in., each	00 00@00 30
Spruce, wall strips, each	00 12@00 12
Hemlock, boards, each	00 00@00 14
Hemlock, joist, 4x6, each	00 00@00 32
Hemlock, joist, 2½x4, each	00 00@00 14
Hemlock, wall strips, 2x4, each	00 00@00 11
Black walnut, gook, M	100 @120 00
Black waluut, ⅝ inch	80 00@90 00
Black walnut, ¾ inch	00 00@85 00
Scaymore, 1-inch	28 00@30 00
Scaymore, ⅝-inch	21 00@23 00
White wood, 1-inch and thicker	3 00@4 00
White wood, ⅝-inch	28 00@30 00
Ash, good, M	40 00@43 00
Ash, second quality, M	25 00@30 00
Cherry, good, M	60 00@85 00
Cherry, common, M	25 00@30 00
Oak, good, M	40 00@43 00
Oak, second quality, M	20 00@25 00
Basswood, M	25 00@30 00
Hickory, M	40 00@40 00
Maple, Canada, M	28 00@30 00
Maple, American, per M	26 00@28 00
Chestnut, M	38 00@40 00
Shingles, shaved, pine, M	0 00@ 6 50
" 2nd quality	0 00@ 5 00
" extra, sawed, pine	4 30@ 4 50
" clear, "	0 00@ 3 00
" cedar, mixed	0 00@ 3 30
" cedar, XXX	0 00@ 0 00
" hemlock	2 25@ 2 35
Lath, hemlock, M	0 00@ 2 15
Lath, spruce, "	0 00@ 2 23

OSWEGO, N.Y.

From Our Own Correspondent.

Three uppers	$42 00@46 00
Picking	32 00@35 00
Cutting up	24 00@26 00
Fine Common	22 00@25 00
Common	14 00@18 00
Culls	11 00@14 00
Mill run lots	16 00@22 00
Sidings, selected, 1 in	30 00@35 00
" 1½ in	32 00@36 00
Mill run, 1x10, 13 to 16 ft	16 00@21 00
Selected	21 00@24 00
Shippers	14 00@16 00
Mill run 1¼x10	17 00@20 00
Selected	21 00@30 00
Shippers	14 00@16 00
Mill run, 1 & 1½ in, stripe	15 00@18 00
Selected	22 00@30 00
Culls	11 00@13 00
1x6 selected for clapboards	25 00@35 00
Shingles, XXX, 18 in. pine	3 10@ 3 50
XXX Cedar	2 75@ 3 00
Lath 1½, No 1	1 85@ 2 00
No 2	1 00@ 1 25
Ash, 1st & 2nd 1 to 4 in	16 00@20 00
Basswood, 1st & 2nd, 1 & 1½ inch	18 00@20 00
" culls, " "	8 00@11 00

BUFFALO.

We quote cargo lots:—

Uppers	$45 00@46 00
Common	17 00@18 50
Culls	12 50@13 00

TONAWANDA.

CARGO LOTS—MICHIGAN INSPECTION.

Three uppers	$42 00@44 00
Common	18 00@24 00
Culls	10 00@13 00

LONDON.

The *Timber Trades Journal* of May 29th says:—We cannot chronicle any change whatever either in the London or coast markets, and business continues unusually restricted even for the present time of year, which is generally one of the quietest seasons as far as f.o.b. sales are concerned. A few contracts have certainly been made, but buyers as a whole remain quite indifferent, while many sellers, finding no good results from forcing sales, seem inclined to abstain from pressing their makes. We think ourselves that the inland trade would brisker were not that the fear of an impending dissolution of Parliament leads buyers to confine their dealings within the narrowest possible limits. It is generally thought that we shall, before long, find ourselves in the midst of another election, with all its accompanying disorganizing influences on trade.

A few weeks back there were some slight signs of an improvement in the Midland districts, but the indications have disappeared completely during the past ten days.

There was by no means a bad room at Messrs. Churchill & Sim's sale on Thursday, especially considering the limited nature of the reserved lots and the counter-attractions down Epsom way. This latter undoubtedly had its influence, as we noted the absence of one or two leading firms from their accustomed places in the vicinity of the auctioneer's desk. Prices ruled low throughout, though here and there a lot really wanted fetched pretty fair values.

The great falling off in the consumption is getting very serious, and till we see some amendment in this quarter we cannot hope for a recovery in prices. There are reports about that several heavy sales have been made lately, but there is nothing to corroborate them in the deliveries from the docks.

The weather this month has not favored the building trade, and a worse time for carcasing we cannot well remember. The rainfall extending over Friday, Saturday and Sunday is almost unexampled, and must do a considerable amount of damage to the crops in loose soil, all the low-lying lands being flooded. "A moist May and dry June keeps everything in tune," says the adage, but we question if the oldest inhabitant can recollect a wetter May than that which is now near its termination.

The deliveries from the docks can hardly be very good while such a state of things continues. The depression of trade was bad enough before, but we must look for the effects of the rain on the consumption in an aggravated form the forthcoming week.

That things, however, are not quite as bad as they seem if evident from the large quantity of goods placed. The wonder is that, after three months of an unusually severe winter, free-on board prices have kept up as they have done. At any rate, there is a big business still being carried on. The weather has been just the reverse of favorable to consumers, yet even at the public sales good stocks hold comparatively steady. If the decline in prices is still noticeable, it cannot be so easily perceived on the better descriptions, which, were it not for the exceptional state of the market, would soon show an upward tendency.

LIVERPOOL.

The *Timber Trades Journal* of May 29th says:—The arrivals of timber laden vessels during the week past have been very few and unimportant; consequently the docks and quays have worn day after day, a bare and uninteresting appearance.

Bad as this may be from some points of view, it is not greatly to be regretted, for, evidently, the more the import for the coming season may be curtailed, the better for the trade generally, as the demand from the country and the wants of the local districts are apparently of the most limited character.

Perhaps some part of this apathetic state may be traced to the fact that some buyers refrain from entering into their purchases until the arrival of the first shipments of fresh goods, and this is not now far distant; but at the same time it is to be feared that the present dead state of trade is traceable to other causes.

There is little change in the freight market, and although some amount of chartering has been done from Quebec to Liverpool, the quantity is below that of the usual average. The latest rate we have heard of is 19s. per load of timber to Liverpool.

We regret to say that another house engaged in this trade, near the Canada dock, have been compelled to suspend payment. A private meeting of the principal creditors was called a few days ago, and we hear another is to be held at the end of this week to consider the position. Probably an amicable arrangement will be arrived at without the intervention of the Court. Pending the result of the proposed meeting nothing further can be said on the subject.

TYNE.

The *Timber Trades Journal* of May 29th says:—There is a long list of arrivals during the last seven days, but amongst them there are no items of importance, with the exception of one cargo of teak from Bangkok and a cargo of timber from Pensacola. Pitch pine timber is largely held on the river at present, and is being now sold at lower rates than at any previous period. There is but little demand for it, and when an order is to be placed there appears to be little difficulty in buying on almost as favorable terms as merchants have imported. Pit-props are still a very slow sale, and prices show no signs of improvement. In trade generally the present is as dull as ever, and the outlook for the future is not at all inspiring. Shipbuilders are still very slack, and the various ironworks and colleries are apparently as dull as it is possible to be. So far there are no arrivals of Baltic deals, but a few ships are almost daily expected.

GLASGOW.

The *Timber Trades Journal* of May 29th says:—Imports at Glasgow for the past week include the first arrival this season of Canadian deals, viz., the parcel per steamer Norwegian, consisting chiefly of narrow first quality pine deals. They are being yarded at Yorkhill.

No auction sale of the new deals has yet been called.

At Greenock the only arrival to note is a cargo of teak timber, consigned to Messrs. Edmiston & Mitchells.

The import of teak to Clyde ports this year to date has been eight vessels, aggregate tonnage 6,075 tons.

There have been a good many launches from the Clyde shipyards within the past week; total over 6,000 tons. At the Point house ship yard Messrs. A. & J. Inglis are about to begin the construction of two steamers (their combined tonnage 1,600 tons) for the Carron Company; and Messrs. Barclay, Curle & Co., (Limited) have, it is stated, been entrusted with an order from Mr. John Burns to build a screw steamship, intended for the Irish trade of the Messrs. Burns.

A public sale of deals took place at Yorkhill, Glasgow, on 26th inst., Messers. Edmiston & Mitchells, brokers. The catalogue comprised Michigan 1st and 2nd pine deals and Shediac, N. B., spruce. There was a small attendance of buyers, and demand quiet; offers for the 1st quality not meeting brokers' views, these deals were withdrawn. The following were the prices realized:—

Michigan 2nd pine deals—	Per cub. ft.
16 ft. 16/24x3	2s. 4d.
14 ft. 10/27x3	2s. 2d.
Shediac, N. B., spruce deals—	
16/24 ft. 9x3	0s. 9½d.
15 ft. 8x3	0s. 8½d.

NEW YORK.

The following is the official list of the prices obtained at the New York Lumber Auction Company's sale at New York on June 8th:—

Lot —Ash bausters, 4570 pieces, 1½ cents each.

Lot 2—Whitewood, 1½ and 2 inch, firsts 7,100 ft. seconds, 4.196 ft.; culls 89 ft., $.. .0

Lot 3—Whitewood ¾ inch, firsts 4,00 f seconds, 3,386 ft.; culls, 146 ft, $23 00

Lot 4—Whitewood, ¾ inch, firsts, 4,'0 ft; seconds 3,663 ft.; culls, 171 ft. $

Lot 5—Whitewood, 2 inch, firsts 7,28 ft, seconds, 3,808 ft. $28.

Lot 6—Whitewood, ⅝ inch, wide, firsts, 1,895 ft.; seconds, 709 ft. $24.

Lot 7—Whitewood, ⅝ inch, firsts, 8,474 ft.; seconds, 6,329 ft.; culls, 345 ft. $22.

Lot 8—Whitewood, 1½, 2 and 2½ inch, firsts, 6,815 ft.; seconds, 1,518 ft.; culls, 184 ft. $32.50.

Lot 9—Whitewood, 1 inch, firsts, 4,850 ft.; seconds, 1,739 ft.; culls 145. $31.

Lot 10—Whitewood, 1 inch, firsts, 5,165 ft.; seconds, 1,537 ft.; culls, 91 ft. $33.

Lot 11—Whitewood, ⅝ inch, firsts, 2,130 ft.; seconds, 1,197 ft.; culls, 151 ft. $25.

Lot 12—Whitewood, 1 inch, culls, 13,084 ft. $16.

Lot 13—Ash, 1, 1¼, 1½ and 2 inch, firsts 2,640 ft.; seconds, 1,866 ft.; culls, 855 ft. $26.

Lot 14—Whitewood, 1 and 2 inch, seconds, 104 ft.; culls, 1,234 ft. $20.

Lot 15—Ash 1¼, 1½ and 2 inch, firsts, 3,729 ft. $26.

Lot 16—Ash, 1 inch, firsts 9,879 ft. $23.

Lot 17—Whitewood, 1 inch, firsts, 5,367 ft.; seconds, 6,393 ft.; culls, 84 ft. $26.

Lot 18—White pine shelving, ⅞ inch, s. 2 s. (wide) 5,533 ft. $26.

Lot 19—Ash and walnut balusters, 125, 1¼x1¼x32, 1 cent each. 11,640, 1½x1½x32, ¾ cent each. 6,150, 2x2x32, 1¼ cents each. 20, 3x3x33, 2 cents each. 100, 3x3x32, 2 cents each.

Lot 20—Whitewood, ⅝ inch, wide, firsts, 2,392 ft.; seconds, 1,558 ft. $24.

Lot 21—Whitewood, ⅞ inch, firsts, 7,695 ft.; seconds, 6,253 ft.; culls, 94 ft. $21.50.

Lot 22—Whitewood, 1½ and 2 inch, firsts, 6,400 ft.; seconds, 3,832 ft.; culls, 116 ft. $28.

Lot 23—Whitewood, 1 inch, firsts, 7,018 ft.; seconds, 4,673 ft. $26.

Lot 24—Whitewood, 1 inch, firsts, 6,359 ft.; seconds, 5,289 ft.; culls, 192 ft. $26.

Lot 26—Whitewood, 1 inch, firsts, 8,535 ft.; seconds, 6,252 ft.; culls, 315 ft. $30.

Lot 27—Whitewood, 2 inch, firsts, 6,174 ft.; seconds, 4,576 ft.; culls, 403 ft. $26.50.

Lot 28—Whitewood, 1¼ and 1½ inch, firsts, 2,394 ft.; seconds, 1,820 ft.; culls, 116 ft. $27.50.

Lot 29—Whitewood, 3 inch, firsts, 788 ft.; seconds, 3,306 ft.; culls, 3,204 ft. $22.

Lot 30—Whitewood, 3 inch, firsts, 2,889 ft.; seconds, 6,566 ft.; culls, 2,694 ft. $25.

Lot 31—Whitewood, 1 inch, firsts, 5,979 ft.; seconds, 5,148 ft.; culls, 375 ft. $25.

Lot 32—Ash 2 inch, firsts, 4,262 ft.; seconds, 5,452 ft.; culls, 657 ft. $24.50.

Lot 33—Elm, 1 inch, firsts, 349 ft.; seconds, 1,215 ft. $16.

Lot 34—Elm, 1 inch, culls, 2,359 ft. $11.

Lot 35—Basswood, firsts, 297 ft.; seconds, 610 ft. $19.50.

Lot 36—Basswood, 1 inch, culls, 2,823 ft. $15.50.

Lot 37—Whitewood, 1¼ inch, firsts, 5,630 ft.; seconds, 2,814 ft.; culls, 40 ft. $29.50.

Lot 38—Basswood, 1 inch, firsts, 159 ft.; seconds, 1,856 ft. $18.50.

Lot 39—Basswood, 1 inch, culls, 8,469 ft. $16.50.

Lot 40—Cherry, 1 inch, seconds, 537 ft.; culls, 1,433 ft. $31.50.

Lot 41—Cherry strips, 1 inch, 4,150 ft. $38.

Lot 42—Whitewood, 2 inch, firsts, 2,993 ft.; seconds, 1,306 ft. $28.

Lot 43—Hemlock joist, 927 pcs. 2½x4x13. 11½ cents each.

Lot 44—Birch squares, culls, 951 ft. $15.50.

Lot 45—Whitewood, 1 inch, firsts, 5,137 ft.; seconds, 7,690 ft. $24.50.

Lot 46—Whitewood, 3 inch, firsts, 7,820 ft.; seconds, 6,210 ft.; culls, 210 ft. $29.

Lot 47—Whitewood, 1, 1¼ and 2 inch, culls, 9,195 ft. $16.

Lot 48—Whitewood, 1 inch, culls, 8,294 ft. $18.

Lot 49—Whitewood, 1 inch, culls, 9,738 ft. $18.

Lot 50—Whitewood, ⅝ inch, wide, firsts, 2,376 ft.; seconds, 1,149 ft. $25.

Lot 51—Whitewood, 1, 1½ and 2 inch, firsts, 159 ft.; seconds 2,184 ft. $27.

Lot 52—Birch, 1 inch, seconds, 191 ft. $15.

Lot 53—Birch, 1 inch, culls, 1,652 ft. $11.

Lot 54—Birch, 2 inch, firsts, 23 ft.; seconds, 530 ft. $18.

Lot 55—Birch, 1 and 2 inch, culls, 5,401 ft. $12.

Lot 56—Ash, 1 inch, firsts, 162 ft.; seconds, 782 ft. $23.

Lot 57—Ash, 1 inch, culls, 6,010 ft. $14.

Lot 58—Whitewood, 1 inch, firsts, 8,990 ft.; seconds 4,135 ft. $29.

Lot 60—Whitewood, ⅝ inch, firsts, 6,645 ft.; seconds, 6,706 ft.; culls, 1,278 ft. $19.

Lot 61—Whitewood, 3 inch, firsts, 555 ft.; seconds 1,086 ft.; culls, 8,263 ft. $20.50.

Lot 62—Cherry, 1½ inch, firsts, 1,491 ft.; seconds, 2,181 ft.; culls, 460 ft. $73.

Lot 63—Ash, 1½ inch, firsts, 705 ft.; seconds, 1,055 ft; culls, 1,374 ft. $18.50.

Lot 64—Ash, 1 inch, culls, 9,362 ft. $14.

Lot 65—Whitewood, 1 inch, firsts, 3,580 ft.; seconds, 2,492 ft.; culls, 104 ft. $27.50.

Lot 66—Whitewood, 1 inch, firsts, 3,873 ft.; seconds, 2,942 ft.; culls, 113 ft. $27.50.

Lot 67—Ash, 1¼ inch, firsts, 1,585 ft.; seconds, 3,252 t.; culls, 2,772 ft. $23.50.

Lot 68—Ash, 1 inch, seconds, 5,403 ft. $19.

Lot 69—Ash, 1 inch, seconds, 7,497 ft. $19.

Lot 70—Cherry balusters, 722 pcs. 4 cents each.

Lot 71—Ash balusters, 9,501 pieces at 2 2¼ 3¾ 5 and 4½ cents.

Lot 72—Whitewood, 1½ and 2 inch, firsts, 5,982 ft.; seconds, 5,543 ft.; culls, 67 ft. $26.

Lot 73—Cherry, 1¼ inch, firsts, 1,083 ft.; seconds, 2,407 ft.; culls, 630 ft. $77.50.

Lot 74—Ash, 2 inch, firsts, 1,491 ft.; seconds, 3,091 ft.; culls, 3,021 ft. $22.50.

Lot 75—Ash, 1 inch, firsts, 7,556 ft. $39.

Lot 76—Whitewood squares, 5x5 to 8x8, firsts, 2,258. ft., seconds, 542 ft.; culls, 337 ft. $28.50.

Lot 77—Whitewood, ⅝ inch, wide, firsts, 2,437 ft.; seconds, 796 ft. $25.

Lot 78—Whitewood, ⅜ inch, wide, firsts, 2,161 ft.; seconds, 1,518 ft. $24.

Lot 79—Whitewood, 3 and 4 inch, culls, 12,219 ft $20.

Lot 80—Ash, 1 inch, firsts, 123 ft.; seconds, 825 ft.; culls, 392 ft. $24.

Lot 81—Whitewood, 1 inch, firsts, 2,950 ft.; seconds, 3,915 ft,; culls, 291 ft. $25.50.

Lot 82—Ash, 1¼ and 1½ inch, firsts, 4,788 ft.; seconds 3,323 ft.; culls, 126 ft. $27.50.

Lot 83—Cherry, 1 inch, firsts, 2,852 ft.; seconds, 4,045 ft.; culls, 520 ft. $71.

Lot 84—Whitewood, ⅞ inch, firsts, 6,643 ft.; seconds, 6,976 ft.; culls, 1,881 ft. $20.

Lot 85—Whitewood, 1½ to 4 inch, firsts, 4,806 ft.; seconds, 4,739 ft.; culls, 459 ft. $27.5

Lot 86—Whitewood, ⅞ inch, firsts, 10,539 ft.; seconds, 7,249 ft.; culls, 167 ft. $24.

Lot 87—Whitewood, 2 inch, firsts, 3 248 ft.; seconds, 2,791 ft.; culls, 140 ft. $25.

Lot 88—Whitewood, ⅞ inch, firsts, 9,365 ft.; seconds, 7,783 ft.; culls, 766. $19

Lot 89—Ash, 1 and 1¼ inch, firsts, 5,295 ft; seconds, 4,847 ft; culls, 351 ft. $31

Lot 90—Hemlock boards, 1,602 pcs 1x10x13, 13 cents each.

Lot 91—Whitewood, 1 and 2 inch, firsts, 1,516 ft; seconds, 1,376 ft; culls, 42 ft

Lot 92—Whitewood squares, 4x4 to 5x5 inch, firsts, 3,617 ft; seconds, 1,247 ft; culls, 192 ft, $27

Lot 93—Whitewood, 2 inch, firsts 3,684 ft; seconds, 5,094 ft; culls, 265 f

Lot 94—Ash, 1¼, 1½ and 2 inch, firsts, 854 ft; seconds 454 ft; culls, 171 ft, $30.

Lot 95—Ash, 1 inch, firsts 3,036 ft; seconds 2,973 ft; culls 1,139 ft, $25

Lot 96—Whitewood, 1 inch, firsts 4,121 ft; seconds 1,876 ft, $29

Lot 97—Ash, 1 inch, culls 887 ft, $14 50

Lot 98—Elm, 1 inch, firsts 265 ft; s ft, $11

Lot 99—Elm, 1 inch, culls 7,342 ft, $9 50

Lot 100—Whitewood, ⅞ inch, firsts 5,515 ft; seconds 2,432 ft, $22

Lot 101—Walnut, 1 and 2 inch, seconds 2,079 ft; culls 7,347 ft, $45

Lot 102—Birch, 1 and 2 inch, firsts 64 ft; seconds 393 ft, $19

Lot 103—Birch and ash, 1 and 2 inch, culls 11,491 ft: $11

WEST'S WORLD'S WONDER or family liniment has proved to be one of the greatest blessings of the age. It is a never failing remedy for rheumatism, cuts, sprains and bruises. Call on J D. Tullyf or a trial bottle and you will use no other

For the past quarter of a century West's Cough Syrup has given relief to thousands, and no medicine compound can show such a vast number of unsolicited testimonials. Ask your neighbor as to its merits. It is an unfailing cure for coughs, colds, hoarseness, asthma, bronchitis, consumption in its early stages, and all throat and lung diseases. Price 25c. 50c. and $1.00 per bottle. Sold by J. D. Tully.

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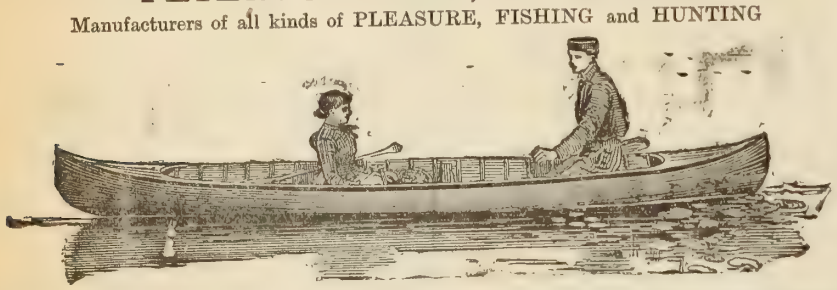

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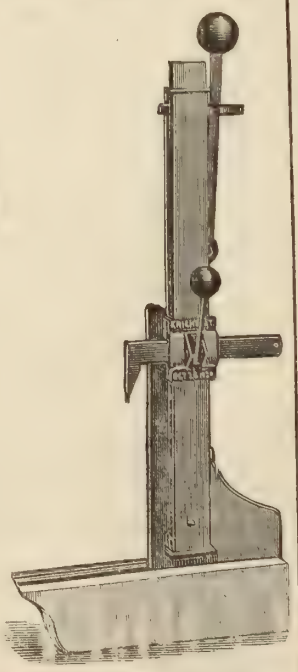

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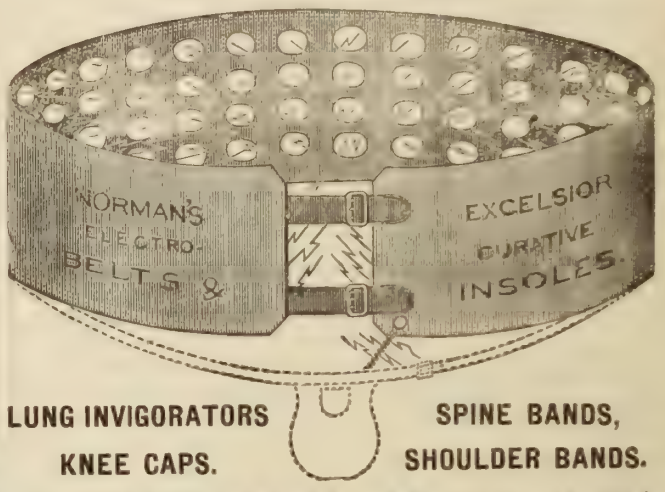

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4. Its columns are filled with interesting reading matter, valuable alike to the land owner, manufacturer or dealer.
5. It costs only $2.00 per year to have it sent, post-paid, to any address in Canada, and no land owner, lumber dealer, manufacturer or individual in any way connected with timber industries, can afford to do without it.

☞TO ADVERTISERS.

It has a circulation among saw mill owners, manufacturers, lumber and timber dealers and all classes connected with the timber business.

Examine the field, count the cost, and you will at once decide that the CANADA LUMBERMAN is the

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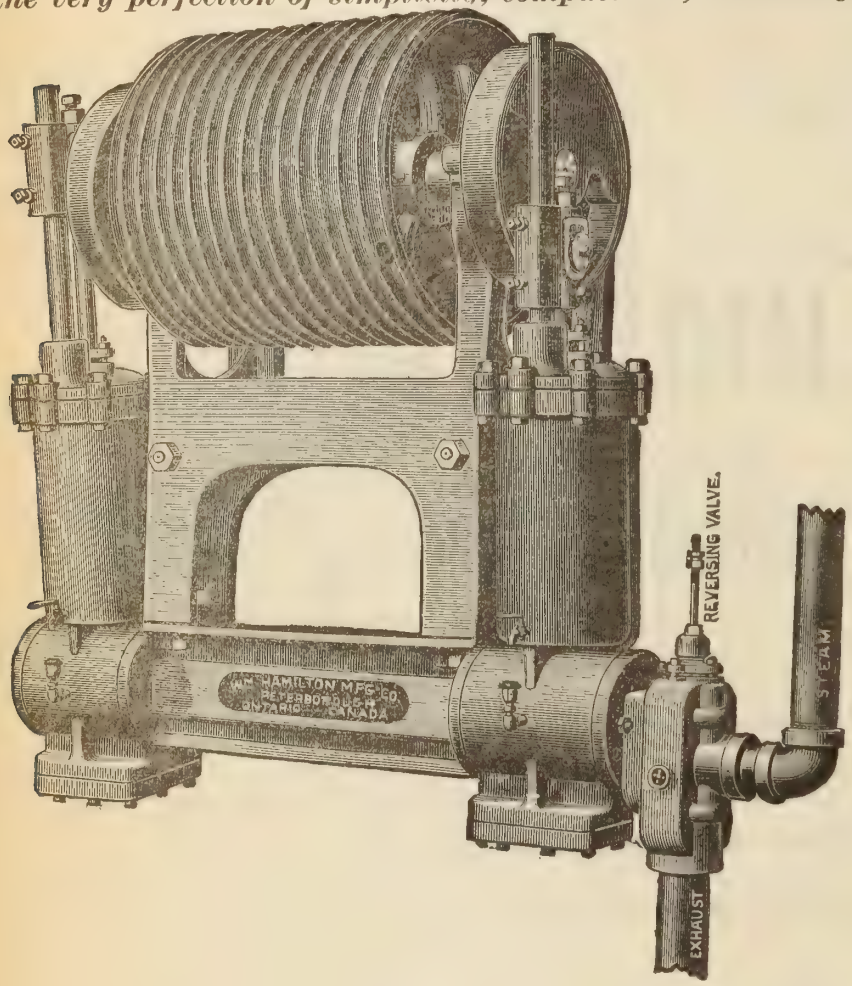
PATENT OSCILLATING TWIN ENGINE

FOR STEAM FEED IN CIRCULAR MILLS WITH RACK OR ROPE.

This Engine has practically but two moving parts, aside from cranks and shafts. The whole array of eccentrics, valves, valve rods, connecting rods, cross heads, slides, levers, rock shafts, bell cranks, etc., is done away with, and the very perfection of simplicity, compactness, durability and cheapness attained.



The above engraving illustrates the Twin Engine, 10x16, for Rope Feed, for Saw Mill Carriages. The spool is 27 in. diameter, 30 in. face, is grooved 2 in. pitch for 1½ in. rope. The shaft is steel, 4½ in. diameter, with disk cranks. No connecting rods, eccentrics or valve rods to get loose and out of order. The ports are in the trunions, and worked by an oscilliation of the cylinders, and are held in their place in the downward motion by a steam cushion below. The sawyer's valve is a perfect balance, and by moving this valve the engine can be reversed, stopped or started almost instantaneously if necessary, as the sawyer has perfect control of it by his lever either to go fast or slow. Should the sawyer let go of his lever either by mistake or any other cause, it is balanced so that the valve will come to the centre and cut the steam off both cylinders and stop the feed. When standing, the lever is locked or fastended, so that is is impossible for it to start off itself. The engine stands upright below the carriage, and bolted to two upright beams, placed on the mill for the purpose. When a rack is preferred in place of the rope, we put on a steel wheel 30 in. in diameter, and the engine placed high enough to work into the rack on carriage bar, or if the beams come in the way, an idler wheel can be used between engine and rack segs; or, the engine can be placed at a distance and have a shaft from it to the carriage; or it can be placed in the engine room, where it is under the control of the engineer for oiling, thence by shaft and pinion to carriage rack bars. These engines are well adapted for cutting long logs, or where the logs are mixed, the advantage of this feed will be apparent to mill men. When the carriages are used in two or more sections, the couplin and uncoup ling of each section is quick and simple.

There were two of these feeds working this summer and giving the best of satisfaction, one with rope feed at James Playfair & Co's Mill, Sturgeon Bay, near Waubaushene, and one at the new mill furnished by us to Francis Carswell & Co., at Calabogie Lake, on the Kingston and Pembroke R. R. This mill is working with the Rack and Pinion feed, and drops from fifteen to seventeen stock boards per minute. We have also sent one to the Rathbun Company, Deseronto, to put in to feed their heavy Circular Mills. They will also commend themselves for various other cases, especially for running Elevators, hoisting Engines, and wherever a simple and easily reversible motion is required.

We would also call attention to our Improved Band Saw-Mill for cutting logs

☞ ***We guarantee this to be the best Mill of his kind got up, and would ask any one wanting a good Band Saw-Mill to communicate with us. We would also call the attention of Mill Men to our new IRON GANGS, CIRCULAR MILLS and MILL MACHINERY. For further information, prices, &c., address the Manufacurers,***

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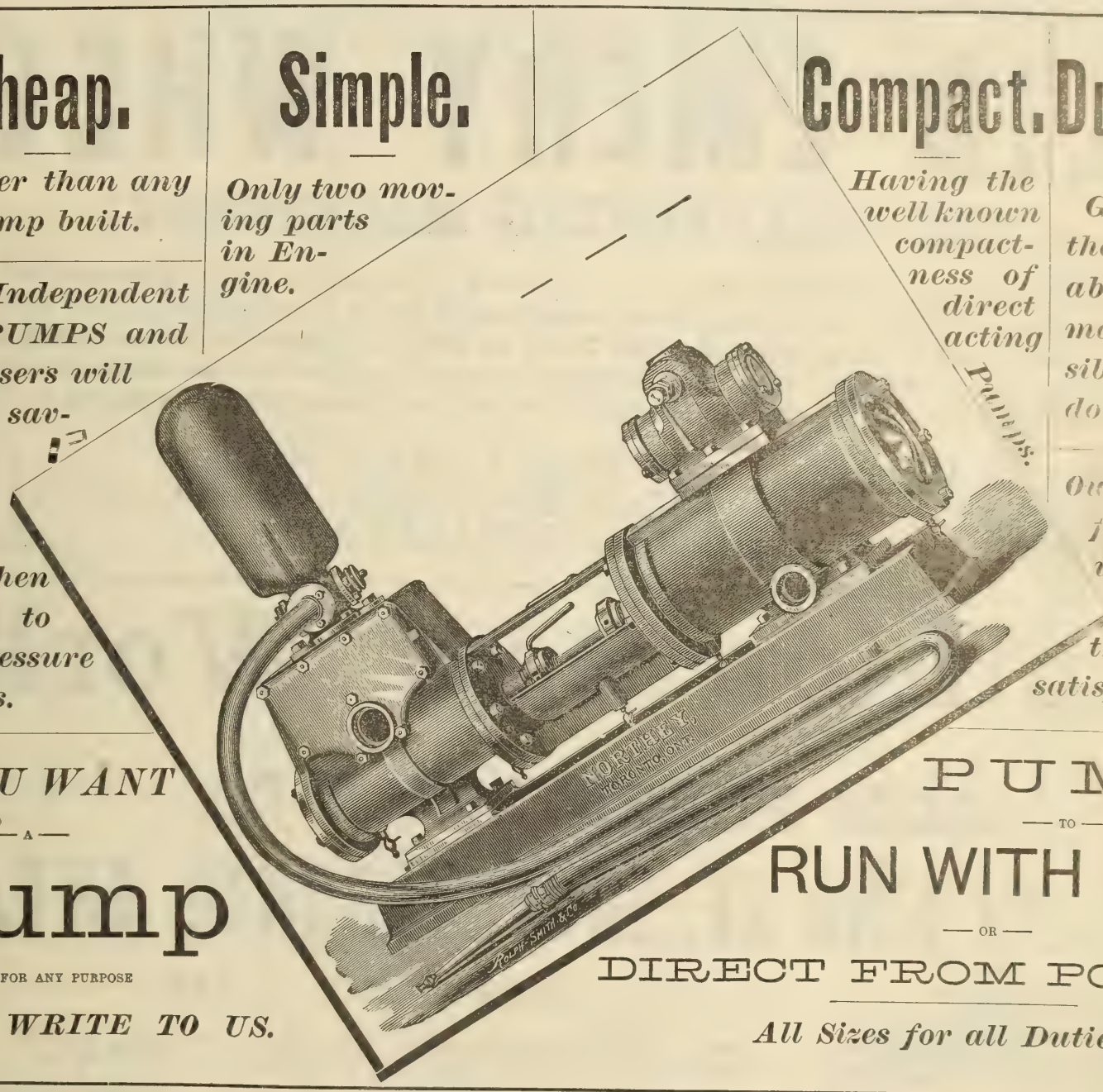

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The products of the Manufacture of the Tanite Company have, for almost 18 years' enjoyed a great reputation, and have been recognized for a long while, in all the countries of the world as a type of excellence in this class of work. In order to increase in Canada their already widely extended use, the Co'y has recently added to the liberality of its terms and conditions, and has chosen the following Houses, so extensively known, to be its Agents:

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THE CANADA LUMBERMAN

AND MILLERS' MANUFACTURERS AND MINERS GAZETTE.

PUBLISHED SEMI-MONTHLY.

The only Newspaper devoted to the Lumber and Timber Industries published in Canada

SUBSCRIPTION $2.00 PER ANNUM

VOL. 6. PETERBOROUGH, ONT., JULY 1, 1886. NO. 13

BURLEIGH FALLS SLIDE.

On Wednesday a deputation of lumbermen met, by appointment, Mr. T. Rubidge, Chief Engineer of the Trent Valley Canal at Burleigh, in reference to a dam and slide at Burleigh Falls which is to be constructed by the Government to take the place of certain improvements which were built by the lumbermen at this point and which the Government found necessary to expropriate for the the construction of the Trent Valley Canal.

The deputation consisted of Messrs. Hilliard, Ullyott, Strickland, and Hazlitt and of Mr. Irwin, who acts as Secretary for the Lumbermen's Association.

The interview was entirely satisfactory; it was found that the projections of Mr. Rubidge in regard to the work were entirely in accord with the views of the deputation, the only point now being the early construction of the works so that they may be completed before another season.

There is no question that the closing of the channel known as the Big Chute at Burleigh for the purpose of the construction of the locks, has put the lumbermen on this stream to a very serious disadvantage. The turning of all the water into the channel known as Little Burleigh rendered the improvements which they constructed themselves entirely useless, and we understand that it was merely the great interest which all lumbermen feel in the early construction of the Trent Valley Canal which hindered them from expressing their views as to the expropriation of these works of their own building at this point in a more forcible manner than they have done.

They, however, are now satisfied that the Government have not lost sight of the disinterested part that they have taken in the matter, and, although for two seasons past they have been laboring at great disadvantage at this point and a great unnecessary cost, it is believed the proposed improvements, which they hope will be constructed at an early date, will obviate the difficulties they have felt themselves laboring under.

THE EXPORT DUTY.

A duty was put on the export of saw logs, which is probably intended to compel the Americans who hold timber limits in Canada to manufacture the lumber here; where it fails to do so, it will bring some revenue into the country, unless it should result in leaving the limits unworked. The approaching exhaustion of the supply of timber in the States, and at a remoter period in Canada, is a matter about which opinions differ very much, and concerning which there is a great want of precise information. One thing is certain: American lumbermen find it easier to get logs in Canada than in their own country. The export duty will stand in the way of their exporting logs; and if lumber gets scarce in the States the price must go up to a figure that will enable them to pay the duty.—*Monetary Times.*

BAND MILL REPORTS.

To the Editor of the Canada Lumberman.

Sir,—We enclose to you some figures in regard to band mill sawing that will go far to establish confidence in this new and useful machine for making lumber.

S. A. Hale, Esq., of Whittlesey, Wisconsin, has kindly given us the record of five consecutive days sawing of 11 hours each, commencing

June 1st	sawed	47,492 ft.
" 2nd	"	45,816 "
" 3rd	"	54,380 "
" 4th	"	47,200 "
" 5th	"	60,667 "
Total		255,555 "

As band mills usually make from 15 to 20 per cent more lumber than the actual scale of the logs. We shall be at liberty to add at least 15 per cent., which is 38,333 feet, this added to 255,555 = 293,888. This sum divided by five, the number of days, gives 58,777 feet as the average daily cut.

About 40,000 of this whole quantity was 2 inch plank; about $\frac{3}{4}$ of the whole was 1 inch board, the remainder beside the plank, $1\frac{1}{2}$ inch.

Another report of $4\frac{1}{2}$ consecutive days work performed last month gave an average daily cut of 56,069 ft.

A large log which scaled 1,029 feet was sawn in eight minutes.

E. P. Attis & Co., of this city, are manufacturers. About 20 such mills have been started since Jan 1st and are all doing good work.

Heretofore the most potent objection to band mills was that enough work could not be got out of them, 25,000 feet per day being about the best average obtainable. But these figures approach the best cutting of the circular mills.

Yours truly,

W. H. TROUT.

Milwaukee, June 11th, 1886.

LUMBER FREIGHTER'S GRIEVANCE

The following letter appeared in the Tornoto *Globe* of June 15th:—

Sir,—Under the head of local news in this morning's issue of the *Globe*, reference is made to the mode of weighing freight lately adopted by the railroads centreing in this city, which demands more than a passing notice.

Under the words "concealed excess-weights," as contained in the circular issued by the said railroad companies, there is an attempt made to cover up from the sight of persons not immediately interested a grab game which for impudence has never, so far as the writer is aware, been tried before.

In order to make the matter plain to your readers let me say that this beautiful little scheme hatched by the railroad officials ("parlour" ones of course) is levelled at the lumbermen, and against them solely it is intended to operate. Various schemes have been brought into play from time to time in order to extort more money from this class of their patrons, such as increased rates of freight and additions to the cost of their yearly travelling tickets, but this last stroke bears away the palm for downright impudence.

The minimum load for a car of lumber is 24,000 pounds, but it must be borne in mind that there is no means provided for weighing at any of the stations where lumber loading is usually done, so that the loader must simply use his judgment. The lumber may be green or half-dry, it may be white or red pine or hemlock; all of which vary materially in weight. When any of said cars arrive in Toronto the weigh-master passes them over the company's scales. If the weight of one car should turn out to be only 20,000 pounds the consignee is charged with 24,000 pounds. Should car No. 2 unfortunately weigh 28,000 pounds the consignee has to pay for the full weight, and 25 per cent. additional on 4,000 pounds "concealed excess weight." This is an exceedingly convenient term to cover up that which anyone may see, after the above explanations, is nothing more or less than a complete swindle.

Lumberman.

DEATH OF AN OLD-TIME LUMBERMAN.

Thomas Smith, one of Ottawa's pioneer lumbermen, died at his brother's house at Stewarton on Saturday morning. He was seized on Wednesday with paralysis of the brain and sank rapidly, death resulting as above stated. Born in Ireland in 1825, the deceased, the third son, came with his parents to this country about 50 years ago. His father, the late Isaac Smith, first located in business at Hull Landing, opposite the Government Hill, now the Parliament grounds, but a few years afterwards removed to Bytown and engaged in the brewing and other business, and is remembered by the surviving Bytonians as a graceful Irish gentleman, a patient but fearless magistrate, and square upright man in his business dealings. The family of six sons and one daughter reflected the fine qualities of their parents. The deceased early engaged in the square timber business on the Upper Ottawa, taking down his own raft to Quebec over 40 years ago; in the days when good road horses and a canoe navy were the means of business transport in the lumber trade, before these of railways and traffic in charters. Industrious and knowing his business, he kept actively to it for thirty-five years, the latter twenty-five in parenership with a younger brother, Charles, his and their operations being on and from the Pettewawa, Mattawa, Amable, Dupot, Kippewa, Dumoine and other stream feeders of the Grand River. For some time past he has not been actively engaged in business. He lived at the Russell House and had but the looking after his property, means and investments to engage his time. Clean, straight, square, honest, truthful, amiable, generous, modest, but manly "Tom Smith," can only be remembered by those who knew him as a man whose word, friendship, honor and record in all relations of life were as pure, true and reliable as the sunlight. He never married, and at his death was was well off. He appeared last Wednesday evening, when seized with the fit that ended his life, to be in the best of health, even quit young looking. On Thursday he was taken to his brother Joseph's house at Stewartown. His physician entertained but uncertain hopes o his recovery. On Friday he became insensible, and his case hopeless. On Saturday forenoon, one of nature's few noblemen passed away, to be hereafter numbered with his eldest splendid brother Joshua, and the latter's companions of the Ottawa and this city: John Egan, Col. McDonald, Big Rogerson, Jerard McCrea, James Skead, Daniel McLachlin, John Supple, Wm. Morris, Jos. Aumond, Robert Conroy, Samuel Dickson, William McAdam, the Grahams, (Black and Madawaska Bill), John Thompson, Wm. Byers, Frank Powell, John Bower Lewis, Wm. Stewart, George R. Baker, Edward Sherwood, Christopher Armstrong, Godfrey Baker, Charles O'Connor, James Fraser, with his youngest, happy and humorous brother Patton—amongst the ever increasing, but silent majority.—*Ottawa Journal.*

BIG FIRE IN OTTAWA.

Ottawa, June 18.—About one o'clock this morning the furniture factory of J. Oliver & Son, on Head street, Chaudiere, was discovered by the night watchman to be on fire. He immediately gave the alarm, and the city brigade and the Union Fire Company promptly turned out. The building, which was a two storey one, 100 feet by 30, was well filled with furniture; the whole being inflammable as a tinder box, and, despite the four heavy streams of water poured upon the flames, the entire building was consumed. The wooden building adjoining, forming part of Baldwin's planing mill, caught fire several times and one side wall was pretty badly burned as well as a portion of the roof. McKay & Co., whose oatmeal mill adjoined Oliver's, also lost a little by the fire, smoke and water. Though the fire was in the heart of the lumber district, yet, fortunately, high brick and stone buildings checked it on two sides. The river was on another and on one side only was danger threatened, unless a heavy wind sprang up. Mr. Oliver places his loss at about $10,000, on which there is but about $2,500 insurance.

AUSTRALIA.

Messrs, Lord & Hughes' monthly circular, dated Melbourne, May 15th, says:—Since our last circular of 19th April, the business in timber has been interfered with by the usual Easter holidays, and auction sales restricted.

The imports of all descriptions of timber keep up in excess of requirements, and stocks are still accumulating. The efforts of importers to force sales at auction resulted in a decline in Oregon, and a dull, heavy market for American, Baltic Dressed, and Kauri, all descriptions with a downward tendency in prices, while Baltic deals, of good quality, have somewhat improved in price. The arrivals of Oregon the last few days have been heavy, and will have a detrimental effect on prices. The arrivals of all descriptions of building material, such as slates, plaster, cement, laths, pickets, etc., have been unusually heavy, not only by direct shipments, but by transhipments from other colonies, which have had a prejudicial effect on our market.

Trade from the yards does not seem to fall off, but continues as heavy as ever, but they are unable to absorb the excessive imports that are weekly offered at auction.

RED DEALS.—Imports—18,891 pieces from the Baltic, and 2,709 pieces from London. The arrivals have been the "Juniper," from Gefle, and "Lancaster Castle," from London. The principal sale by auction during the month has been the cargo ex "Jotun," on the 7th inst., S K B brand realizing for 12x4, 11x4, and 9x4, 6d., 11x3, 6⅛d.; 9x3, 6⅛. to 6d.; 7x3, 5½d. to 5d.; 7x2½, 5½d. to 5d.; 7x2, 5 5-16d.; D O M brand 12x4, 5⅝d.; 11x4, 5 9-16d. to 5⅝d.; 9x4, 5⅝d ; 11x3, 6d. to 5⅝d.; 9x3, 6⅛d. to 5d.; 7x3, 5⅜d. to 4¼d.; 7x2½, 5⅜d to 4d.; 9x2, 5⅜d. to 5¼d.; 7x2, 5¼d. to 4¼d per foot of 9x3. Last month's prices are well maintained, and for good joiners' deals there is an active demand.

SPRUCE DEALS.—Imports—13,918 pieces. The arrivals have been the "Howard," from Saguenay; "Slieve Donard," from Liverpool; and "Wakefield," from Boston. Sales comprise shipments ex "Mary S. Amess," Sydney steamers, and "Wakefield," 11x3 realizing 3¾d., and 9x3, 3d. to 2⅞d. per foot 9x3.

OREGON TIMBER—Imports—4,920,005 feet super. The arrivals have been "Cambrian Chieftain" and "Sarah S. Ridgway," from Tacoma, "J. P. Smith" and "Hospodar," from Port Blakely, and "Record," from Burrard Inlet. The balance of "Narwhal's" cargo was quitted on the 4th inst, at from £5 5s. to £4 15s., average, £4 19s 2d. The "Cambrian Chieftain" cargo on 7th inst, at from £5 to £4 12s 6d., average £4 15s. 3d., and the cargo ex "Sagamore," on the 11th, at from £5 5s. to £4 15s, average £4 16s 2d, Imports for the month are unusually heavy and, if continued on the same scale, the present ruinous prices cannot be maintained.

LUMBER —Imports—Clear pine, 128 883 feet super; shelving 163,292 feet super; T. and G ceiling, 23 884 feet super. The arrivals have been "Wakefield," from Boston, 'Sarah Hignett," from New York. and "Charles and Arthur,' from Adelaide. Prices ranging for clear pine, £13 5s. to £14; shelving, £8 17s. 6d. to £10 5s; T. and G. ceiling, at £8 15s. to £9 2s. 6d per 1 000 feet super.

REDWOOD.—Imports—*Nil.* The "Alice Muir" cargo was offered on the 7th inst., when only a small portion of 5in. and 6in. was sold at £10; holders declining to accept less.

FLOORING AND WEATHERBOARDS.—Imports—4,243,072 feet lineal. Arrivals are "Forfarshire," from Frederickstad; "Aurora" and "Celer," from Christiania; and "Emily," from Adelaide. Sales have been made of shipments ex "Regina," "Celer" add "Othilde," at the following rates:—Red, 6x1½, 9s. to 8s. 9d.; 6x⅞, 7s. 6d. to 7s. 3d.; 6x¾, 6s. 6d. to 6s. 6x½. 4s. 10d. to 4s. 9d.; 4-out, 5s. to 4s. 11d.; white, 6x1⅛, 9s. 6d.; 6x⅞, 7s. 6d. to 7s. 3d.; 6x¾, 6s. 6d. to 5s. 9d.; 6x½. 4s. 11d.; 4-out, 5s.

KAURI PINE.—Imports—697,647 feet super. The arrivals have been per "Nora," from Kaipara, and "E. O. Clark," from Wangaroa. Sales comprise shipments ex "E. O. Clark," "Parnell" and "Nora." Hewn logs sold at 11s. 6d. to 10s. 6d.; flitches, 23s. 6d. to 14s.; sawn boards, 22s. to 13s. 9d.; shelving, 20s, to 16s. Sales difficult to effect for anything but superio timber.

PITCH PINE.—Imports—31,781 feet super. This small consignment of T. and G. ceiling arrived per "Sarah Hignett," from New York, and is now in course of landing.

CEDAR.—Imports—80,344 feet super. This parcel arrived per Sydney steamers, and "Charles and Arthur," from Adelaide. There have been various sales during the month, and last month's rates have been fairly maintained, good, sound logs realizing up to 43s. 6d. per 100 feet super. The trade is now heavily stocked.

DOORS.—Imports—751. These arrived by the "Sarah Hignett," from New York, and "Ly-ee-moon," from Sydney, and came to the order of the trade; only a small line of 2 ft. 8in.x6ft 8 in.x1¼ in. was quitted at auction, at 10s. in bond.

LATH AND PICKETS.—Imports—Laths, 18,977 bundles; pickets, 4,893 bundles. Sales have been made of sundry shipments, 4½-feet Oregon laths realizing 30s. 6d. to 28s.; 4½-feet spruce, 30s. to 28 s.; 4-feet, 25s. 6d. to 24s. 6d. pe 1,000.

SLATES.—Imports—475,854. The arrivals have been "Slieve Donard," from Liverpool; "Wakefield," from Boston; "Sarah Hignett," from New York; "Lillie Hawkins," from Adelaide. There have been various offerings during the month, but prices realized have not been satisfactory to importers.

PLASTER —Imports—835 barrels. These arrived per "Wakefield" and "Sarah Hignett," from U. S. A. The only sale by auction has been a small invoice of Knickerbocker brand, at 9s. 9d. per barrel.

CEMENT.—Imports—7,750 barrels. Comet brand, at 5s. 6d. per cask, and Gibbs & Co's Portland at 9s. 6d. Stocks exceedingly heavy, and sales difficult to effect of unknown brands.

GALVANIZED IRON.—Imports—1 459 tons. On the 14th inst., a small shipment from Adelaide of Redcliffe Crown, 26-guage, was sold by auction, at £16 7s. 6d , and Walker's 3 Crowns, at £16 2s. 6d. per ton. We hear of a line of 200 cases Orb on the spot and to arrive, having been placed privately, at £17 10s. per ton.

EXPLANATION.—Red deals and spruce deals are sold at per foot of 9x3; T. and G. flooring at per 100 feet running; Oregon timber, redwood, clear pine, shelving, ceiling, per 1,000 feet super; Kauri pine and cedar logs at per 100 feet super; laths, pickets and slates at per 1,000 pieces. Shorts are all lengths under 12 feet.

TYNE.

The *Lumber Trade's Journal* says:—The list of last seven days' arrivals is a long one, and covers several ships from the lower part of the Baltic with deals and battens There is also an arrival of pitch pine timber, and a more than usually heavy list of pit-prop arrivals which appear principally to be going into stock. One cargo of Memel deals is reported, two cargoes of staves from Bjorneburg, one from Oscarshamn, one cargo per steamer of usual assortment from Christiania, and another one from Gothenburg, make up a more than usually heavy list. So far there is not any improvement to note either in prices or in demand. A small business is being done, but it is very small, and is as free from speculation as it is possible to be. Buyers buy only from hand to mouth, and the margin of profit, at any time low, appears at the moment to be reduced to much less than usual limits.

There is very little change to report in the shipbuilding and housebuilding trades. Several of the shipyards are practically at a standstill, and no immediate prospect of any alteration.

THE drives are nearly all down the Seguin river, says the *North Star*. The P. S. L. Co's. drive on the Boyne is well down and all the logs belonging to the different companies of this place are now safe.

AT Taylor Bros. steam saw mill on Upper Don road, near Toronto, on June 18th, Wm. M. Knox, head sawyer, was taking a slab off a log when a portion of it broke away, fell on the circular saw, and was thrown against him with great violence, knocking him senseless and causing severe internal injury.

PORTABLE SAW MILLS.

A *Norwich*, Conn., despatch says:—The wood chopper's axe and the old-fashioned saw mill cannot destroy the Connecticut forests fast enough to satisfy greedy farmers who like a dollar better than a tree. The portable steam sawing machine is the worst pest many persons think that ever visited New England. It hum is heard all day in all parts of this state. Four horses can draw it up the steepest hillside in the most remote woodlands, and timber that a few years ago was not worth marketing on account of its distance from the old saw mills is now easily available.

The portable saw mill is pulled into a tract of woods and is unlimbered and set up. It is a single machine. There is a buzz saw that runs with lightning speed in a heavy frame, and an upright boiler and engine. The black smoke funnel towers above the highest trees, and all day pours a column of smoke out of the very heart of the forest. The saw, whose slashing strokes, sounding like the bussing of a great locust, may be heard at a long distance, rips up the timber which has been felled in the vicinity of the mill. After that has been sawed the mill is wheeled further into the woods. The forest disappears rapidly before its steady advance. After a tract has been cropped of its wood the steam mlll is driven into a new district, and the work of destruction is continued. The wood that is sawed is mostly chestnut, oak or birch. It is sawed into planks or railroad ties; the planks go to New York

The first portable saw mill that visited this town is owned by Mr. Peckham of Colchester It has been at work on the extensive forests west of the city three or four weeks and has sawed more than 100 000 feet of lumber. The flinty hills, which are good for nothing except to grow timber on have been stripped of their wood, and the whole country over which the mill has passed looks scarred and desolate Mr Peckham makes his home in the woods while he is destroying them. A rough plank building, in which three rooms are erected a few household utensels are gathered into it, and Mrs Peckham, who accompanies her husband, cooks sews and washes for the workmen. She is assisted in doing her duties by the wife of one of her husband's employees The bare little shanty is not without the enjoyable things of Connecticut village households; the markets are not far away, there are newspapers and books on the unplaned shelves and Mrs Peckham and her helpmate enjoy their life. There is a flavor of romance in it. They are in sight of villages and trim homesteads, and the gilded tips of city church spires; at the same time they are not vexed by little cares of civilized life, and gossips and other bores do not intrude. At night the little settlement in the woods looks very bright and cherry. Its lights stream through the cranneries in the cabin and partially illum nate its rude surroundings, the paraphernalia and litter of a lumber camp, and the black background of forest. Inside the tired men sit about the rough table perusing old newspapers and telling older stories, while the women sew. From the door of the cabin may be seen the twinkling lights of villagers on three sides. At 9 o'clock the lights are put out and all go to bed. Breakfast is eaten early, steam is made in the boiler, and at 7 o'clock the whistle is blown for the men to go to work. The whistle is sounded three times a day, as in factories.

The portable saw mill was first introduced into this State about ten years ago, and its advent has since been viewed with disfavor by many men who are interested in the preservation of the forests. On the other hand, men better acquainted with the grass and tree producing quality of Connecticut soil, and who are not influenced by selfish motives, think that there is no cause for alarm. A tract of land that has been cleared of its timber will grow a new forest within twenty or thirty years, and many of the finest forests in the State are on land that was on mowing lots forty years ago Stone heaps at regular intervals in these forests which were piled up at the time the land was in grass, attest the truth of the statement.

Mr. Peckham has nearly completed his contract for sawing wood in this town. He moves his mill next to East Haddam, into the big forests about the Devil's Hopeyard, not far from the Connecticut River. His business is a profitable one; he can saw about 10,000 feet of lumber a day, and he works more cheaply than the water saw mills do.

WOOD-WORKING PATENTS.

The following list of patents relating to the wood-working interests, granted by the U. S. patent office, June 15, 1886, is specially reported by Franklin H. Hough, solicitor of American and foreign patents, 925 F street, N. W. Washington, D. C., who will furnish copies of patents for 25 cents each.

343 785—Saw dresser, circular—H. D. Wolcott, Wrights, Pa.

343,658—Saw-teeth, devise for swaging—J. A. Crossman and N. C. Buch, assignors to E. C. Atkins & Co, Indianapolis, Ind.

343,713—Saw tooth—S. Kinney, Brownsville, Cal.

343,787—Sawing off stumps, machine for—J. Q Adams, Saginaw. Mich.

PATENTS ISSUED JUNE 22ND.

344,130—Bit-brace—B. L. Osgood, Buffalo, N. Y.

344,292—Saw-guard, knob—A. Touchette, Manistee, Mich.

344 175—Saw-guide—J. F. East, Tanners Creek, Va.

344,234—Saw, hand—M. Barrick, Nova, Ohio.

344,066—Sawing-machine, circular—C. Tollner, Pulaski, N. Y.

Tale of Timber Limits.

There was a large assemblage, says the *Globe*, of moneyed men at the Toronto Mart on Saturday to bid on the five timber berths on the north shore of Lake Huron, that were offered separately, and the three in the same locality that were offered *en bloc*. Limits 4 3 and 5, near the Georgian Bay, on the Wabuapitac River, containing 36 square miles, were also put up and knocked down to C Boeckh & Co, for $2,600; No. 54 was withdrawn, at $6 500; 84 was sold to Henry Hart, for $6 000 subject to a reserve; 93 opened t $10,000, and ran up to $20 000 at which price it was sold to James Maxwell subject to a reserve: 68 and 70 were withdrawn.

Preserving Power of Water.

A remarkable instance of the preserving power of water in respect to logs submerged is supplied by the following extract, taken from the pages of our contemporary, the *Lumberman's Gazette*, of May 26th, Speaking of the driving streams in the Chippewa district, it states that among the logs brought down this spring to be sawed at the La Crosse mills are thousands that have been lying in the smaller creeks for the last twenty years. Logs were found bearing the stamp of the owner, dated 1867. On log is supposed to be the largest ever taken out of the Black River country. When measured it scaled 2,000 ft., and was cut nineteen years ago this spring.

U. S. Tariff Revision.

Washington, D. C., June 27.—Mr. Randall will to-morrow introduce his Tariff Bill in the House. The Bill, he says, does not contain anything novel or extraordinary, and is designed to build up much needed industries, revive those that are languishing, and remove inequalities in the existing law He does not claim that the Bill is a complete or perfect measure of tariff revision, but holds that it is a decided step in the right direction and a sufficient indication of the policy that should be pursued in remodelling the tariff and revenue laws. The changes in the rates proposed are to go into effect on the 1st of January, 1887.

THE prevention of decay in wood is said to be effectiveiy accomplished by exhausting the air from the pores and filling them with a gutta-percha solution, a substance which preserves the wood alike from moisture, water and the action of the sun. The solution is made by mixing two-thirds of gutta-percha to one-third paraffine, this mixture being then heated to liquefy the gutta-percha, when it is really introduced into the pores of the wood, the effect of the gutta-percha being, when it becomes cool, to harden the pores.—*Building.*

Chips.

TIMBER rafts, the Port Hope *Guide* says, are being built in the new harbor, and a large number of men are engaged in the work.

THERE will be no necessity for discussing, just at present, what the Morrison bill does or does not include. The discussion may be postponed for a year or two.

MR. JAMES DICK, inspector of hulls, says the Lake Ontario current is always easterly, except when a wind or gale continues several days from the east, and at the termination of the easterly gale is stronger in its easterly course.

ON June 22nd fire destroyed the saw-mill on the Lake range, foot of the second Concession Saugeen, belonging to D. Campbell. Nothing was saved. Insured for $1,200 in the London and Middlesex Company.

WHILE Mr. John R. Paul was cutting some cedar blocks in the cedar mill, Deseronto, the axe glanced cutting his wrist very severely. It was stitched by Drs. Newton and Clinton. He lost about one gallon of blood, the *Tribune* says.

DURING 1885 there was shipped from California to Australia 5,950,000 feet of redwood pine. This, in one way, indicates the possibilities of Canadian trade on the Pacific ocean when the line of steamers are running from the terminus of the C. P. R.

FOREST fires are raging in the vicinity of Moncton, N. B., and at various points along the northern division of the Intercolonial. At Kent Junction, the station buildings are in danger, and if the rain does not fall will likely be destroyed. No rain has fallen here for nearly a fortnight.

S. & J. ARMSTRONG, says the Burk Falls *Arrow*, have concluded a contract with the Ontario Lumber Co. to cut about a million feet of logs taken from the township of Strong. This with their own and the custom cutting, will make things at the mill lively until late fall, if not into the winter.

ONE Saginaw firm has avoided the effect of the recent advance of the export duty on logs by the Canadian Government. The *Courier* states that Messrs. Hill, Bliss & Wells, who owned timber limits in the Georgian Bay region estimated to cut 150,000,000 feet of pine, have sold the same, nearly doubling their investment.

THE log jam of 200,000,000 feet, which commenced in the St. Croix River, at Taylor's Falls, Minn., on June 13, still continues, and is worse than ever. Since the jam occurred three hundred men, forty horses, and three steamboats have extricated only 15,000,000 feet, which is less than has entered from above. The logs in the jam are valued at $2,000,000.

THE first annual meeting of Bryant, Powis & Bryant, London timber dealers, was held recently. The report showed a dividend of 15 per cent, and a balance carried forward of £7,375. 4s., 11d. The success of the company, which has been in existence only a year as a company, is unprecedented. The complaints of dull trade which have come across he water have scarcely prepared Canadians for such an announcement, and the management of this company's affairs must be in exceedingly good hands.

THE amount of timber in the Georgian Bay country of Ontario, owned by Michigan men, are estimated as follows:—Emery Lumber Company 100,000,000 feet; Folsom & Arnold, Bay City, 200,000,000 feet; R. A. Alger & Co., Detroit, 150,000,000 feet; Fowler & Chapman, Bay City and Detroit, 100.000.000 feet; Hills, Bliss & Wells, Saginaw, 100,000,000 feet; Cheboygan Lumber Company, 150,000,000; Bewick, Comstock & Co., Fletcher Pack & Co., Gilchrist *et al*, Alpena, 600,000,000; McArthur Bros., Saginaw and Toronto, 350,000,000; total, 1,750,500,000 feet.

AN Ottawa despatch states that the raft of Messrs. McLachlan Bros., consisting of eighty-eight cribs containing 2,462 pieces red pine timber and 533 pieces of sawn dimension timber, left there on the 9th for Quebec. Messrs. J. R G. Bryson's raft, consisting of sixty-nine cribs, passed the Chatts slide on the 7th inst., and is now running over the Chaudiere slides.

THE Rathbun Company's drive of logs and timber on the Salmon River, say the *Tribune*, is making good progress considering the low state of the river. It was thought a few days ago that it would be almost impossible to bring this large drive through, but under the able supervision of that veteran manager, Tobias Butler, Esq, we feel reasonably certain that the logs will be safely delivered in the booms at Deseronto.

HITHERTO it has always been thought necessary, says the Ottawa *Free Press*, to go to Michigan to see lumber cut fast, but the work done by Messrs. Flatt & Bradley's mill at Casselmen recently, shows that we know something about it in this section. On Wednesday, in that mill, a single 66-inch circular saw cut 113,000 feet, 60,000 feet being deals. It is questionable if any Michigan mill can beat this record.

SINCE the opening of the season the following quantities of saw logs, etc., belonging to the firms mentioned passed through the Gatineau:—

W. C. Edwards & Co	18,946
The Rathbun Co	6,654
Hamilton Bros	14,166
J. McLaren & Co	14,605
Total	54,371

THE Eganville *Enterprise*, of June 23rd, says:—The high wind which prevailed on Thursday evening last had the deteriorating effect of breaking two booms of logs on Round Lake, containing sixty thousand pieces, belonging to Messrs McLachlin Bros., of Arnprior. This will delay the drive for a short while. It will be about three weeks before this drive reaches here, as the water is very low in the Bonnechere. The Madawaska logs are about six weeks' drive from Arnprior, and as the logs are short at that place one of the mills was shut down in consequence.

THE *Lumberman's Gazette* says:—The Emery Lumber Company of this city and Saginaw have 15,000,000 feet of logs in the Spanish River they intend to bring over and which will cost $30,000 more on account of the change in the duty. That would be a fair amount of profit on the venture. McArthur Bros., of Saginaw, it is said, have some logs in the same district, 3,000,000 feet, which they had sold in Buffalo, and they are fortunate enough to have paid the export fees before the duty was raised, by which they saved $6,000.

If any of our readers that are afflicted with rheumatism have never tried West's World's Wonder or Family Liniment, we advise them to do so at once, and be convinced of its extraordinary merits. It is a never-failing remedy for cuts, sprains, bruises and all complaints requiring external treatment. Price 25 cents and 50 cents per bottle. Sold by J. D. Tully.

For the past quarter of a century West's Cough Syrup has given relief to thousands, and no medicine compound can show such a vast number of unsolicited testimonials. Ask your neighbor as to its merits. It is an unfailing cure for coughs, colds, hoarseness, asthma, bronchitis, consumption in its early stages, and all throat and lung diseases. Price 25c. 50c. and $1.00 per bottle. Sold by J. D. Tully.

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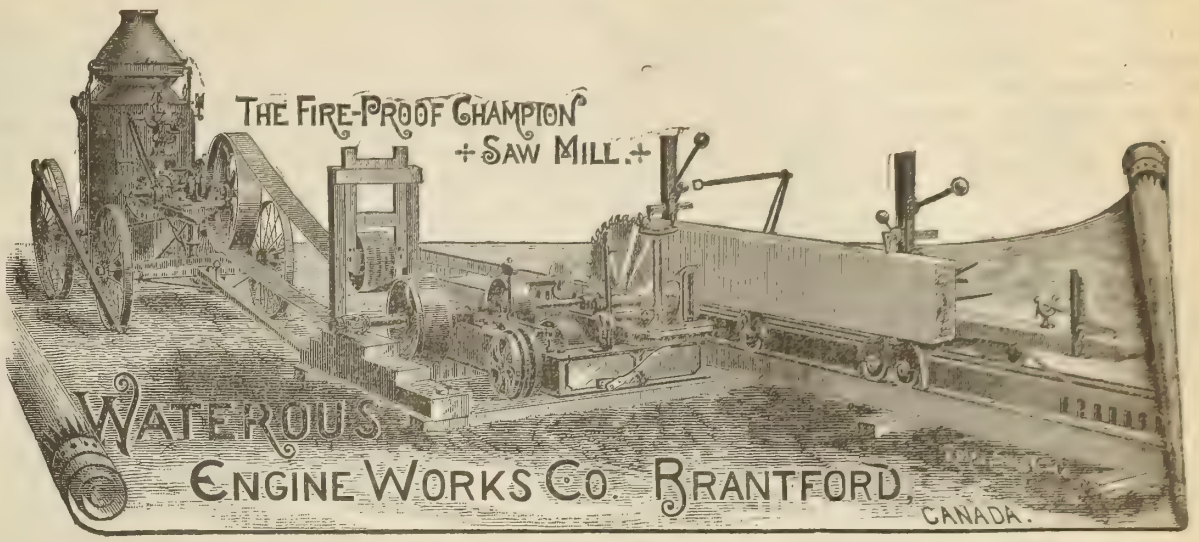

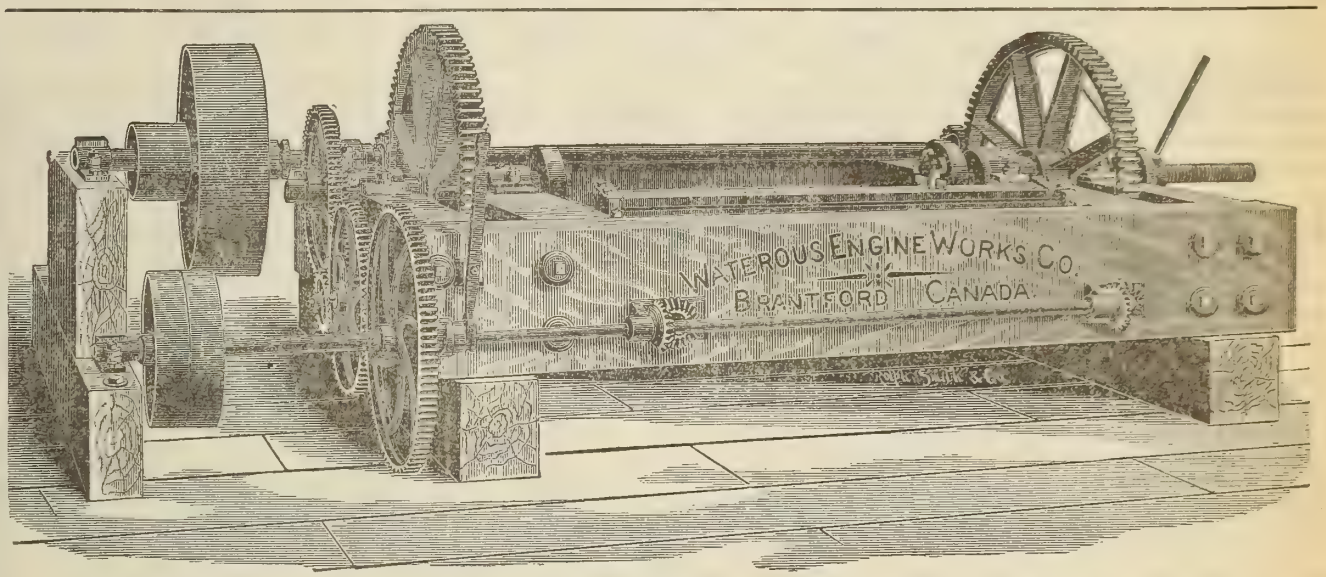

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WOODS ON EXHIBITION.

The *Timber Trades Journal* of June 5th continuing its notice of woods in the Colonial Exhibition in London says:—

We note that since we last laid down our pen considerable additions have been made to the Canadian Court. The explanation afforded of the apparently unfinished state of the Canadian Court was that a lot of the exhibits were on the sea. As observed, the chief portion of these have since arrived, and Canada is now every whit as well represented as any of our other colonies. The specimens of the various woods have also been added to, and the carved show cases from New Brunswick are strickingly illustrative of the ability and enterprise our fellow-subjects across the Atlantic throw into everything they take in hand.

In fact, throughout the exhibition great care has been bestowed upon the forest productions, the various specimens of timber and plank of each country, including the classification and arragement, evidently being the work of those who had their soul in the business.

The public are indebted to the Canada and Pacific Railway Company, Montreal and Quebec, for a neatly arranged cabinet with samples of all the merchantable woods culled from the forests through which this important railway passes.

The New Brunswick Railway Company likewise contributed the different specimens of the woods from their part of the Dominion already mentioned, and the arrangement and selection are highly creditable, the cabinet containing the different specimens being very artistically constructed, the panels being composed of finely finished boards of each variety, and the pilasters branches of the several trees with the bark on. The sample cases contain other specimens of the woods, with a facsimile of the leaves painted thereon.

This illustrative method of adornment is, however, not confined to the Canadian exhibits, many of the Australian planks being similarly treated. Another interesting feature is making the various seats, on which the visitors rest, of the woods of the country. Of course the pine varieties from Canada are too well known to need any particular description here, but the different specimens supplied by Messrs. Burstall & Co., of Quebec, are well worth looking at; some of the huge blocks, cross-sections of these forest monsters, 3 feet and more in diam eter, with the bark just as they were felled, were still in the shape they were put on board ship, a faw boards nailed around to save them from abrasion; indeed, there is yet a considerable amount of labor to bestowed on the wood department of the exhibition, for in addition to these we come across other huge blocks from the forests of the Andaman islands and elsewhere, that lay still unpacked.

The Canadian Government are to be credited with some excellent botanical specimens, including a collection of the flowering plants and ferns of the Dominion. We think these latter are simply excellent, and vie even with the Australian exhibits, the land of the kangaroo being especially a country of ferns. The photographs of the forest giants, which the Dominion Government furnish, framed in wood, of the species represented, are also highly interesting.

The woods of commerce are, of course, the chief objects of interest to those actually engaged in the timber trade. To several of the Canadian ladies, including Mrs. Chamberlain, of Ottawa, Ontario, and Mrs. C. P. Traill, we are indebted for an exceedingly beautiful arrangement of flowers and fungi. Mrs. Hill, of Amherst, Nova Scotia, contributes an album with splendid plates of British Columbian wild flowers. Nor is Quebec behind—Miss E. M. Jack, of Chateau, Quay Basin, Quebec, sending through a friend a collection of forest tree seeds with the flower of each seed painted and classified.

The Royal City Planing Mill Company, New Westminister, British Columbia, furnishes specimens of spruce and bark from that part of the Dominion, and Mr. C. C. Stevenson, of Montreal, likewise a handsome collection of the various woods. The exhibition of prepared lumber is a very attrative part of the wood exhibits, and includes toys and domestic utensils, these latter forming a very considerable portion of the industries of the country. Prominent amongst the contributors of these are the Brandon Manufacturing Company, of Ontario, and Mr. H. Bulmer, jr., and brother, of Montreal, Mr. Ewen Campbell, of Brae, Prince Edward's Island, who supplies some excellent samples of sawn cedar shingles, for roofing and other purposes, the Canadian Government and the Canadian Pacific railway being likewise contributors of manufactured goods and furniture from the Northwest.

The pine mouldings supplied by Messrs. Gignac & Co., of Quebec, are specimens of what can be done in this way by the Canadians, and it is rather a matter for surprise that a trade in pine mouldings between the mother country and Canada has not further developed itself. We know shipments have been made and a trade on a considerable scale attempted, but hitherto without much success, the low-priced stuff from the Baltic side shutting up most of the avenues for its introduction.

The boatbuilding industries of the Dominion are well represented, since our last visit, by some capital specimens of both fishing and pleasure boats of spruce cedar and other woods. The prices of these are marvellously low; decent cobbles or "Dories," as they are termed, strongly constructed, being ticketed at from $20, Mr. Albert Butler, of Yarmouth, Nova Scotia, having supplied several boats of the fishing class, of which he, it seems makes a specialty. There is a capital specimen of a centre-board sailing boat for bank fishing, built entirely of spruce, at equally low prices. This description of boat might be used with advantage at many places along our coast, and is well wor the attention of Poole fishermen and at places like Lynn, Boston, and in rivers like the Stour these crafts might be found serviceable. Amongst the constructors of these and other crafts at Nova Scotia are Joseph W. Wolfe, of Lunenburg; John William and Isaac C. Cromwell, of Shelburne; J. C. Morrison, of the latter place; Conrad & Anderson, of Lunenburg; besides James S. Ferguson, of Pakenham, Ontario, who contributes a splendid specimen of a salmon fishing canoe.

The birch, beech, ash and elm from the lower ports are unsuitable for this market, and the hardwoods generally are not so well grown as those from the upper provinces; and, while the supply of the latter is sufficiently plentiful the occasion for turniug attention to the hardwoods of New Brunswick and Nova Scotia has hardly arisen. Of the woods exhibited the maple, both figured and bird's-eye, is a very high standard of excellence, but it never successfully competed with the home species. Another thing operating against its sale is that it has gone out of fashion, and even in picture frames it is now seldom seen, while for furniture pitch pine and walnut are the substitutes. In addition to this the Canadian supply could never be depended upon, and this irregularity compelled the trade to rely on the home grown timber.

We must not forget that for many of the fancy woods of Canada the United States are better customers than we are, and their ability to get the stuff at a cheaper rate of carriage keeps the trade running in that direction.

The Quebec walnut, of which we saw some well grown specimens, is too well known to need any particular mention, a remark that applies to the birch, which, like ash and elm from the upper provinces, are of every day use among us.

Woods like buttonwood, butternut, hickory, &c., will only come into use on this side in a manufactured state; in fact, a daily improving trade is already being done in such goods, which as utensils, are known under the cognomen of "domestics."

Tamarac and hacmatac, once highly thought of this side of the Atlantic, are sold at ruinous prices when they come over here now, the former uses for these woods having almost entirely disappeared. In the palmy days of wooden ships for knees, transoms and beams this description of timber had a special value, but in the construction of iron vessels hacmatac or tamarac is not wanted as planking it was least serviceable.

We have touched on the merits of the various woods, representing the forests of the Dominion, and the question of their adaptability for this market will depend on the ability of the forest owners to get them over here at sufficiently cheap rates.

New undertakings are always surrounded with difficulties, and, while the present depression lasts, there is nothing sufficiently promising in the outlook to foster enterprise of that nature.

We are good customers of the Dominion, and the large inroads into their forest which the hatchet has made are laid at our door; still, if a trade in the less common woods can be established, well and good, there is no better market to try it in than London.

Before quitting Canada we may mention that the display of metal industries is something surprising. Axes, adzes, tools of all kinds form a show in themselves, and the ironmongery is simply perfection. In fact, as far as machinery is concerned, the Dominion is a long way in advance of any of our colonies, and both for wood-working and agricultural purposes the appliances exhibited are every way worthy the proud position Canada holds.

In machinery, furniture, and musical instruments she vies with the United States, and in the latter probably outrivals her neighbor. We noticed a fine display of marble, which seems to be another industry of the Dominion, and one in which she is likely to take the pride of place. Bricks and pottery generally are also a speciality, and so of nearly all the articles of daily use.

We may add that the Executive Commissioner for Canada is Sir Chas. Tupper, C. B., who has very kindly given us every information concerning, and fullest facilities for examining the exhibits in this section. Of the care and attention which we have found this gentleman to give to the smallest matters connected with the interests of Canada, we must express our hearty appreciation, and are sure that his labors cannot but be of the greatest value to the colony he so zealously and courteously represents.

BOUND FOR AUSTRALASIA.

Alderman Alexander Wood, of Winnipeg, who was yesterday appointed agent general for the Dominion for Australasia was seen this morning by a representative of the *Free Press*. He said that he should leave in a few days for Sydney, N. S. W., where he will establish an office.

"What is wanted," said Alderman Wood, "is a knowledge in the country to which I am going of the products and capacity of the manufactories of the Dominion. The commercial relations of these two countries need to be developed in a practical way."

His intention is to first prepare a pamphlet showing the trade done between Australasia and Great Britain, the United States and Canada, and illustrating how far the condition of the Dominion could be improved with respect to the export of manufactured goods. He proposed for this purpose visiting the great manufacturing centres of the country to ascertain their capacity for manufacturing certain articles consumed in Australasia, as well as the ruling price in the home market. Then samples of their goods will be obtained and it is understood that they will be freighted free by the Canadian Pacific Railway as far as possible. On arriving at Sydney a central office will be opened where trade journals, directories, and other information will be supplied to the importers. An exhibition hall for samples of Canadian manufactures will be thrown open and everything possible done to induce our fellow colonists to take advantage of the Canadian markets.

"In what special lines do you hope to divert trade?"

"Principally agricultural implements, carriages and horse carts, passenger and freight cars, saws and tools, machinery of all kinds, leather, organs and pianos, oils, sugars, tobaccos, household furniture of all kinds and a thousand other things."

"Where are these lines of trade mentioned now going and how do you hope to obtain them?"

"Well I will tell you. In 1885 the United States exported $250,000 worth of agricultural implements to Australia, while the Dominion of Canada only sent $256 worth. We can make and sell this line of goods just as cheap as the Americans, and give just as good a quality of machinery. This trade should be divided. Then take the trade in carriages and horse carts; the United States last year sent out $388,000, while Canada's trade was not worth a dollar; for the same time the American manufacturers exported $86,000 worth of railway and freight cars, and in machinery of all kinds over three quarters of a million dollars; leather $147,000 worth from the United States, Canada nothing; pianos and organs, United States $138,000, Canada $8,000; illuminating oil, United States $931,000, Canada not to exceed $1,000; sugars, United States, $601,000, Canada hardly anything; tobacco $931,000 from the States with no trade from Canada. Household furniture and woodenware of different kinds, United States $1,000,000, Canada about $8,000. Of course these figures all apply to the year 1885, and show exports from Canada and the United States to Australasia."

"When I was in Quebec recently," continued Mr. Wood, "I noticed a tobacco manufacturer putting up a shipment of his own make for a London house, ordered by a Boston broker, to be shipped to Sydney via Boston. He told me he could make the same grade of tobacco as put up in the United States at two cents per pound less on account of the cheapness of labor."

"The trade needs looking after," said Mr. Wood, "that is all that is needed. The United States exports to Australasia should more than be divided with this country, and as soon as the Canadian Pacific gets its line running through to the Pacific and a line of steamers running regularly between Vancouver and China and Australasia, we will be in better shape to make rates for goods for through shipment."

"Have you any idea when the line of steamers mentioned will be put on?"

"Just as soon as there is any business for them."—*Ottawa Free Press.*

OTTAWA RIVER IMPROVEMENTS.

Improvements of a very extensive character which will go a long way towards improving navigation, as well as the forwarding of lumber along the Ottawa and its tributaries, have just been completed under the directions of the Dominion Government. Repairs have been made at the principal stations, slides have been reconstructed, booms have been laid, and piers have been built, involving an outlay of many thousands of dollars. The points at which work was performed included the Coulonge, Black, Gatineau, Pettewawa, Madawaska and Desmoines rivers. The most extensive work in re-constructing the Coulonge slide, and in executing repairs at Carillon station, where the piers, booms and slides, damaged by an ice shove last year, were thoroughly overhauled and repaired. A large gang of men are engaged blasting rocks in the timber channels at the head of Lake Temiscamingue, thus opening up an extensive lumber region hitherto unvisited. The improvements are being made on the Quinze rapids which extend a distance of 13 or 14 miles. The rocks in the channel form the only barriers to the descent of the logs and when once removed will go a long way towards opening up that distant region.—*Eganville Enterprise.*

We are informed, says the *Herald*, that about 85,000 railway ties are to be cut at the Rathbun mills in Campbellford, this summer and next fall, besides the production of lath and shingles which is also large. This will exceed last years operations by 50,000 ties. The average capacity of the mills in ties alone, is 650 per day, and at this rate it will require five months to complete the contract. Extensive improvements have been made in the mills and on the premises, getting in readiness to resume work at an early date. Employment will be given to a large bevy of men.

The ravages of the recent fire in Hull, Que., are being rapidly repaired. Some 60 or 70 new houses are in course of erection. This speaks well for Canada's mill town.

Chips.

JOHN MEAGHER had his leg broken June 5th. He was working in Rathbun's mill, Deseronto, when a slab struck him with the result named.

EXTENSIVE forest fires have lately raged in the vicinity of Hermansville and Wausaukee, upper Michigan.

THE planing mill of Lewis, Seymour & Martin, Toronto, was on June 12th damaged by fire.

A FIRE at Muscatine, Iowa, on June 12th destroyed ten million feet of lumber, a saw mill valued at $60,000 and several houses and bridges.

MR. THOMAS SMITH, a well known lumber merchant died on June 7th. He was attacked with paralysis of the brain on the 2nd and sank rapidly.

THE river drivers on their way down Crow River, Ont., with a large drive of logs. They will reach the Trent and arrive at Campbellford in a few days.

ON a late Wednesday the largest lumber fleet that ever sailed from Marquette. Mich., in one day left that port. It consisted of seven vessels loaded with over 3,000,000 feet of lumber.

ON May 27th Messrs. S. & J. Armstrong shipped the first cargo of clear dry pine lumber from Burk's Falls over the N. & P. Junction Railway, thus practically opened the outward bound freight business of the new railway.

ABOUT 11 months ago Sibley & Bearinger bought what is known as the Gamble pine tract in Ogemaw county, paying therefor $105,000. It is reported that the same tract has been sold to Detroit parties for $175,000. It is estimated to cut 30,000,000 feet.

FOREST fires in the vicinity of Cadillac, Mich., burned considerable standing timber. Several pieces belonging to Dr. A. Blodgett were burned over, and much timber killed, so that it will have to be cut. About 200 acres in all was thus served by the fire.

THE railway from Lake Winnipeg to Hudson's bay is likely to be built. The Manitoban Government is to guarantee interest on $4,500,000, as capital, for a period of 25 years. Work of construction is to begin at the northern end of Lake Winnipeg.

WHILE Mr. O. E. Howell, of Jerseyville, was teaming logs into the mill yard of Mr. Obed Howell's in some way one the logs he had on the trucks slid and caught him. When found the log was lying on his breast and he was unconscious. It is thought that he will recover.

FOREST fires in the vicinity of Florence, Wis., last week destroyed 400 cords of wood belonging to the Florence Furnace Company. Woods fires prevailed at many points throughout northern Wisconsin and upper peninsula of Michigan, burning much standing timber, and destroying ties, poles wood and bark.

WE learn with interest that the Victoria *Times* that according to a telegram from Port Townsend, the Port Discovery saw mill has received from Japan an order for ties to the amount of 120,000,000 feet. The mill in question has never cut more than 30,000,000 feet in one year. It would accordingly take four years of steady work to fill the Japanese order.

THE lumbermen's section of the Toronto Board of Trade are moving to have the railway companies fix the freight rate at so much per thousand. The Secretary of the Board of Trade has interviewed the different Canadian railways on this matter, and they have expressed their willingness to meet the lumbermen and discuss the proposed change.

MINDEN.

ACCIDENT.—Last week Alex. Morin, while working on one of Mr. J. M. Irwin's drives in Redstone Creek, met with a painful accident. Morin was attempting to wade through the creek and almost reached the bank, when a saw log came rushing along, striking Morin on the leg, breaking the bone between the ankle and knee, and knocking him over into the stream. One of his comrades, Paul Le Tait, nobly rushed to his rescue, and at great risk to himself managed to get Morin ashore. The poor fellow had to be sent out to Haliburton, a distance of eighteen miles, nine miles of which he had to be carried by men through the rough woods, no easy task when we mention that Morin weighs 230 pounds. However, they managed to get him safely to Haliburton, where the new doctor set the leg and he is now doing as well as can be expected. Now comes the part that shows the kind of stuff the river men are made off. The superintendent, G. S. Thompson, the next day headed a subscription list for the poor fellow and the boys made up the handsome sum of $125.—*Echo.*

A Carriage for New Zealand.

A carriage manufacturer in Montreal, who took first prize for his vehicles at the exhibition at Auckland, New Zealand, in 1877, has just executed a Queen's platform phæton to the order of Mrs. Samuel Morrin, of Auckland. The carriage, which presents a most elegant appearance, is built of the best possible materials, and the workmanship is first-class. The frame is of second growth ash, the panels whitewood, and the wheels of second growth hickory. The body which is supported on four springs, has a prominent English splash board and a seat behind for a footman. The dhæton is fitted both with shafts and a pole, and so can be driven either by a single horse or pair. When seen at the Antipodes it will no doubt stimulate more orders.

GILMOUR & Co. are pushing ahead their planing mill at Trenton. They have about completed a very large burner to consume all the blocks and shavings that may accumulate in their planing mill. It is a very large and formidable structure. They have the railway bridge accross the dam nearly completed and the washout has been cribbed up.

A "Pointer."

When Col. Sellers gives you a "pointer" in stocks, my friend, leave them severely alone, but when your own feelings tell you that you have palpitation of the heart, asthma, bronchitis or catarrh which unless checked are apt to run into consumption, heed the admonition before it is too late. All the diseases enumerated, and others, arise from impure blood. Put the liver in action, the largest gland in the human body, and you will speedily regain your lost health, and your bad feeling will disappear. Dr. Pierce's "Golden Medical Discovery" will accomplish the work speedily and certainly. Of your druggist.

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Perhaps the most extraordinary that success has been achieved in modern science has been attained by the Dixon treatment for Catarrh Out of 2,000 patients treated during the past six months, fully ninety per cent. have been cured of this stubborn malady. This is none the less startling when it is remembered that not five per cent. of the patients presenting themselves to the regular practitioner are benefitted, while the patent medicines and other advertised cures never record a cure at all. Starting with the claim now generally believed by the most scientific men that the disease is due to the presence of living parasites in the tissues, Mr. Dixon at once adapted his cure to their extermination; this accomplished the Catarrh is practically cured, and the permanency is unquestioned, as cures effected by him four years ago are cures still. No one else has ever attempted to cure Catarrh in this manner, and no other treatment has ever cured Catarrh. The application of the remedy is simple and can be done at home, and the present season of the year is the most favorable for a speedy and permanent cure, the majority of cases being cured at one treatment. Sufferers should correspond with Messrs. A. H. DIXON & SON, 305 King street west, Toronto, Canada, and enclose a stamp for their treatise on Catarrh.—*Montreal Star* 1y122.

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An area of 137 square miles.

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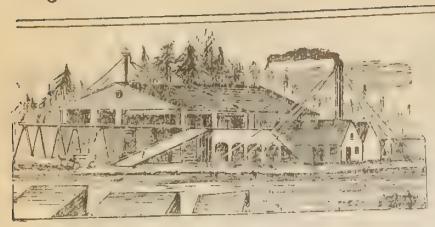

THE CANADA

LUMBERMAN

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PETERBOROUGH, Ont., JULY 1, 1886.

SOME FIGURES.

THE *Lumberman's Gazette*, of Bay City, Mich., thought the Canadian Government did wrong to increase the export duty on logs, and in two issues rung the changes on that chord. It seems, however, to have received new light on the subject from the Montreal *Herald*, and now thinks, like the immortal Mr. Toots, that it is "of no consequence," because the United States purchasers of the Georgian Bay limits did not intend to export in the rough much of their timber. Well, if these Michigan lumbermen did not intend to carry the logs over, what harm can the export duty do them? They can still saw the logs here and take over the lumber by paying the tax exacted by their own Government, the same as the Canadian dealers do.

The figures quoted from the Trade and Navigation Returns by the Montreal *Herald*, to show that very little timber had been exported in the rough, gives the *Gazette* considerable satisfaction, and it proceeds to say that one Saginaw firm only intended to export logs, and only 12,000,000 feet, and Alpena people probably 12,000,000 more. The *Gazette*, however, mentions in another place a firm that will export 3,000,000 feet, and there are probably more that it has overlooked. These figures give a total of 27,000,000, while according to the Trade Returns, quoted by the Montreal paper, the export of logs last year from the whole Dominion only amounted to 47,829 feet, and of this only about 300 feet was pine from Ontario! There is a vast difference between 300 feet and even 27,000,000 feet, and as the Montreal *Herald's* opinion was based on last year's published returns, its argument is a very foolish one, even in the light of the figures furnished by the *Gazette*.

To place the matter in as plain a light as possible, let us use the *Gazette's* figures for an illustration. Here are 27,000,000 feet of lumber to be exported in the rough, and on this the United States dealers would have to pay (supposing it is all pine), according to last year's tariff rate, $27,000, while the Canadian who exported the same quantity of sawn lumber to the United States would, by the laws of that country, have to pay $54,000. According to the present tariff rates, since the Canadian export duty was increased to $2, the United States and the Canadian dealers would pay, in duties, exactly the same sum, and the Canadians would not be placed at a disadvantage. The increase only removed the Canadian dealers' disadvantage, and "levelled up" the duties to put all on the same footing. That ought to be plain enough, and appears perfectly fair—neither dishonest, unnecessary or silly.

The import duty, we might add for the information of the *Gazette*, is $2 on pine and $1 on spruce, not $3 and $2, as it states.

THE MORRISON BILL.

THE introduction of the Morrison Bill in the United States Congress and the raising of the duty on logs exported from this country have kept the minds of lumbermen fixed on the question of tariffs for some time. The latter question—the export duty—was settled in accordance, as we believe, with the best interests of the Canadian lumbermen and of Canada, but the former has been disposed of, for the present, in a way that will continue the discussion of the question.

The Morrison Bill has been brought up in the House of Representatives, a motion having been made by its promoter that the Bill be considered, but the House decided, by a majority of fifteen, to refuse consideration of the Bill. It was announced that another effort would be made to have it brought before the House, but the indications now are that it has been definitely disposed of, so far as the present session is concerned, and very probably the vote taken will not be reversed by the present Congress.

The action of the United States Senate on the proposal to appoint a Commission to consider the fisheries and trades relations with Canada showed the temper of that House, the proposition having been voted down, and the action of the House of Representatives on the Morrison Bill seems to make it plain that neither of the Houses of Congress is prepared to go far, if any distance at all, in the direction of modifying the restrictions placed upon trade between this country and the Republic. This is to be regretted, and it is to be hoped that, as some have argued, the refusal to consider the Morrison bill when the proposal was made does not show a decided hostility to the measure itself, but only a refusal to consider it at that time. Still there is, so far as we have seen, very little to base such a conclusion upon, and the plain fact remains that consideration of the measure was refused for no other apparent reason than because the majority of the members were opposed to its provisions.

The fate of the Morrison bill demonstrates the wisdom of the Canadian Parliament in increasing the export duty on boys, because it would indeed be folly to allow the United States lumberman to carry our logs across the water and use their product to compete with our manufacturers, while they at the same time handicapped the Canadians by compelling them to pay a tax on all the sawn lumber they carried across the lakes to sell. When the United States shows a disposition to enter into arrangements for better trade relations between the two countries Canada should be ready to meet them, but in the meantime the United States should not be allowed to monopolize all the advantages that tariffs can give.

SOUTH AUSTRALIAN FORESTS.

The good work in progress at Bundaleer and Wirrabara is being repeated in other parts of the colony, and there are altogether some twenty reserves for forest purposes which are being planted and improved. The timber which these reserves will yield in the course of comparatively few years will repay the State handsomely for the outlay incurred. Nor shall we have to go far to find a customer for the timber, as our own railways and other public works will absorb it. Sleepers will have to be renewed, fences repaired and replaced, and wharfs and jetties constructed, and if in course of time the whole of the material for these works can be supplied by our own forests we shall have shown to the world that we have spent our money wisely, while at the same time we shall have found employment for our laboring classes in felling and preparing the timber for use instead of having to import it. We trust that notwithstanding the grave necessity which exists for care and prudence in the management of every department in the public service, a sufficient sum of money will be placed at the disposal of the Woods and Forests Department for next year, so as to enable the authorities to carry on the work with vigor and success. The cry is now for reproductive public works, and surely the planting of our forest reserves comes most emphatically within that definition. What will an acre of gum or pine trees be worth in 20 years? An acre of waste land would probably be worth £5 at the outside, but if it be covered with well-developed timber trees the value of the land will be enormously improved. Judicious planting will not only add to the beauty of the landscape, but it has the utilitarian advantage of increasing the humidity of the climate. We are saddling posterity with a large debt, the interest and principal of which those who come after us will have to pay, and if we leave to posterity well-timbered forests, instead of bare plain or gnarled and stunted bush, we shall leave a legacy by means of which our successors can pay that debt more easily. It is almost certain that as the forests of Western Australia and Tasmania become denuded of their natural growth of trees the value of timber will rise considerably. By planting largely now we shall make preparation for that time, and in course of years be able to supply all our needs in this respect. But the work must be done systematically and with judgment, and the colony is fortunate in having at the head of its forest department a gentleman of Mr. Brown's ability and enthusiasm. His work speaks for itself. Notwithstanding the exceptionally dry season through which we have passed some 90 per cent. of the trees planted out are growing. It is pleasing indeed to contrast the bare plain and brown hillsides of Bundaleer with the planted portion of the reserve, with its vigorous growth of gums and pines covering hundreds of acres, and so full of healthy life that one can almost fancy he can see them grow. If all this can be done, why is not more of it done? A number of the unemployed could be occupied throughout the winter and spring months in planting our forest reserves. If, taking advantage of the dull times, we could plant another thousand of forest trees this winter, it would be a work for which the laboring classes would thank us and posterity would bless us.—*South Australia Advertiser.*

AN EXPORT DUTY ON SAW LOGS.

The Montreal *Journal of Commerce* says:—In the House of Commons this week the most important business of a commercial character transacted was that connected with the increase of the port duty on saw logs from $1. as heretofore, to $3 per thousand feet. The *Journal* was, we believe, the first to bring forward (in an article on "Our Timber Supply," in December 1885,) the duty of the Government in respect to this matter. The article gave rise to wide-spread discussion among technical journals in Canada and the United States, but the unanimous disapproval it met with in Michigan and other lumber producing states, was perhaps as convincing an argument of the prudence of the course with respect to Canadian interests as could be looked for.

Considerable anxiety has been expressed as to the possible effect of such a duty on the action of the United States legislature, and we believe representations have been made to our Government that it may lead to a retaliatory action fatal to the interests of Canadian lumbermen. We are, however, of the opinion that the danger is imaginary. In the first place, that there is a very strong party in the United States which favors free lumber is abundantly clear from the strong support the Morrison Bill received. This party would present a vigorous opposition to any increase in the duty for any cause whatever, and obviously with much greater effect than they had when endeavoring to secure its repeal. The defensive is a much stronger position than the offensive.

In the next place the advocates of free lumber would in this case be reinforced by the western lumbermen and other American citizens who have bought Canadian limits. However much they may object to a policy which practically forces them to build mills and manufacture lumber in Canada, they would have no desire to have this prospect made additionally burdensome by a duty on the lumber they make, which would destroy their profits; or on the other hand to hold the limits idle in the hope that a retaliatory policy may force the hand of the Canadian authorities.

As far as we can gather any nervousness as to the result of an increased export duty on logs is mainly confined to the lumbermen on the Georgian Bay, who are brought into direct competition with those of Michigan, and naturally feel most keenly their strenuous and powerful opposition. The lumbermen on the Ottawa, knowing the strength of the eastern markets for Canadian lumber, and perhaps not taking into account sufficiently the opposition from so far of a quarter, has no fear of the results.

"The eastern people want our lumber, and must have it," is their view of the case, and they are prepared to wait philosophically the course of events. They are, however, generally disposed to support a duty of $2 per thousand feet, the rate imposed on our lumber when shipped to the States.

We are still of the opinion we have from the first expressed, that our forests should be so used as to assist in developing our own country, and to that end that the raw material therefrom should be worked up to the farthest point in the mills and factories of Canada.

It is bad enough to see our rough lumber exported to Burlington and Whitehall, and there give employment to vast numbers in resawing, dressing, manufacturing the same into doors, sashes and such articles before being distributed to the consumers in the eastern states, but it would be ten times worse to see our valuable forests stripped to feed the mills and stimulate the industries of foreign cities. We are glad the government has had the courage to take hold of the difficulty with a good grasp. Let us hold our own until the States give free admission not only to our rough product but to all classes of dressed and manufactured lumber. There is no reason, save the discrimination of the United States tariff, that our exports of the "product of the forest" to the United States should not be nearly double what they are now, and that, not by further depleting our forest reserves, but by working up into a higher product, by skilled labor, the raw material we now send out.

A BENEFIT EITHER WAY.

American owners of timber limits in Canada acquired them with the intention of taking over the logs and manufacturing them in Michigan. The increase of the export duty to $2 per thousand feet makes this design difficult of execution. It is probable that some logs will be taken over, in which case the Canadian treasury will get the benefit of the extra duty; and some mills may be erected by Americans on Canadian streams, by which the manufacture of lumber here will be extended. Owners of Canadian limits, residents on the other side, are reported to be about to try both experiments. One of these limit holders has sold at a good profit. The future state of the American market for lumber will probably determine whether logs will hereafter be shipped to the States in large quantities or manufactured here. Meanwhile there seems to be a disposition to prepare for both contingencies; and if expensive mills be once put up in Canada, the motive to work them, while any profit can be made, will keep them in operation.—*Monetary Times.*

A CONSIDERABLE number of logs are now being brought over the Midland Division of the G. T. R, says the Port Hope *Times*. There are to-day thirty cars lying on the sidings near the old car factory; some of the sticks are very large, a number measuring over 3 feet in diameter at the butt.

AT the New York Real Estate Echange last Thursday, 92,000 acres of timbered lands in Herkimer and Hamilton counties, New York, were offered at $250 an acre.

RAISING OAK TREES.

During the last few years large quantities of acorns have been taken from this country for the purpose of planting. White oak acorns are preferred, and they have been chiefly obtained in the State of Missouri. They are generally planted on sandy or broken land that is intended for pasturing sheep. In Great Britain sheep are accustomed to eat acorns, and it is considered profitable to raise them for sheep food. No variety of oak has received much attention at the hands of the planters of fruit trees. They state that the trees make a very slow growth, and for this reason they prefer to plant trees that grow rapidly and furnish timber and fuel in a short time. A foreign writer suggests that oaks may be raised to excellent advantage in connection with other varieties of trees that grow rapidly. He admits that oaks grow slowly while they are young, but states that they increase in size rapidly when they are 15 to 20 years old. He, therefore, recommends planting a row of oaks between rows of quick growing trees. The latter will be large enough to use for various purposes when they are from 15 to 20 years old. If care is exercised they may be cut down so as not to injure the young oaks. These trees being removed, the young oaks will grow rapidly and completely occupy the ground. Oaks are easy to propagate, as the acorns can be obtained at small cost and are almost certain to germinate Acorns are much easier to manage than large nuts like those on the pecan or hickery. They can be planted where it is desired to have them grow or in nursery rows, from which the small trees may be taken up when they are at a suitable size to be transplanted. The wood is excellant for fuel, timber and post.—[*Ex.*

POINTED OPINIONS.

A New York lumber dealer, who has often expressed— sometimes very forcibly, too—his opinion that there is "no inspection," no authorized inspection of lumber in the New York market, said to us yesterday: "Isn't it a strange state of things here when the inspection in hardwood lumber of one man only—Patrick Moore—will be accepted? What we want is uniform inspection under the control of a lumber exchange, and the sooner we have both the better for the New York lumber trade. If we had a lumber exchange in the metropolis, with authorized licensed inspectors, Chicago, Boston and other lumber centres would no doubt join in one uniform system of inspection that everybody would recognize, and which would obviate much of the present annoyance.

"A lumber dealer in Cincinnati wrote me the other day asking me what I could get for firsts and seconds in walnut in New York. I couldn't answer him for the reason that I had no idea more than the man in the moon what I could get. Firsts and seconds out west might mean 20 per cent. first and 80 per cent seconds, or vice versa.

"Now, if there was a universal, recognized inspection and standard of prices for grades of lumber, a man in Cincinnati would know what the prices of a certain kind of lumber would be in New York What we ought to have at once is a lumber exchange to regulate grading, inspection and prices."—*New York Lumberman.*

LIABILITIES OF HOT AIR AND STEAM.

The subject of the spontaneous combustion of wood has been discussed at various times by the French Academy of Sciences. Among the most interesting statements made on these occasions is that by M. Cosson, describing an accident which occurred in his laboratory, it appearing that, while he was working in his laboratory, a portion of the boarding of the floor spontaneously took fire; the boards were in the vicinity of an air hole, fed with warm air from a stove about thirteen feet away on the floor below. A similar accident had occurred two years previously, and, in consequence, M. Cosson had the boards adjoining the airhole replaced by a slab of marble. The boards which subsequently ignited adjoined the marble, and though the heat to which the boards were subjected was very moderate, being only that of air at 77° F., still the boards slowly carbonized, and, being thus rendered extremely porous, a rapid absorption of the oxygen of the atmosphere had resulted, and sufficient heat was thus produced to originate combustion. A similar instance of spontaneous fire is said to have occurred at Passy, a few days before, due to the action of the warmth from the airhole of a stove upon the woodwork, thus showing the danger liable to arise from this source, and the necessity of attention to the same on the part of builders.

DRUM MAKING.

Of a total of 200,000 drums made in the United States last year, it is said that 178,000 were manufactured in Granville, Mass. The old fashioned drum with wooden barrel, which was formerly the only kind in the market, is being rapidly supplanted by the neater and lighter model with a tin barrel. For the manufacture of the latter tin of various colors is employed, blue and red predominating, though the larger quantity of tin drums are made of a brass imitation. This tin comes in sheets of two sizes, 14x20 inches and 20x28, the sheets being packed in cases holding 112. For wooden drums the barrels are generally bass or white wood, occasionally oak. The stay hoops are of oak or beech. Before the strip of wood can be used, it needs to undergo many processes, among others bending, planing and sweating. The first drums made used to be boiled in open tanks, and the limit that could thus be prepared daily was less than 50. The introduction of machinery and more perfect methods has increased the daily productions, so that 2,000 drum pieces is considered nothing more than one man's fair day's work. The log, usually cut to three feet in length, is placed between the teeth of a huge machine, and the slicing begins. The knife receives it, and, as the log revolves, the piece sliced is received on a cylinder and then rolled up. Seventy-five thicknesses make one inch of the log. If then the log is three feet through, one revolution will yield a piece nine feet long, and the total length sliced from the log would extend over a mile. Cutting machines further reduces this huge sheet to the desired lengths. A core of six inches thickness is left, which is taken out of the jaws and split into drumsticks and tenpins. The veneers are heated, then bent, and are soon ready to be shaped as a drum. There are also planing and sandpapering machines, all run by water power. The strips are put through the bender, from three to six at a time. The sticks are smoothed by rolling in revolving barrels, the process being continued for three or four hours.—*Exchange.*

A NORTHERN MARKET FOR SOUTHERN LUMBER.

There is a growing opinion among the yard dealers in this city that more attention must, in the near future, be devoted to the cultivation of a trade in southern lumber. It is a recognized probability that the pine trade will be more and more cut into, until competition will become so sharp that old time profits will be impossible. While the pine trade of this city, both local and shipping, will make this the leading market for that kind of lumber as long as the supply holds out, the increasing use of other woods and the diversification of the lumber business generally suggest that it is unwise for dealers to shut their eyes to the growing demand for southern lumber, to the degree of letting St. Louis, Kansas City and other markets "get away" with the lion's share of the business. Men with a vision beyond the bounds of their pine yards see that southern pine, cyprus and poplar are bound to come into use in this city and surrounding towns in an increasing degree, and that somebody will reap such advantage of handling these woods as there may be in the operation. The demand will increase, and it will be met. Will the pine dealers ignore the innovation, or will they endeavor to seize it and make it redound to their advantage? Some of the dealers are answering the latter part of the query in the affirmative. They hold that, as this is a railway centre of greater magnitude than any other in the country, as well as the most important lake port in the northwest, and has acquired the prestige of the greatest lumber market in the world, it is a natural conclusion that Chicago should become an important distributing point for southern lumber. In taking this view, it is not considered that the far western demand is to be supplied from this point. But the local, suburban and near-by trade—say within a radius of 150 miles—can be furnished from this market at a profit.

The common objection to a shipping trade in southern lumber at this point has been that surrounding towns can be supplied directly from the mills. It is claimed that country yard dealers can get rates from the south as low as the wholesale handlers in this city can. This may be so, and yet there is more to the consideration than this simple fact. It takes money, facilities and experience to handle lumber. It also requires missionary work to induce dealers and consumers to take hold of a kind of lumber to which they are not accustomed. The manufacturers at the south sometimes need laboring with, also. Now the lumbermen of this city have the requisite capital to buy up and handle all the lumber produced in Arkansas, Louisiana, Mississippi and Alabama, if they could see profit in the undertaking. If they could find a field for distributing a large amount of southern lumber they would go into the business without delay. Or, if they could buy lumber at the south in large quantity—by the entire mill cut—at prices low enough to admit of a handling bill and a profit besides, some of them would venture to undertake it. But there must be a partial cessation of the peddling business now practiced by the southern manufacturers before the wholesale dealers of this city will be able to take hold of yellow pine, cyprus and poplar on a large scale.

If a system could be perfected whereby the dealers of this city could control the cut of numerous southern mills, a large amount of lumber could thus be profitably handled through this market. Were owners of mills at the south to be guaranteed the sale of their product for the entire season, knowing that it was going into competent hands, and that there would be no backset or failure in payment, they would sell lumber at rates that would give the northern buyer something of a monopoly of the business. The owners of mills at the south are not generally so rich that they would prefer to peddle out lumber by the car load, to retail dealers and consumers all over the country, when they could dispose of an entire season's cut at a fair log run figure.

This proposition it seems to men who have seriously thought of the subject, is the basis on which a southern lumber market can be built up in this city. Carried out, it would involve a more careful and specific manufacture, that would satisfy the northern demand. It would be necessary to conduct the business so that a full supply of southern lumber could be carried in stock.

As the white pine supply diminishes, and gets more and more into strong hands, the use of southern woods will increase. Already they cut a large figure in eastern seaboard markets. Time will come when the east will be largely supplied over interior railroads.—*Northwestern Lumberman.*

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A LIMIT TO PINE VALUE.

A large owner of pine in the Aroostook region of Maine lately complained that the upper grades of lumber were selling at prices $2 to $3 below prices that prevailed when he purchased his holdings in the Aroostook country in 1851. This reduction in price has been brought about mostly because of an increase of transportation facilities and the cheapening of freight rates, whereby western pine has crowded Maine lumber in the eastern seaboard markets.

This statement of the Aroostook lumberman leads to a reflection of some importance. It is a fact that the increase of demand and the diminution of supply have not served to enhance the price of either high or low grade white pine lumber. It is a curious circumstance that today the druggy classes of lumber are the clears and selects. This is fact, notwithstanding that it is generally acknowledged that good lumber, as compared to coarse, is growing scarce and hard to be obtained in large proportion to the common and coarse qualities. Wide lumber, either coarse or fine, is now of more importance than strictly fine lumber that is not wide. Wide lumber will sell for a relatively higher price than any other of whatever grade or class.

The Maine man's experience suggests the probability that the value of white pine lumber will not advance with the ratio of diminishment of the supply. There are holders of pine stumpage who seem to think that the day will come when soft pine will be worth about as much as mahogany, certainly as much as black walnut, simply because of its scarcity. But there is no reason for such a conclusion. Probably there were men in Maine 20 or 35 years ago, who thought their good pine would by this time sell for $75 to $100 a thousand, because firsts and seconds sold in 1851 for $45 and $35 a thousand. They argued that in fifteen or twenty years pine would be a scarce article in Maine, and hence holders would be able to realize almost any price they should choose to ask for it. They made no calculation for the influx of pine from the west, even from far Wisconsin, of cypress poplar and yellow pine from the south, and the extensive adoption of hardwood in house finishing and other work, wherein soft pine was once deemed indispensable. So, to-day, it is likely, holders of Michigan and Wisconsin pine think that in fifteen or twenty years the supply will have become so nearly exhausted that they can realize cabinet-wood prices for their trees. But such sanguine owners are likely to be disappointed. Causes like those that have prevented the Aroostook men from doubling up the value of their holdings are operating to hinder the rapid advancement of the value of western pine. When the price of any wood in ordinary use is pushed up to a certain point, it strikes opposition to further advance in the shape of other woods that are brought in to take the place of the vaulting aspirant. When white pine became too costly in the east for ordinary purposes—and in the west, too, for that matter—yellow poplar entered the field for box-making, furniture work, etc. In house finishing the hardwoods have largely taken the place of white pine. Maple and yellow pine flooring are as cheap as a fair article of white pine and much better in the long run.

Thus no wood, however excellent it may be, can monopolise the market, or command a value above a range determined by competition with other woods.

Hereafter transportation facilities between the south and the north, and between the Pacific coast and the interior, will increase, thereby cheapening freight rates, so that the vast supplies of yellow pine, poplar, cypress, redwood, fir, cedar, and the various deciduous lumber-producing woods will be growing competitors of northern pine. It is to be doubted if white pine will be worth more twenty years from now than it is to-day. Choice sections of stumpage may enhance somewhat in value, but it will not do to venture too much on that even. The tendency is towards the cheapening of all sorts of commodities, and there is no reason to suppose that this general law will not apply to lumber.—*Northwestern Lumberman.*

Advertise in the LUMBERMAN.

THE COLONIAL EXHIBITION.

From the Canadian *Gazette*, London, England, of June 3rd, we take the following in reference to the Colonial Exhibition :—

Among the visitors at the Canadian section during the past week have been the Princess Louise and Princess Victoria. In company with the Marquis of Lorne their Royal Highnesses made an inspection of the educational court, and spent some time in examining the various exhibits of school work from the Province of Quebec, and in conversation, in the French language with the honorable Gedeon Ouimet, Superintendent of Public Instruction for the Province.

Some foreign visitors have also put in an appearance. Among these, Mr. V. E. Maar, lecturer at the Royal Danish Agricultural College of Copenhagen, spent some time in the section. His attention was particularly attracted by the agricultural trophy, and he expressed himself as specially struck with the fruits there displayed.

The Queen has been pleased to extend her recent purchases in the Canadian section. The latest recipient of the royal patronage are Messrs. La Liberte, of Quebec, from whom Her Majesty has secured a valuable otter muff. The royal party were evidently much impressed during their visit with the fur exhibits forming part of Canada's display.

Attentions are being showered from every quarter upon Canadian with other Colonial visitors who are here in connection with the exhibition. On Saturday, by invitation of the Secretary of State for the Colonies, a number of seats were placed at the disposal of Canadian visitors in the Colonial Office stand for the purpose of viewing the customary trooping of colours in celebration of the Queen's birthday. The Peninsular and Oriental Steam Navigation Company with their wonted liberality invited, through the Exhibition Reception Committee, a large company of colonists, and among them many Canadians, to a luncheon at the Royal Albert Docks yesterday (Wednesday), the party being conveyed by special steamer from the Temple pier. The proprietors of the *Times* newspaper have also, through the Reception Committee, issued invitations to a small party of Canadians to inspect their machinery and works on Friday next.

The Queen's birthday banquet of Canadian exhibitors on Saturday, was in itself entirely successful, thanks to the caterers and to the distinguished speakers. The speeches were all more or less in good form. The Marquis of Lorne makes an excellent chairman on such occasions, and surrounded by the faces of so many he had known in Canada, it was but natural that he should be appreciative and even humorous in his various utterances. Sir Chas. Tupper, in proposing "The Chairman," made a brief but happily impressive and businesslike speech. The Hon. G. Ouimet spoke in French, to the apparent appreciation of many Canadian guests, while Sir Saul Samuel, as Agent General for New South Wales, was able to strike a chord of sympathic feeling through the whole assembly by his timely reference to the Canadian Pacific Railway as a route to Australia, and to the projected cable from Canada's Pacific shore to the antipodes.

The visitors to the exhibition last week numbered 160,170, making the large total of 545,281 since the opening on May 4th.

At the levee held by the Prince of Wales on Monday the following Canadians connected with the exhibition were presented to His Royal Highness by Sir Philip Cunliffe-Owens, Secretary to the Royal Commission:—The Hon. Hector Fabre, Dr. Alfred R. C. Selwyn, the Hon. Gedeon Ouimet, Lieutenant-Colonel Thomas Ross, Mr. Thomas Cross, Dr. J. P. May, and Major Gartshore.

FORESTRY.

Did the prairie regions of the North-West form no part of the Dominion, Canada might with general accuracy be said to consist originally of one vast natural forest. Even now, indeed, one may find it so described without any material qualification in some English works reputed to be of standard merit, for until quite recently not a few learned geographers treated of Canada in their writings as little more than a fringe of habitable land along the shores of the St. Lawrence and the great lakes. But while the busy woodsman and hardy settler have together turned much of this original forest into arable and pasture land, the timber regions are still vast and varied enough to maintain for them a leading place among the feeders of Canadian industries. Hence, under the guidance of such experts as Professor Macoun, the woods of the Dominion form a prominent and interesting section of the South Kensington display worthy of the most careful attention.

THE WOODS OF THE PACIFIC PROVINCE.

In the very middle of the Central Gallery stands the already famous trophy of British Columbian pines. Erected to a height of some 10 to 12 feet the trophy consists of highly polished sections of the noted Douglas fir or Oregon pine of British Columbia. A fine collection of this same wood, the king of all trees, is to be found in the annexe to the south of the central gallery, leading from the game trophy. Here the immense polished sections average from 4 to 10 feet in length and as much as six feet in diameter. The finish of these samples serves admirably to show the beautiful grain and colour of the wood. They also permit of illustration of the facility with which the wood may be worked and of its inherent strength. So tough, indeed, is this Douglas pine that it was chosen for the structure of all the high bridges of the Canada Pacific Railway through the mountains. In the Machinery-in-Motion Court may be found an unpolished perpendicular section of the same wood, 15 feet high, which, though not taken from the centre of the tree, measures some seven feet in diameter, and this section is reported to have been taken from a tree twenty feet from the ground. The palm must, however be accorded to a truly immense horizontal section, in five parts, which is shortly to form the principal feature in a wood and coal trophy, in the outside space partly occupied by the Ontario windmills. It exceeds in size even the famous section on the Parliament grounds at Ottawa, for while that measures eight feet four inches in diameter, these five sections when put together represent a total diameter of over ten feet, the bark alone measuring ten inches in depth. In the Agricultural Court the woods of the Pacific Province are also well represented. As we have already seen, the base of the central pillar of the agricultural trophy is faced with polished slabs of no less than twenty-five of the species found in British Columbia, among which the beatifully grained red cedar must claim special admiration. Here a new feature adds much to the interest of the collection. On each polished panel a photograph shows the tree as it is met with in the forest, while the frame in which the photograph is encased is itself of the variety depicted, to indicate the wood in one of its manufactured stages. These species are not, it must be remembered, intended to show the full size, or, indeed, the entire beauties of the mighty trees of the Pacific Province, growing as they do in unhindered grandeur to twelve or thirteen feet in diameter, and nearly 300 feet in height. They merely illustrate the various species as near their natural state as possible, and this, it must be admitted, they do most admirably.

THE NEW BRUNSWICK TROPHY.

One of the most attractive features of the whole Canadian display is the New Brunswick wood trophy, occupying a prominent position on the south aisle of the central gallery. In other of the colonial sections—in the New Zealand and Australian for instance—will be seen large wood collections, but is doubtful if one equally compact and yet so completely representative is to be found in the whole exhibition. The main portion of the trophy is divided into three perpendicular sections. Along the base of three sections is arranged a series of fifteen uniform logs of commercial or large woods, each log being 37 inches in height and 20 inches in diameter. The right wing is devoted to the coniferous woods ; to the hemlock—one of the most important trees of the Province in connection with the tanning industry—the white and red pine, and the black and white spruce, representing the varieties chiefly used in shipbuilding. The centre and left sections are given up to the other large woods ; in the centre, the white and black birch, the scrub or rock and swamp maple, and the beech ; and in the left wing, the red and grey oak, the elm, black ash and basswood. Above this series of logs, in each of the three sections, an ash-wood case, resting on an inclined plane, contains as many as thirty small panels of the lesser woods, and also some of the larger woods, that are not abundant enough to be used for commercial purposes, or not sufficiently important to be represented in the principal parts of the trophy. The smaller woods thus represented include, in the right wing, the swamp and black alder, the mountain ash, bilberry, wild red and wild black cherry, wild thorn and scrub pine; in the centre section, the dwarf and grey birch, the mountain and white and striped maple, and the mooseberry and other duplicated varieties ; and in the left wing, the ironwood, dogwood, witch-hazel, willow, white ash, balsam, poplar, aspen poplar and sumach. Each small panel bears a life-like painting of the foliage, the flower, and often the fruit of its variety, and is framed with strips of its own wood showing the bark and growth. The beauty of these smaller woods is thus fully depicted, while a careful inspection will show how their usefulness may be extended for chemical and medicinal purposes, and also for ornamental trees.

Above the sloping case large upright panels indicate the large woods in polished sections, the principal varieties being the same as those shown in logs at the base. The sides of these large panels are formed of saplings of the respective woods, resting upon turned bases, and capped by capitals carved to represent the leaf, fruit and flowers of each variety. In these large panels the shaft and rift of the grain, as well as its density, annual growth, depth of sap and bark, are well shown, thus conveying, by the aid of the logs below, a complete idea of the natural growth of each of the larger woods. Their higher commercial use is also shown by oblique bars stained to show in turn the effect of ebony, walnut, mahogany, rosewood, satin-wood and other stains. The fruit, foliage, and flower are also beautifully painted upon many of the large panels, as upon the smaller ones, and above is carved some fancy work in each class of wood. The cornice surmounting the whole is composed principally of bark and specimens of each variety in mouldings. Above this main part of the trophy the principal animals of life of the Province is depicted in heads of moose, cariboo, and deer, as well as specimens of the porcupine, fox, racoon, mink, muskrat, ermine, the smallest species of American owl, flying and common red squirrel, raven woodpecker, partridge and other small game. To these it was intended to add specimens of the destroying insects of the forests, but time forbid. Indeed, though originally designed for the International Forestry Exhibition held in Edinburgh in 1884, the trophy was itself prepared in comparatively but a short time. Yet it shows few, if any, traces of hasty work, and must be admitted to be in every respect highly creditable to the New Brunswick Government, under whose auspices it has been erected, to the originators, Messrs. Howe, of St. John, New Brunswick, to Mr. Ira Cornwall, jr., agent for the Province at the Exhibition, and those other New Brunswick gentlemen who have actively interested themselves in the matter.

THE EAST AND CENTRAL FOREST ZONES.

The next feature of the forest display of Canada is the small trophy met with on the south portion of the Agricultural Court. It consists mainly of three shelves. On the two lower are arranged perpendicular slabs of the woods of Ontario, New Brunswick, Nova Scotia, and all Eastern Canada. These are, in a large measure, specimens in a different form of the varieties composing the New Brunswick wood trophy, for what applies to that Province will also apply to the whole eastern zone of the Dominion except that Western Quebec and Ontario possesses many species not found in the other provinces. On the upper shelf are arranged the slabs from a large number of the finest trees of the Rocky Mountain district, not, however, selected or intended to do more than show the ordinary product. Above this shelf is a horizontal section of the British Columbia oak, (Quercus Garryana), and above that again a roofing of Canadian shingle and a Canadian

hawk. The small size of this trophy has not, unfortunately, permitted the display upon it of the photograph of each varity, as is being done in the case of the British Columbia samples and the photographs of the growths of Eastern Canada must, therefore, be placed elsewhere, though an interesting feature will be added in the specimens of the fruit to be shown in jars beside each variety. Close at hand, in the south annexe to the Agricultural Court, the woods of Quebec and the Lake Superior region are adequately represented. On the one side of the annexe, large logs of the tree are shown, while on the other side the cut wood is represented. And here activity prevails, for it is largely from the deals of Eastern Canada that rustic seats are now being made for the use of visitors to the Canadian section. The seats will bear inscriptions, showing the place of growth, and thus form an excellent exhibit in themselves. From Thunder Bay eleven species of woods are shown as specimens of the timber used in connection with the gold and silver mining industries. These include the white, Norway, and jack pines, spruce, tamarac, white birch, and white poplar.

The central forest district of Canada is also represented in connection with the agricultural exhibits. Here may be seen the ash-leaved maple from the heart of the prairie, the close-grained red fir peculiar to the eastern side of the mountains, white spruce of the best quality, clear of knots, and capable of excellent seasoning without warping; cypress pine, with, in some respects, the appearance of bird's-eye maple, as well as white and black birch, red and white pine, spruce, poplar, tamarac, oak, balsam and balm of Gilead. The woods of the country north of the prairie—that is in the forest regions of the North-West—are of the first quality. The black and white spruce are found in abundance, as well as the two species of poplar and pine. In the mountain section of the North-West there are eleven species of timber trees, most of which are of large size, producing the best of timber. These same varieties are also represented on the British Columbia side of the mountains, and many of them reach even to the coast.

VANCOUVER.

In an extended notice of Vancouver, B. C., the terminus of the Canadian Pacific Railway, the San Francisco *Journal of Commerce* says:

As the lumber resources of the Province are practically inexhaustible, its manufacture and shipment forms of the chief industries carried on at present about Vancouver.

HASTINGS' SAW MILL.

This mill is located in what is now the city of Vancouver, and was founded as far back as 1864. It is under the direction and management of Mr. Richard H. Alexander, who is one of the most enterprising and prominent men of this new city. The mill has three engines and six boilers, employs 150 hands, all departments included, and has a capacity for turning out 70,000 feet of lumber per day of 12 hours. Though they supply a good share of the local demand, their business consists chiefly in shipping, the product of the mill going principally to Australia, China and South America. A vessel is at present being despatched to London loaded with spars and clear lumber. A specialty is made of large timber. Some time since a flagstaff was got out for the Indian and Colonial exhibition, held in London, which was 148 feet long and only 16 inches at the butt end. A sawn piece of timber, 28x28 inches, 110 feet long, was shipped to China, which was the cause of a somewhat singular order; a request coming for a piece for use in building a summer palace for the Emperor of China, to be sawn five feet square and 60 feet long. They had seen such heavy productions coming from the mill, they imagined any size could be obtained. The mill would not back down, but offered to produce the stick if they would find the means to ship it.

ROYAL CITY PLANING MILL COMPANY.

This firm, who have large mills in New Westminister, where they turn out all kinds of lumber, wood finishing, turning, etc., established themselves in Vancouver last fall. They have constructed a wharf 600 feet long with a frontage of 76 feet, on which are piled large quantities of lumber, laths, shingles, etc., which is brought here on scows from the New Westminister mill. They are putting up a mill here which will be in working order by the middle of May, and will have a capacity for turning out 50,000 feet per day of 12 hours. They supply at present in Vancouver about 30 hands; in New Westminister, 100. Their business here, owing to the amount of building going on, is very large, averaging 25,000 feet per day. Mr. John Hendry is general manager, and Mr. R. C. Ferguson manager in Vancouver.

SPRUCE DEALS.

The business of St. John, N. B. in the manufacture of spruce deals for the British, runs up into the hundred or more millions feet each year, enormous steamers and ships being employed in the freighting of the manufactured lumber. Sometimes half a dozen large-sized steamers may be seen in St. John harbor at one time, loading deals for the English market. Spruce deals are selling just now at unusually low prices in St. John, only fetching $8.50 per thousand feet, while logs cut on Canada soil are selling at $7.50 per thousand feet, delivered at the mills in St. John. It is difficult for the outsider to see where the profit, if any, is realized in such a business. The lumber manufacturers claim to secure quite a margin in the scale of the logs they buy. There are so scaled as to saw out 1,100 feet or so to the thousand. The average cut of sawing deals at St. John is $1 per thousand feet.

Of course deals are not always so low as at the present. There is the ever-present hope of a rise, which leads many a lumberman to a fruitless dance in the uncertain chase for profits. American logs, those cut in the state of Maine and floated down the waters of the St. John to the mills, sell at $9.50 per thousand feet. Many of these are sawed at St. John in mills controlled by Americans, and shipped to Boston and New York for a market. Thus 600,000 feet of the spruce lumber used in the construction of the new Washington mills at Lawrence comes from St. John, N. B. Driving, rafting and booming the millions of feet of logs cut on the St. John waters gives employment to thousands of men. All logs so cut are stopped at the great booms at Fredericton. Then they sorted, rafted and taken in tow for the mills at St. John, at an expense of $1.80 per thousand feet inclusive of all charges.— *Manufacturer's Gazette.*

FOREST FIRES.

PEMBROKE, Ont., June 10.—Two weeks ago some Poles set fires in the vicinity of Pogue Lake, and the high winds that prevailed since that time have carried the fire down to Brennan's Creek, a distance of over ten miles, the breadth of the burnt district being over three miles. Mohr's limit suffered most, the fire totally destroying it. McLachlin Bros.' limit caught in several places, burning all the provisions the men had for the drive. The fire is now under control. Constables have gone in search of the parties who set out the fires. On Saturday during the high wind the barns and outbuildings on the farm of Mr. Stephen Ryan, Reeve of South Algoma, took fire from the bush and were totally destroyed. A number of settlers in South Algoma and Hagarty have had their fences and crops burned. On Saturday evening they had a good shower of rain, and only for this a good deal more damage would have been done. The Polish settlers were removing their furniture and effects from their houses and burying them, but the timely rain saved their buildings. A Russian Pole was arrested on the instance of McLachlin Bros., and brought before Justices Kinders and O'Grady, charged with setting fire to their limits, and was committed to jail for thirty days.

M. FOREN'S workshop in Belleville was seriously damaged by fire on June 18th, and a quantity of his lumber burned. A shed adjoining owned by G. S. Tickell, was also burned. Mr. Foren's loss is $600; insured in the Royal for $600. Mr. Tickell's loss is $120. The Ashley carriage factory was also damaged to the extent of about $50.

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REGULAR SALES will be held during the year 1886, as follows:

Tuesday,	*April 6th,*	*Tuesday,*	*August 10th,*
do	*May 11th,*	*do*	*September 7th,*
do	*June 8th,*	*do*	*October 5th,*
do	*July 13th,*	*do*	*November 2nd,*

and Tuesday, December 7th.

Sales commence promptly at 10.30 a.m. Wm. Norman, Auction'r

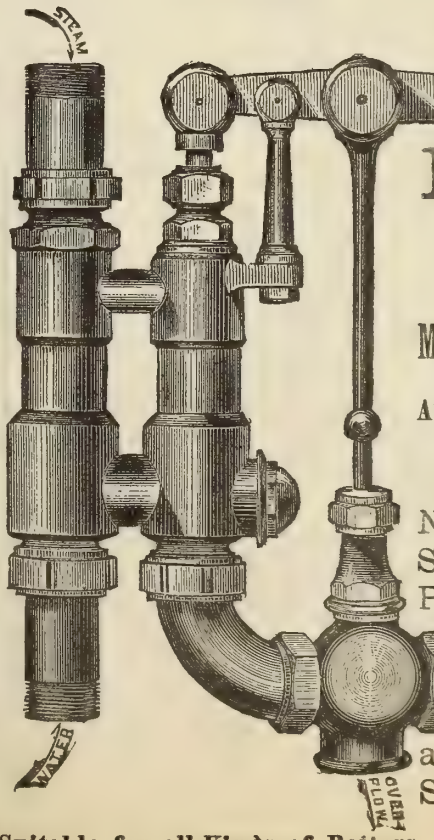
At each of these sales we shall offer a full and complete assortment of the best grades of

HARDWOODS AND PINE LUMBER

Dealers and consumers will find it to their profit and advantage to attend. Catalogues giving the inspection of each lot offered can be had at the yard on the day of sale, or will be mailed on application. Address

New York Lumber Auction Co'y (Limited)

Foot of West 21st Street, New York City.



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T. McAVITY & SONS

ST. JOHN, N. B.

Market Reports.

TORONTO.

From Our Own Correspondent.

TORONTO, June 23.—No lumber of any consequence is now leaving our docks, nearly all the dry stuff is shipped out, and the new cut is all there is to depend upon for shipment, and but little of that is yet ready to move. The retail yards are all doing a brisk business, some of them, however, I fear, not doing a safe one. This, I think, is confined to two or three who deal heavily with speculative builders, which is risky. One of this class of contractors has just skipped out between the two lights, leaving some confiding dealers to mourn his dishonesty. This will continue to be the case to a greater or lesser extent, until such time as dealers demand undoubted security for their material before it is placed on the ground, and in justice to themselves and their creditors, they have a right to do this.

Sales from the car for local demand continue fair. Most of the bill stuff coming in is this season's cut, and cars have to be loaded with due regard to the eye of the weigh master, so that until the new cut is partially dry business must be done by the middlemen at a small profit. Wholesale dealers have made such vigorous opposition to the R R. Companys' unjust demand for 25 per cent. penalty on all excess weights, that the Companys have come to the conclusion that discretion was the better part to take, so that demand has been abandoned, though not without a good deal of squirming. There is still another unjust practice adopted by the Grand Trunk Railway, which should at once be rectified, and that is as follows:—any lumber firm bringing lumber from any given point on their road, say that four cars are shipped from the same place and at the same time. Three of said cars weigh less than 24,000 lbs., and one over that weight. Instead of striking an average, the three cars are charged at 24,000 lbs., and the fourth one is billed to the consignee with the excess weight. To give the N. & N. W. R. Co'y their just due, let me say they do not follow this course and a large corporation like the former should be above such petty larceny. There is really no other fit name to apply to it.

The quantity of lumber unloaded by track side has lessened somewhat during the last month, and all dimension stuff arriving by rail moves off readily, although prices are not high enough to give the dealers a fair living profit.

Mill cull boards and scantling	$10 00
Shipping cull boards, promiscuous widths	12 00
" stocks	13 00
Scantling and joist, up to 16 ft	13 00
" " " 18 ft	14 00
" " " 20 ft	15 00
" " " 22 ft	16 00
" " 24 ft	17 00
" " " 26 ft	18 00
" " " 28 ft	19 00
" " " 30 ft	20 00
" " " 32 ft	21 00
" " " 34 ft	22 50@22 50
" " " 36 ft	24 00
" " " 38 ft	27 00
" " " 40 to 44 ft	30 00
Cutting up planks to dry	20 00@25 00
" boards "	20 00
ound dressing stocks	16 00@18 00
Picks Am. inspection	30 00
Three uppers, Am. inspection	35 00@40 00

B. M.

1½-inch flooring, dressed	25 00@30 00
1¼ " " rough	14 00@15 00
1¼ " " dressed	23 00@25 00
" " undressed	14 00
" " dressed	16 00@20 00
1 " " undressed	12 00@14 00
⅞ Beaded Sheeting, dressed	18 00@20 00
Clapboarding, dressed	12 50
XXX sawn shingles, ₱ M	2 75@ 2 90
Sawn Lath	2 25
Red oak	20 00@25 00
White "	25 00@30 00
Basswood, No, 1 & 2	18 00@20 00
Cherry, No. 1 & 2	50 00@60 00
White ash 1 & 2	25 00@30 00
Black ash 1 & 2	20 00@25 00

MONTREAL.

From Our Own Correspondent.

Montreal, 26th June.—During the early part of the last fortnight, unfavorable weather considerably interfered with the local lumber trade, and consequently retarded the distribution, but latterly it has been fine and business has been more active. Generally speaking, the trade done during June is considerably in excess of that done in the corresponding portion of last year. There is a large stock of lumber on hand here, but not an excess, as there is a good demand, and as building operations are being still actively carried on, it is likely to continue so for some time.

The demand for car loads has been good, and some large lines have been profitably disposed of, although some sales of a less satisfactory nature are spoken of. Large quantities of lumber are being daily received per Lachine Canal, from the Ottawa district. Up to date, 354,000 pieces deals, 17,500 ends and 38,600 boards have been exported to Europe, and 951,000 feet to South America.

The following are the quotations at the yards:—

Pine, 1st quality, ₱ M	$00 00@40 00
Pine 2nd " "	00 00@30 00
Pine, shipping culls, ₱ M	14 00@16 00
Pine 4th quality deals ₱ M	10 00@12 00
Pine, mill culls, ₱ M	8 00@10 00
Spruce, ₱M	10 00@13 00
Hemlock, ₱ M	9 00@10 00
Ash, run of log culls out, ₱ M	20 00@25 00
Bass, " " ₱ M	18 00@20 00
Oak, ₱ M	40 00@50 00
Walnut ₱ M	60 00 100 00
Cherry, ₱ M	80 00 100 00
Butternut, ₱ M	35 00@40 00
Birch, ₱ M	20 00@25 00
Hard Maple, ₱ M	25 00@30 00
Lath, ₱ M	1 50@ 0 00
Shingles, 1st, ₱ M	2 00@ 3 00
Shingles, 2nd, ₱ M	2 50@ 0 00

CORDWOOD.

Prices are steady.

The following are the quotations at the yards:—

Long Maple, per cord	$ 6 00@6 50
Long Birch "	6 00@0 00
Long Beech "	5 00@5 50
Tamarack "	5 00@0 00

ALBANY.

Quotations a the yards are as follows:—

Pine, clear, ₱ M	$55 00@60 00
Pine, fourths	50 00@53 00
Pine, selects	42 00@47 00
Pine, good box	22 00@33 00
Pine, common box	13 00@15 00
Pine, 10-in. plank, each	00 45@00 47
Pine, 10-in. plank, culls, each	00 25@00 27
Pine boards, 10-in	00 30@00 32
Pine, 10-in. boards, culls	00 16@00 20
Pine, 10-in. boards, 16 ft., ₱ M	28 00@32 00
Pine, 12 in. boards, 16 ft	28 00@32 00
Pine, 12-in. boards, 13 ft	28 00@00 00
Pine, 1¼ in. siding, select	40 00@43 00
Pine, 1¼-in. siding, common	15 00@18 00
Pine, 1-in. siding, select	40 00@42 00
Pine, inch siding, common	13 00@15 00
Spruce, boards, each	00 00@00 16
Spruce, plank, 1½-in., each	00 00@00 20
Spruce, plank, 2-in., each	00 00@00 30
Spruce, wall strips, each	00 12@00 12
Hemlock, boards, each	00 00@00 14
Hemlock, joist, 4x6, each	00 00@00 32
Hemlock, joist, 2¼x4, each	00 00@00 14
Hemlock, wall strips, 2x4, each	00 00@00 11
Black walnut, gook, ₱ M	100 00@120 00
Black walnut, ⅝ inch	80 00@90 00
Black walnut, ¾ inch	00 00@35 00
Scaymore, 1-inch	28 00@30 00
Scaymore, ⅝-inch	21 00@23 00
White wood, 1-inch and thicker	38 00@40 00
White wood, ⅝-inch	28 00@30 00
Ash, good, ₱ M	40 00@43 00
Ash, second quality, ₱ M	25 00@30 00
Cherry, good, ₱ M	60 00@85 00
Cherry, common, ₱ M	25 00@30 00
Oak, good, ₱ M	40 00@43 00
Oak, second quality, ₱ M	20 00@25 00
Basswood, ₱ M	25 00@30 00
Hickory, ₱ M	40 00@40 00
Maple, Canada, ₱ M	28 00@30 00
Maple, American, per M	26 00@28 00
Chestnut, ₱ M	38 00@40 00
Shingles, shaved, pine, ₱ M	0 00@ 6 50
" 2nd quality	0 00@ 5 00
" extra, sawed, pine	4 30@ 4 50
" clear, "	0 00@ 3 00
" cedar, mixed	0 00@ 3 30
" cedar, XXX	0 00@ 0 00
" hemlock	2 25@ 2 35
Lath, hemlock, ₱ M	0 00@ 2 13
Lath, spruce, "	0 00@ 2 23

OSWEGO, N.Y.

From Our Own Correspondent.

Three uppers	$42 00@46 00
Picking	32 00@35 00
Cutting up	24 00@26 00
Fine Common	22 00@25 00
Common	14 00@18 00
Culls	11 00@14 00
Mill run lots	16 00@22 00
Sidings, selected, 1 in	30 00@35 00
" 1¼ in	32 00@36 00
Mill run, 1x10, 13 to 16 ft	16 00@21 00
Selected	21 00@24 00
Shippers	14 00@16 00
Mill run, 1¼x10	17 00@20 00
Selected	21 00@30 00
Shippers	14 00@16 00
Mill run, 1 & 1¼ in, strips	15 00@18 00
Selected	22 00@30 00
Culls	11 00@13 00
1x6 selected for clapboards	25 00@35 00
Shingles, XXX, 18 in. pine	3 10@ 3 50
XXX Cedar	2 75@ 3 00
Lath 1¼, No 1	1 85@ 2 00
No 2	1 00@ 1 25
Ash, 1st & 2nd 1 to 4 in	16 00@20 00
Basswood, 1st & 2nd, 1 & 1¼ inch	18 00@20 00
" culls, " "	8 00@11 00

TONAWANDA.

CARGO LOTS—MICHIGAN INSPECTION.

Three uppers	$42 00@44 00
Common	18 00@24 00
Culls	10 00@18 00

CHICAGO.

The *Northwestern Lumberman* of June 26th says:—

BY THE CARGO.

Over 200 cargoes of lumber have arrived in port during the week. The daily offerings on the market have been ample for the requirements of trade. The larger proportion of incoming lumber is green piece stuff. It has sold with fair readiness, and prices have not materially differed from those that prevailed during the week previous. The price of short green dimension is still placed at $9, though that is all the market will bear. The appearance of thing indicates a perturbation of the market bottom, though the commission men are hanging on like grim death. On Thursday business seemed rather slow, and holders manifested some anxiety to close trades. While it is not within the open truth to say at the moment that lumber is cheaper than it was a week ago, the tendency is certainly not to strength. It is predicted that if the wind holds northerly, and the cargoes continue to come along as fast as they are now dropping in, there must be another decline of a quarter on a thousand.

There is considerable indefinite talk about the present market value of No. 2 boards and strips. This term now applies to lumber comprehended in a wide range. So many ports now send lumber to this market that it is almost impossible to say what is and what is not strictly No. 2 stock. The only way is to give a sufficientiy wide range to prices for green and dry as to include all that can be classed as No. 2. This we endeavor to do in this issue. Sales have lately been made of stock that was classed as No. 2 at $10, $10 25, $10 75 and $12 a thousand, the latter being for strictly dry. This season, however, most of the inch lumber being absorbed by the yards has been bought at the mills to arrive, and, of course, on private terms.

Shingles are still somewhat slow of sale, and prices are weak at our quoted range.

Dimension, short green	$ 9 00
Dimension, short dry	9 50@10 00
Boards and strips, No. 2	10 00 12 00
Boards and strips, medium	13 00 15 00
Selected	21 00 24 00
Boards and strips, No. 1	16 00 19 00
Shingles, standard	1 70 1 75
Shingles, extra	1 80 2 00
Shingles, cedar, standard	1 65 1 75
Shingles, cedar, extra	2 00
Lath, green	1 25
Lath, dry	1 40

AT THE YARDS.

For a week past only a fair demand has prevailed. There begins to be some complaint of dullness, though it was to be expected that there would be a falling off in distribution as midsummer approached. Since the labor troubles in May subsided, a large requirement has prevailed in this state and dealers who cultivate this trade have made no complaint of lack of demand.

Receipts of lumber and shingles for the week ending June 24, as reported by the Lumberman's Exchange:—

RECEIPTS.

	Lumber.	*Shingles.*
1886	56,950,000	30,814,000
1885	59,966,000	26,364,000

FROM JAN. 1, TO JUNE 24, INCLUSIVE.

RECEIPTS.

	Lumber.	*Shingles.*
1886	493,377,000	236,910,000
1885	474,656,000	172,509,000
Increase	18,721,000	64,401,000

STOCK ON HAND JUNE 1.

Lumber & timber	327,201,436
Shingles	246,867,500
Lath	38,277,435
Pickets	2,029,109
Cedar posts	125,204

EASTERN FREIGHT RATES.

FROM CHICAGO AND COMMON POINTS ON CAR LOAD LOTS OF HARD AND SOFT LUMBER.

To New York	25c.
Boston	30c.
Philadelphia	23c.
Baltimore	22c.
Washington	22c.
Albany	24c.
Troy	24c.
Buffalo and Pittsburgh	15c.
Shenectady	24c.
Wheeling	15c.
Suspension Bridge	15c.
Salamanca	15c.
Black Rock	15c.
Dunkirk	15c.
Erie	15c.
Toronto	15c.

GLASGOW.

The *Timber Trades Journal*, of June 12th says:—The past week's import list, it will be observed, includes further arrivals of Canadian deals here per steam liners. No auction sale at time of writing has yet taken place, at which the newly-landed deals have been offered, but there will be one to note for next issue. Other imports of Glasgow have been American oak planks and Austrian wainscot billets and planks, the bulk of which are sold ex-quay, and parcels of staves from New York.

The imports of staves from the States to the Clyde amount this year at date to 305,000 pieces, as against 350,000 pieces for corresponding period last year. The stock in yard is moderate. Pipe staves not inquired for. There is further to note in the past week's arrivals an import of American poplar or whitewood logs, of which the market was bare. They have the N. T. B. mark (imported by the Scottish Carolina Timber and Land Company), and are yarded for sale at Queen's Dock.

At Greenock the only arrival to note is a cargo of teak, consigned to Messrs. Edmiston & Mitchells.

Imports of north of Europe goods to Grangemouth are much under those of corresponding period last year, the carrying tonnage for the current year to date amounting to 5,600 tons as against 17,600 tons at this time last year.

Particulars are appended of a public sale of timber held at Greenock on 3rd inst. A portion of the catalogue—the goods saved from the wreck of the *Benefactress*—was exposed without reserve.

A large company was present, and in the aggregate a considerable quantity of goods changed hands.

AUCTION SALE.

On 3rd inst., at Greenock, Messrs. Edmiston & Mitchells, brokers:—

(Sold without reserve on account of underwriters):—

	Per cub. ft. s. d.
Quebec waney boardwood—	
18 in avg	2 0
Quebec 3rd waney boardwood—	
19 in avg	1 2
Quebec deck plankwood—	
56 c ft avg per log	1 6
Quebec yellow pine—	
60 c ft avg per log	1 0½
15 logs 35 c ft avg per log	1 1½
Quebec red pine	
13 logs=349 c ft	0 11½
Quebec birch—	
2 logs=27 c ft	1 1
Quebec walnut—	
5 logs=109 c ft	3 5
Quebec ash—	
1 log=36 c ft	1 1
Quebec elm—	
2 logs=99 c ft	1 7
Sawn pitch pine—	
2 logs=78 c ft	1 0

The undernoted timber was disposed of after the salvage sale:—

	Per cub. ft s. d.
Quebec waney boardwood—	
18 in avg	1 10½
17 in avg	1 6
Quebec square boardwood—	
41 c ft avg per log	1 1½
Quebec deck plankwood—	
55 c ft avg per log	1 3½
Quebec yellow pine (joisting) —	
60 logs 36/50 c ft avg per log 11½d &	1 0
Sawn pitch pine—	
35 c ft avg per log	1 0

LIVERPOOL.

The *Timber Trades Journal*, of June 12th, says:—A good criterion of the present state of trade here may be found in the report of the public sale given below.

Notwithstanding the effort to push business, because those in whose hands the goods are, have a great desire to get them sold before the holidays, nothing, or next to nothing in the shape of business is being done during the whole of Whit-week.

On Wednesday, the 9th inst., Messrs. A. F. & D. Mackay offered for sale by auction, at their public salerooms, 10, Canada Dock, two cargoes of sawn pitch pine timber and deals, one entire cargo of spruce deals of last season's import, part of a cargo of deals now landing, and part of one now about due, both from St.

John's, N. B., two parcels of pine deals, in addition to sundry lots of birch timber and planks, waney board pine, oak, etc., so that the catalogue lacked nothing in the way of variety.

There was the same want of animation during the whole of the proceeding, if we except the luncheon time, that has marked the recent public sales of whitewoods. Upon commencing with the cargo of sawn pitch pine, per *Equator*, some time elapsed before a bid could be obtained; but by dint of pegging away and going over the catalogue two or three times rather more than one-half was sold. This being the case, there was no inducement to b ing forward the cargo per *Sarawak* from Darien. It was, however, hurried over, the oddments only being sold. Matters showed no improvement when the spruce deals were reached, lot after lot per *Andrew Jackson*, from St John, N. B, failing to elicit a bid, and the same fate was shared by the cargo in store per *Creedmoor*, of last season's shipment. from St. John's, N. B. The remainder of the cargo per *C. S. Parnell* was sold out to wind up the accounts, and this was about the only satisfactory item in the day's work. Birch timber was as dull as ever, 11d per foot only being bid for some St. John, N.B, birch, 14½ in deep. It is almost needless to say this was declined.

The following prices were realized :—

Ex *Equator*, from Pensacola.

Sawn pitch pine:—

Feet long.	In. deep.	Per c. ft. s, d.
17 to 38	17 to 18	1 3
30 " 41	14	1 2½
13 " 29	16	1 1
35 " 45	15	1 1½
13 " 34	15	1 0½
32 " 45	14	1 1½
17 " 31	14	1 0½
25 " 46	13	0 11½
27 " 51	11 to 12	0 11½
30 " 32	12	1 0
20 " 48	9 to 10	0 9½

Pitch pine deals—

Feet long.	Cut for	
12 to 33	3x9 to 6x13	0 9½

Pitch pine planks—

9 to 30	4x9 to 6x11	0 10
9 " 30	3x9/17	0 9½

Ex *C. S. Parnell*, from St. John, N. B.

1st and 2nd spruce deals—

Feet.		Per std. £ s. d.
12 to 25	3x11	6 7 6
9 " 11	3x11	6 2 6
16 " 28	3x7	5 10 0
12 " 15	3x7	5 7 6

4th deals— 4 0 0

BUFFALO.

We quote cargo lots:—

Uppers	$45 00@46 00
Common	17 00@18 50
Culls	12 50@13 00

LONDON.

The *Timber Trades Journal* of June 12th says:—There is a remarkable change in the character of the dock deliveries of timber goods this week. In fact, it almost takes one's breath away to see them rising over those of last year by 1,000 standards, where, for some time past they had been "toiling after them in vain," and always at least 500 or 600 standards per week behind. One only reason has been assigned for it: that it was the "Derby" week last year we are comparing with, which arrests our *Io Pæns* at an apparent spurt of lively trade to record. Nevertheless, the fact remains that the Surrey Commercial docks delivered last week about a thousand standards of sawn wood, &c., more than they did at the same period last year.

Trade remains exceedingly slack and shows no animation whatever, buyers around the coast exhibiting little interest to enter into further contracts, while London firms are restricting their purchases to the supply of the bare necessities of the moment. Importers are, moreover, naturally inclined to postpone the making of fresh engagements until the political horizon is clearer, as it is now very probable that a few weeks hence will find us in the midst of a general election, which must for a time completely disorganize trade. Anything, however, will be better for the country than a continuation of the unsettled state of things which we have lately experienced.

Messrs. Churchill & Sims' mahogany sale on Wednesday was well attended and prices seemed to vary considerably. This market generally may be described as presenting two remarkable features, viz., the extraordinary dearness of big sound logs, and the remarkable cheapness of the smaller descriptions. As a buyer remarked he never knew large table wood so dear, or the small wood so cheap. The cargo of cedar and hardwood ex Chandnagor from the Philippine Islands appeared to be a bad spec to the importer, judging from the poor prices it realized, several of the fancy woods, samples of which were handed around, were very heavy, and some amusement was created by a gentleman present remarking that the stuff would do very well for tombstones.

Messrs. Churchill & Sim had not an overflowing attendance to their sale on Wednesday. The catalogue was not a very large one, and, with the exception of the few pine lots and the flooring, was mostly composed of batten stuff. The bad prices obtained for the parcels of pine should be a warning to Quebec shippers against sending goods over here unsold. The regulars ex West Cumberland were really nice deals, and there must have been considerable loss on the orginal cost. The 7 to 10 inch went equally low, and altogether the result was far from satisfactory, and is certainly do encouragement to consign. At one time it was thought the stock of pine was unequal to the demand, but if any such illusions have existed the recent result of sales will dispel them. Stocks are quite sufficient, and anything like an attempt to press them would have disastrous results.

We have seen what forcing goods on an unwilling market has done in the way of lathwood. Not long since good fresh wood readily fetched under the hammer, £7 to £7 10s. now it has been sold as low as £5 10s., and Riga at 20s. less, really good wood. The defeat of the Government, which cannot help leading up to a general election, will have an unfavorable effect on business, and must interfere with trade in the provinces, especially in country districts, where these events have a far greater influence than in the larger cities.

If there were the slightest possibility of trade reviving we should recommend all our friends to come to London market and stock themselves with the cheap goods going; but, unfortunately, we cannot hold out much hopes of it. It was always the case that the public sale prices were under the cargo rates, but formerly the goods put up for absolute sale were picked over or inferior parcels, sea-damaged or something of that sort; but now we have cargoes hardly out of the ship clapped on the market, without any reservation, to go for what they can fetch; hence the amazing difference between the sale price and the c.i.f. quotations tells with double force.

SUPERVISOR OF CULLERS' OFFICE.

Comparative statement of timber, masts, bowsprits, spars, staves, etc., measured and culled to date, at Quebec :—

	1884.	1885.	1886.
Waney White Pine	6[illegible]299	197,942	607,245
White Pine	627,940	452,240	395,716
Red Pine	27,193	12,965	38,205
Oak	3[illegible]641	563,879	301,176
Elm	226,120	126,770	145,132
Ash	95,258	43,803	20,551
Basswood	205	....	80
Butternut	811	163	57
Tamarac	1,965	36	1,971
Birch and Maple	178,495	264,979	153,544
Masts and Bowsprits	— pcs	— pcs	— pcs
Spars	32 pcs	— pcs	— pcs
Std Staves	16.6.2.22	39.0.3.28	19 8.2.3
W. I. Staves	69.8.1.25	64.2 1.17	8.1.2.16
Brl Staves	0.6.2.23	48.5.0.22	.....

JAMES PATTON,
Supervisor of Cullers.

Quebec, 25th June, 1886.

The Beginning of Consumption.

Blotches, pimples, erruptions, fever-sores ulcers and enlarged glans, are but so many manifestations of poisonous and scrofulous humors in the blood, which sooner or later are apt to attack the delicate tisssues of the lungs, causing ulceration and consumption of these organs Be wise in time and use Dr. Pierce's Golden Medical Discovery, the greatest blood-purifier, pectoral and strength-giver yet known to medical science. It cures all these dangerous maladies having their origin in the blood, if taken in time.

LIVERPOOL STOCKS.

We take from the *Timber Trades Journal* the following Comparative Table showing Stock of Timber and Deals in Liverpool, Birkenhead and Garston, on May 31th 1885 and 1886, and also the consumption for the month of May 1885 and 1886 :—

	Stock, 1885	*Stock, 1886.*	*Consumption 1885.*	*Consumption 1886.*
Quebec Square Pine	200,000 ft.	154,000 ft.	70,000 ft.	42,000 ft.
" Waney "	191,000 "	212,000 "	[illegible]	[illegible]
St. John Pine	42,000 "	24,000 "	17,000 "	0,000 "
Other Ports Pine	46,000 "	17,000 "	2,000 "	8,000 "
Red Pine	28,000 "	17,000 "	9,000 "	1,000 "
Pitch Pine, hewn	566,000 "	251,000 "	185,000 "	62,000 "
" Sawn	434,000 "	823,000 "	277,000 "	259,000 "
Planks	00,000 "	00,000 "	0,000 "	0,000 "
Dantzic, &c., Fir	68,000 "	44,000 "	34,000 "	00,000 "
Sweden and Norway Fir	42,000 "	32,000 "	0,000 "	12,000 "
Oak, Canadian and American	162,000 "	173,000 "	14,000 "	26,000 "
" Planks	153,000 "	165,000 "	89,000 "	69,000 "
" Baltic	11,000 "	5,000 "	3,000 "	1,000 "
Elm	11,000 "	17,000 "	0,000 "	1,000 "
Birch	80,000 "	122,000 "	59,000 "	16,000 "
Ash	25,000 "	8,000 "	1,000 "	2,000 "
East India Teak	66,000 "	219,000 "	31,000 "	10,000 "
Greenheart	49,000 "	108,000 "	25,000 "	11,000 "
N. B. & N. S. Spruce Deals	14,921 stds.	11,022 stds.	4,390 stds.	3,979 stds.
" Pine	539 "	795 "		
Quebec Deals	2,133 "	4,158 "	760 "	1,296 "
Baltic Red Deals, &c	2,258 "	3,099 "	198 "	562 "
Baltic Boards	68 "	207 "	22 "	8 "
" prepared Flooring	3,567 "	3,452 "	1,093 "	1,578 "

BOARD OF TRADE RETURNS.

The following are the returns issued by the board of Trade, for the month of May 1886; and also for the 5 months ending May 1886 :

MONTH ENDED 31ST MAY, 1886.

Timber (Hewn).	*Quantity. Loads.*	*Value. £.*
Russia	11,865	25,098
Sweden and Norway	59,094	83,143
Germany	30,019	78,236
United States	7,529	28,799
British India	4,520	56,516
British North America	688	2,070
Other Countries	31,326	48,812
Total	145,041	317,674
Timber (Sawn or Split, Planed or Dressed).		
Russia	41,553	78,862
Sweden and Norway	123,459	267,836
United States	31,373	85,939
British North America	19,508	46,175
Other Countries	6,090	16,844
Total	221,983	495,656
Staves, (all sizes)	9,002	38,947
Mahogany (tons)	4,431	35,037
Total of Hewn and Sawn	367,024	803,830

FIVE MONTHS ENDED MAY 31ST, 1886.

Timber (Hewn).		
Russia	15,425	39,659
Sweden and Norway	187,777	255,577
Germany	44,534	114,620
United States	39,449	137,380
British India	18,225	235,188
British North America	3,854	11,877
Other Countries	180,555	241,948
Total	489,819	1,036,749
Timber (Sawn or Split, Planed or Dressed).		
Russia	50,451	95,023
Sweden and Norway	277,911	603 918
United States	117,986	318,863
British North America	34,524	78,058
Other Countries	18,953	56,823
Total	499,825	1,152,685
Staves (all sizes)	33,421	164,889
Mahogany (tons)	21,587	180,386
Total Hewn and Sawn	989,644	2,189,434

RAFTS ARRIVED.

The following rafts are reported in the *Chronicle* as having arrived at Quebec :—

June 10—R. H. Klock & Co., Ottawa River, white and red pine, etc., Cap Rouge.

John S. Murphy, Black Lake, pine and spruce deals, Black Lake Station.

June 15—Cook & Gibbons. waney white pine, ash and elm, New Liverpool Cove.

June 16—Collins' Bay Rafting and Timber Co., waney pine, etc., Bowen's Cove, Sillery.

June 17—Thomas Buck, white pine, ash, oak and elm, Belleville and Michigan, New Liverpool Cove.

A. Fraser, white and red pide, Ontario, St. Lawrence docks.

June 18—McArthur Bros., Michigan, staves, New London Cove.

June 19—McLachlin Bros, Bonnechere, red pine (2), Cap Rouge.

June 21—J. Burstall & Co., Ontario, oak, elm, ash, white pine, etc., Woodfield cove.

THE short supply of lumber this summer has greatly hampered building operation at Calgary, N. W. T.

A GREAT AND GROWING INDUSTRY.

The conversion of wood and straw into pulp, says the *Canadian Manufacturer*, and of that again into paper, has been prosecuted on an extensive scale for a number of years, and with great success. Still the most skilful practical managers of the business have had it forced upon their attention that the process, even on the most improved methods generally in use, lacks a good deal of being perfect, and they have been looking anxiously for that certain something to turn up, which would fill the long felt want, to use a rather hackneyed expression. It is now claimed that the identical "something" that fills the bill has been found at last in the Ritter-Cellner process, which is now being introduced into Canada, as appears by the following paragraphs from the *Paper Trade Review* (London, England) :—

Two Canadian paper and pulp makers have been in England for some weeks past, both of whom are associated with new enterprises. Mr. John A. Fisher, one of the visitors, whilst partner in the firm of John Fisher & Son, Dundas had a considerable experience in handling wood material and converting it into pulp by the soda process. This experience makes it an easier matter than it otherwise would have been for him to start a new mill on a sulphite system, the locality being Chatham, New Brunswick. He has chosen, as already stated in this journal, the Ritter Kellner process, the patent rights have been arranged with Mr. Kaindler (Everling and Kaindler, Paris,) and quite independent of the American Sulphite Co. and Syndicate. Mr. Kaindler is a paper manufacturer, and we believe a personal friend of Baron Ritton, hence the association. Mr. Fisher's new mill, unlike many mills in America, will be built of brick with slated roof, and if all goes well, it will be the first fully equipped Sulphite mill across the Atlantic. Mr. Mr. Fisher leaves on Saturday by the Cunard steamer Aurania. The other visitor—who left us on Thursday—is a partner in a pulp mill now being erected in Nova Scotia, and which we may refer to more fully at some future time. A small experimental plant, including three boilers, has already been shipped.

Mr. W. Friedlaender has returned from the continent, after visiting a number of pulp mills and concluding arrangements for several important agencies. He sends us samples of bleached sulphite pulp, produced in a German mill by the Ritter-Kellner process. They are remarkable for their purity of color and length of fibre. The pulp appears even more favorable than the samples by this process reviewed some months ago in these columns. Papermakers would do well to examine samples for themselves.

SEVERAL newspapers have taken up the incipient agitation in favor of placing an export duty on sawn lumber, arguing that such a tax would favor the manufacture of sashes, doors, etc., in Canada. These wise advisors of our legislators seem to forget that there is a United States duty on these articles, and that the placing of an export duty on sawn lumber would only result in the extinction of a valuable industry.

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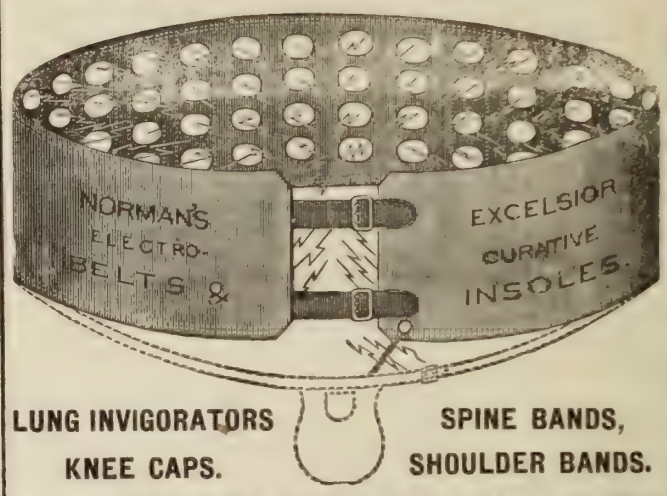

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3. It furnishes complete and reliable quotations of prices of lumber in all the leading markets.
4. Its columns are filled with interesting reading matter, valuable alike to the land owner, manufacturer or dealer.
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☞TO ADVERTISERS.

It has a circulation among saw mill owners, manufacturers, lumber and timber dealers and all classes connected with the timber business.

Examine the field, count the cost, and you will at once decide that the CANADA LUMBERMAN is the

———*CHEAPEST, BEST, MOST RELIABLE and ONLY TRUE MEDIUM*———

for placing your goods or wares before the saw-mill men and lumber and timber dealers of the Dominion.

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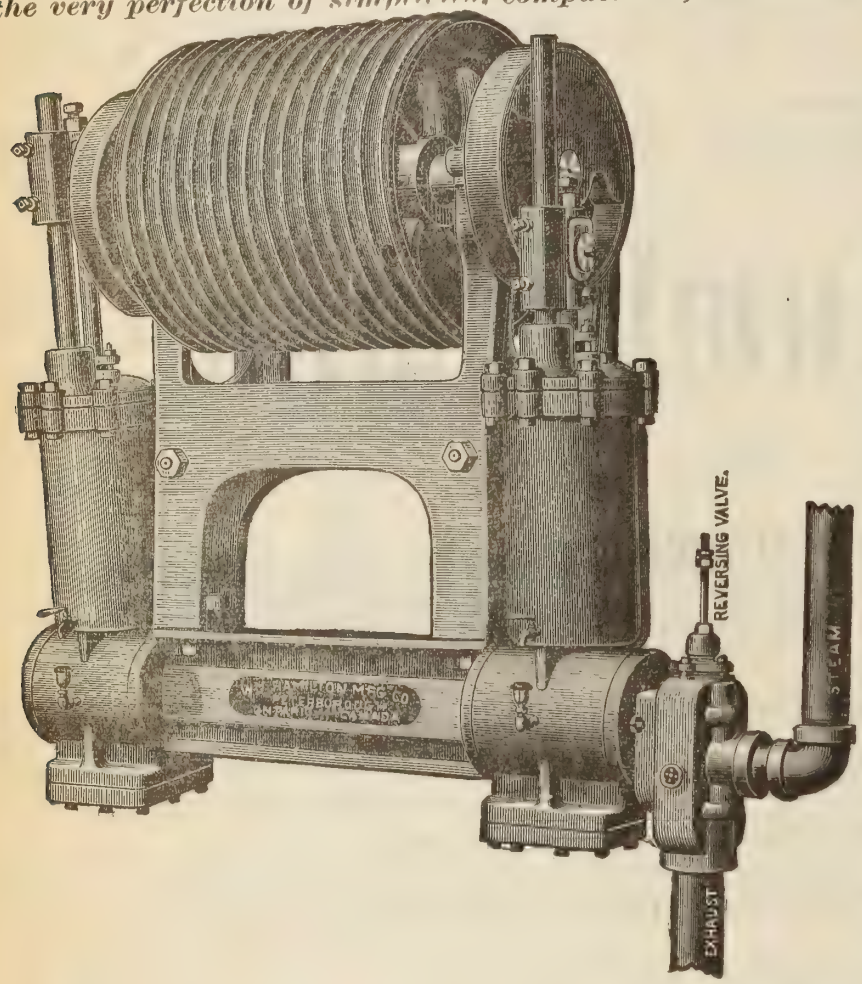
FOR STEAM FEED IN CIRCULAR MILLS WITH RACK OR ROPE.

This Engine has practically but two moving parts, aside from cranks and shafts. The whole array of eccentrics, valves, valve rods, connecting rods, cross heads, slides, levers, rock shafts, bell cranks, etc., is done away with, and the very perfection of simplicity, compactness, durability and cheapness attained.



The above engraving illustrates the Twin Engine, 10x16, for Rope Feed, for Saw Mill Carriages. The spool is 27 in. diameter, 30 in. face, is grooved 2 in. pitch for 1½ in. rope. The shaft is steel, 4½ in. diameter, with disk cranks. No connecting rods, eccentrics or valve rods to get loose and out of order. The ports are in the trunions, and worked by an oscilliation of the cylinders, and are held in their place in the downward motion by a steam cushion below. The sawyer's valve is a perfect balance, and by moving this valve the engine can be reversed, stopped or started almost instantaneously if necessary, as the sawyer has perfect control of it by his lever either to go fast or slow. Should the sawyer let go of his lever either by mistake or any other cause, it is balanced so that the valve will come to the centre and cut the steam off both cylinders and stop the feed. When standing, the lever is locked or fastended, so that is is impossible for it to start off itself. The engine stands upright below the carriage, and bolted to two upright beams, placed on the mill for the purpose. When a rack is preferred in place of the rope, we put on a steel wheel 30 in. in diameter, and the engine placed high enough to work into the rack on carriage bar, or if the beams come in the way, an idler wheel can be used between engine and rack segs; or, the engine can be placed at a distance and have a shaft from it to the carriage; or it can be placed in the engine room, where it is under the control of the engineer for oiling, thence by shaft and pinion to carriage rack bars. These engines are well adapted for cutting long logs, or where the logs are mixed, th advantage of this feed will be apparent to mill men. When the carriages are used in two or more sections, the couplin and uncoup ling of each section is quick and simple.

There were two of these feeds working this summer and giving the best of satisfaction, one with rope feed at James Playfair & Co's Mill, Sturgeon Bay, near Waubaushene, and one at the new mill furnished by us to Francis Carswell & Co., at Calabogie Lake, on the Kingston and Pembroke R. R. This mill is working with the Rack and Pinion feed, and drops from fifteen to seventeen stock boards per minute. We have also sent one to the Rathbun Company, Deseronto, to put in to feed their heavy Circular Mills. They will also commend themselves for various other cases, especially for running Elevators, hoisting Engines, and wherever a simple and easily reversible motion is required.

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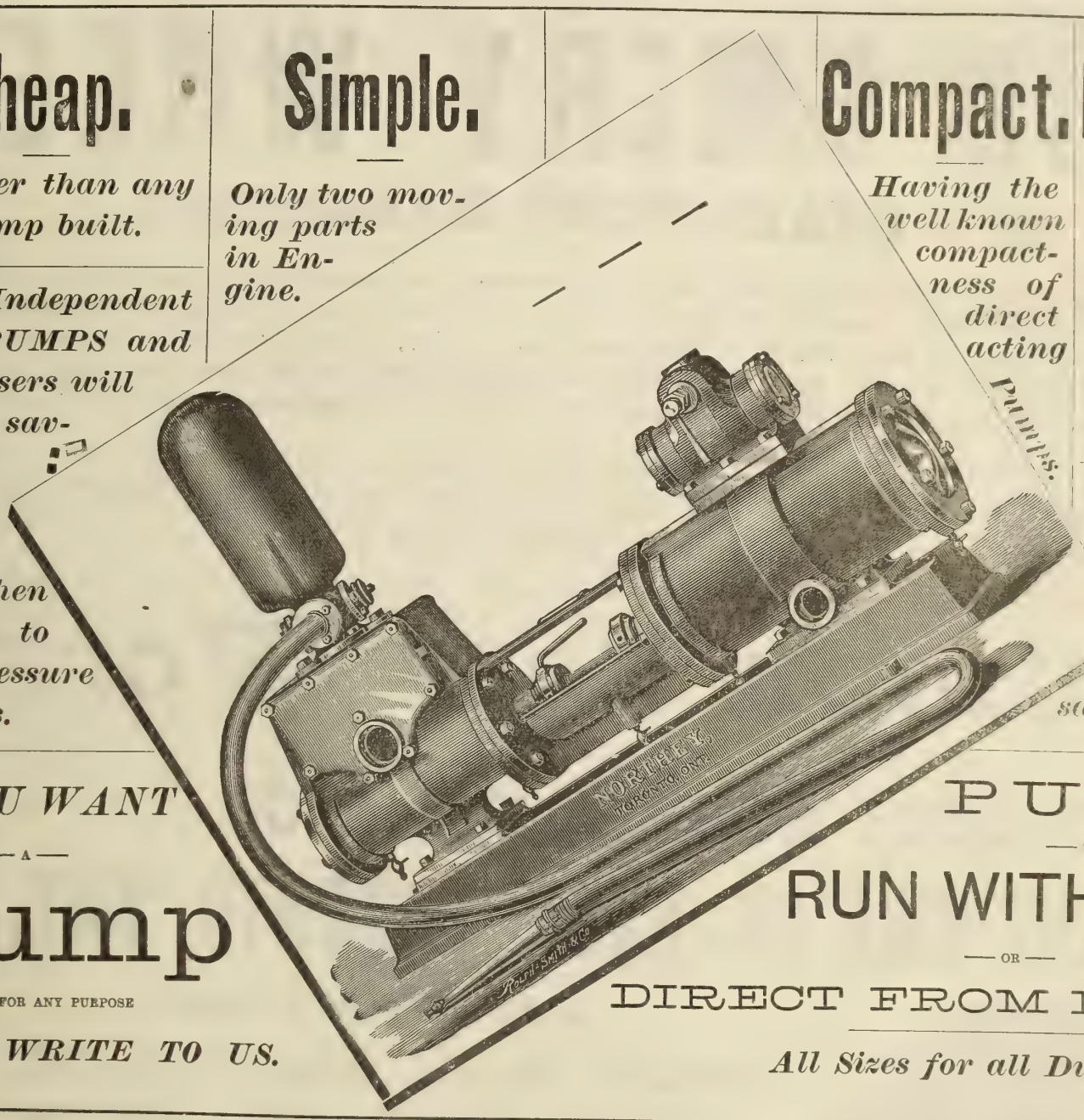

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VOL. 6. PETERBOROUGH, ONT., JULY 15, 1886. NO. 14

COLONIAL EXHIBITION.

The following notes regarding the Indian and Colonial Exhibition, London, Eng., are taken from the London *Canadian Gazette* of June 10th :—

As is but natural, the agricultural trophy in the Canadian section continues to receive the special attention of visitors. "This is the best thing in the exhibition," is a sentence to be heard continually from their lips. The many questions asked of and fully answered by Mr. Cracknell further indicate the deep interest awakened, for the majority are not satisfied to look and pass on, but wish to be informed as to the locality and conditions of growth of the samples.

It is the hope of many that one result of the present meeting of Canadian and Australasian in friendly rivalry may be the creation of an interchange of commodities between their respective parts of the Empire. A step has already been taken in this direction by Messrs. Wallace, Warne & Co., of Western Australia. This firm, attracted by the excellence of the cheeses of Eastern Canada, have opened up negotiations with Mr. T. D. Millar, of Ingersoll, Ontario, for the importation of cheese from Canada to Australia, and that enterprising gentleman is now on his way to the Dominion to carry out the arrangement. There are many other commodities capable of taking part in a satisfactory intercolonial trade.

The Congress of Chambers of Commerce of the British Empire to be held at the exhibition on the 8th July, will, it is claimed, be the most important commercial congress ever held in any country. The parts of the Empire represented will be—Australasia with no less than 13 chambers, Canada with four, China, India, Indo-China, South Africa, with four, British Guiana, the West Indies with three, and the British chamber in Paris. The Canadian delegates will represent respectfully the Board of Trade of Toronto, Montreal, Quebec and Hamilton. It is to be regretted that Winnipeg and Victoria send no one to speak on their behalf.

The Leeds *Mercury* remarks :—"Pushing Canada comes out bravely with agricultural products, and with machinery and implements too, being singular in the latter display, as the other colonies do not show a score of implements between them."

The Edinburgh *Scotsman* compares the Canadian with the Indian section. "India beams forth in all its eastern splendor ; Canada comes to the front as a country capable of great things waiting for the development which capital and population can only supply."

FORESTRY CONTINUED.

The commercial aspect of Canada's forestry display at the exhibition is very obvious. Canadians are firmly convinced that the trade with Europe in the hardwoods of their eastern Provinces may be largely extended. For the soft woods there is always a sufficient local demand, and Canada is not in a position to compete with the Baltic lumber so far as the soft varieties are concerned. It is therefore the hardwoods of Canada that best adapt themselves to export. At present England imports her hardwoods in immense quantities from the United States, a large number of factories being devoted exclusively to this branch of the trade. There are, however, important indications that the United States supply is fast falling off. A considerable importation does already take place to the United States from New Brunswick, and from Western Ontario, in spite of the present duty, and an agitation is in progress in the States for the free importation of the lumber of Eastern Canada, to prevent the destruction of the forests of the great Republic. On the other hand the supply of eastern Canada is, in many respects, ample, Authorities even declare that there is no perceptible decrease, generally speaking, in that of New Brunswick for instance ; while the concontemplated railway from Rivere du Loup across to the St. John's river, will open up a large extent of country with very fertile soil though hitherto inaccessible. Thus, with extended effort on the part of the various Provincial Governments, no hindrance need arise in the development of the industry. The authorities of Nova Scotia have not found it necessary or desirable to do much at present in furtherance of this development of the industry. In Ontario a great part of the country is in the hands of the Provincial Government, but still the lumbermen have extentive limits, and husband the timber, cutting only a limited extent. The New Brunswick Government will shortly have the new districts under control, where ample maple, birch and pine are to be found, and they will, it is hoped, take every necessary measure for their proper use and preservation.

ENGLAND'S WOOD EMPORIUM.

Taking eastern Canada as a whole, there is therefore abundance of woods useful for manufactures—the three species of ash, two of elm, basswood, beech, three of maple, three of hickory, six or seven of oak, butternut, black walnut, buttonwood, three species of birch, and several others. And these are at present in extensive use in the manufactories of Canada. Among the Canadian exhibits—in agricultural and other implements, in machinery, in furniture, and in many other classes, nearly all these varieties may be seen in actual use. There Englishmen may realize for themselves what Canadian woods are capable of ; and pointing to these exhibits, Canadians naturally ask: What is to prevent England looking to us, as one of her colonies, rather than to the United States, not alone for her raw material, but for the manufactured goods we are equally able to supply ? In Quebec and Ontario alone, there are above sixty-five varieties of trees, of which more than four-fifths are in present use for manufactures in the country and for export. Here then is surely a good field for development, but many Canadians have themselves a lesson to learn. They must realize more fully that it is questionable prudence to cut down forests for the mere purpose of exporting the raw lumber. Indeed, in view of the immense importance from a climatic and general point of view of the forests to Canada, such a policy is unwise in the last degree. When land is being cleared for agricultural purposes, then export such lumber rather than burn it ; but Canadians must remember the great value in years to come of the vast timber areas now too often so lightly thought of. If proper steps be taken to preserve the forests, there will still be ample material to develop to a hitherto unknown extent the wooden manufactures of the country, and bring England and Europe to realize that Canada may be looked to for the supply of much of the manufactured goods now obtained from the United States. And on this point, too, Canadians must not forget that while sentimental feelings and artificial encouragement may do something to extend trade relations with England, future development must largely rest with their own enterprise and with their readiness to meet the full requirements of European markets.

As to the export forest trade of British Columbia, most competent authorities believe it to be but yet in its infancy. The chief woods of the Province that lend themselves to manufacture and export, are the red and yellow cedar, Douglas pine, white maple, oak, alder, and dogwood. Of these prominence must be given to the first three. They are invaluable to the Province, growing to an enormous size, and producing an immense amount of the very best of wood for the almost every purpose. Considerable exports already take place to Australia, South America, China, and other parts of the eastern world, for few woods can equal those of the Province for bridges, railway ties, frames and shipping accessories. But the past record is as nothing to what the future is destined to show, not only in the raw material, but also in the highly finished manufactures to which the natural conditions of the Province so readily lend themselves.

The *Gazette* of June 17th says :—Among the visitors to the Canadian section last week was a party of four farmers, formerly from the north of Ireland, and now settled near London, Ontario. They are now in England to take out a number of horses for agricultural work, the Canadian stock not being in their opinion at present so heavy and suitable for this purpose as English breeds. They report a very early spring in Ontario, and a generally forward state of growth. Fall wheat promises to be excellent this year, though they find raising cattle for export more profitable.

TIMBER ON THE PUBLIC DOMAIN.

The following order, issued by the land office in regard to cutting timber on the public domain took effect on the 1st inst. The order is issued in accordance with the act of June 3, 1878, authorizing the citizens of Colorado, Nevada and the Territories to cut and remove timber for mining purposes :

1. The act applies only to the States of Colorado and Nevada, and to the Territories of New Mexico, Arizona, Utah, Wyoming, Dakota, Idaho and Montana, and other mineral districts of the United States not specially provided for, and does not apply to the States of California and Oregon, not to the territory of Washington.

2. The land from which timber is felled or removed, under the provisions of this act, must be known to be strictly and distinctly mineral in character, and more valuable for mining than for timber, or for any other purpose or use.

3. No person who is not a resident citizen or or bona fide resident of the State, Territory or mineral district shall be permitted to fell or remove timber from lands therein.

4. Timber felled or removed shall be strictly limited to building, agricultural, mining and other domestic purposes. All cutting of such timber for sale or commerce is forbidden. But for building, agricultural, mining and other domestic purposes, each person authorized by the act may cut and remove for his or her own use, by himself or herself, or by his, her on their own personal agent or agents only.

5. No person shall be permitted to fell or remove any growing trees of any kind whatsoever less than eight inches in diameter.

6. Persons felling or removing timber from the public mineral lands of the United States must utilize all of each tree that can be profitably used, and must cut up and use the tops and brush or dispose of the same in such a manner as to prevent the spread of forest fires.

Unenforced Tariff Resolutions.

The following letter appeared in the Montreal *Star* :—

SIR,—Much has been said and written by learned men through the press about enforcing the export duty on logs and shingle bolts, but it appears to be all talk so far.

It's a pity our country has to suffer so severely by our Dominion Government allowing capital to bury itself and they walk to the funeral. They pass acts to protect our resources, and let us wait for the day of resurrection to unearth them to be enforced.

Yours, etc.,

P. D. BYRAM.

Madawaska, N. B., July 2nd, 1886.

Chips.

CUMMING'S saw mill at Birtle, N. W. T, has been damaged by fire.

THE Bay City *Lumberman's Gazette* has commenced its fifteenth year. It has adopted a wider column than formerly used. It gives every week considerable lumbering information.

THE *Monetary Times* says:—There was shipped last year from California to Australia 5,950,000 feet of redwood pine. Does not this help to point out the possibilities of Canadian trade on the Pacific Ocean when the line of steamers is running from the termination of the C. P. R.?

RAIN is much needed on the upper stretches of the St John river. There are, says the *Globe*, about twelve millions of logs hung up in the neighborhood of Eleven Islands. These belong principally to Mr. Walter Stevens. There is a solid body on the bed of the river and there is no trouble in crossing dry shod.

FIRE has been raging in the forest along the Zeland Valley railroad, N. H, owned by E. J. Henry. Three camps with two million feet of spruce and about two miles of track have been burned, also 2,000 cords of wood. Two mills were forced to shut down; damage $30,000.

ZEALAND, N. H., July 8.—Fire is raging in the forest along the Zeland Valley railway, owned by E. J. Henry. Three camps, with 2,000,000 feet of spruce, and about two miles of track, have been burned. Also 2,000 cords oi wood. Two mills have been forced to shut down Damage $30,000.

RYERSON, HILLS & Co and other parties last week sold to the Cohasset Lumber Com pany, of North Muskegon, about 30,000 000 feet of pine timber located in Newaygo and Lake counties. The timber will all be taken to Muskegon for manufacture.

THE new lumber rates from Chicago to points in Ohio, Indiana Michigan, Pennsylvania, West Virginia and Kentucky went into effect July 1st. The rates are on the basis of 10½ to Cincinnati, 13 to Cleveland, 12½ to Saginaw river points, 12½ to Louisville, 9 to Toledo.

T R LYON sold to Davis, Blacker & Co., of Manistee, recently, a group of pine near Luth er. town 19 11, estimated to cut 11,000 000 feet for $55,000 000 – just even $5 stumpage How can good lumber depreciate in value asks the *Lumberman's Gazette* when such prices are paid for timber in the woods

THE Kirby Carpenter Company, says the *Lumberman's Gazette* is now settled in its policy of piling lumb r at the mills at Menominee. Mich The yard at Chicago is being rapidly closed out of stock and none is being put in. Its year's cut of 60,000,000, or more, will be piled at the mill. The Ludington, Wells & Van Schaick company is pursuing a like policy

THE Duluth tells us that the lumber firms there report an increased demand for lumber outside of the city. The prospects in the early spring for a good trade looked dubious but within the last month business has improved and from all parts of Minnesota and Dakota orders are coming in for building material.

LUMBER manufacturers along the line of the Northern Pacific railroad held a conference in Duluth lately. Estimates made the amount of lumber on hand show 107,000,000 feet against 165,000,000 a year ago, and the log crop this year to be 231,000,000 against 172,000,000 last year. Lumbermen figure from these figures that there will be a lumber famine before the year is over. Prices on dimension stuff for places west of Brainard were made $1 over Duluth prices and common boards advanced $1. An effort will be made to establish uniformity of grades through the Northwest.—*Mississippi Valley Lumberman.*

SAYS the *Lumberman's Gazette* of Bay City:—"The CANADA LUMBERMAN informs the *Gazette* that the export duty on rough timber is $2 on pine and $1 on spruce, not $3 and $2 as this paper has stated. Glad to be put right" The first proposal was to place the duty at $3 and $2, and now the Government has authority from Parliament to raise the duty to those figures if it is found desirable. At present, however, the duty is $2 on pine and $1 on spruce.

THE LUMBERMAN'S OCCUPATION.

Bangor, once the greatest lumber market in the world, though doing a much smaller business than in Penobscot's palmy days, is still the home of expert loggers and drivers, and the headquarters for the most approved kinds of lumbermen's implements. Such is the fame of Bangor cant dogs and axes and batteaux that operators in the comparatively new logging regions of the west and far off Pacific slope send here for them. But is the men of the Penobscot who are principally sought, not for cutting the logs, for almost anybody can swing an axe, but for the perilous work of driving the logs through rapid waters and over roaring falls and swift rapids. Every spring, when the trees have been felled and when the warm sun has transformed frozen streams into rushing torrents, men from the Kennebec and Connecticut come to Bangor to hire crews who are handy with the axe and cant-dog, and who are not afraid to break a jam or sleep on the hard ground in a single blanket. They are especially anxious to get Bangor boys when they have a hard drive in propect, for they know that the Penobscot red-shirters will pull through if it is a possible thing.

Not many people understand how logs are driven from the wilds where they are cut so many miles to the great booms near the mills, where they are sawn into lumber. It is a peculiar and a hazardous work, and when a lot of drivers start away for the headwaters with their pike poles, cant-dogs and axes it is just as natural to expect that some of them never will come back alive as it would be in the case of a company of soldiers starting for a battle field. After the loggers get through dumping the logs over into the frozen streams but a brief period ensues before the snow and ice melt and carry the big spruce sticks in great masses down stream and create big jams, backing the water up so that many of the logs are floated over submerged flats, to be left high and dry when the first detachment of drivers break the jams and let the water loose Then the drivers' work begins he grounded logs in the upper country where horses can not be used must be carried to the streams by men and often it requires 20 strong drivers wading knee deep in mud, to carry a single stick to the water. The farmers whose meadows are thus strewn with logs often claim the timber as a recompense for the obstruction it causes to their operations and at times they appear with shotguns to prevent the drivers from carrying off the logs. But the boss driver orders his men to "bring that stuff down" and the "stuff" generally comes.

Several crews are employed on a drive of any considerable size or at the head or lower end, others along the line or at the rear. There are many rocks, rapids and falls where the moving mass is likely to jam, and these places must be carefully watched to prevent a general "hang ing up" of the logs. Sometimes one big stick caught on a rock will hold back hundreds of thousands of feet, and then some daring fellow is ordered out with an axe to chop away the obstruction. It is at the risk of his life. He must be quick, for at the last stroke of his axe the big log snaps asunder with a boom like that of a cannon, and then there is a tremendous stampede of all the logs behind it. If the driver is lucky and agile he gets ashore all right, leaping from log to log, but one misstep, or a little slowness is likely to precipitate him into the seething mass, and if it is ever found below, his body is mangled almost beyond recognition. Generally it is never found

As the drive progresses the men follow through to the woods or along the rocky, uneven shores after it, and "wangans," or commissary departments of the different gangs, going on before. The driver works as long as it is light enough to see a log, and the moon is bright they often go to work at 3 o'clock in the morning and continue until the last glimmer of twilight. They eat their plentiful but coarse evening meal and, wrapped in their blankets lie down to sleep. While they sleep, which seems to them but an hour, the "wangan" moves ahead five or six miles, and when they awake there is that distance to walk through the woods before breakfast.

I saw a Bangor man who had just returned from the Connecticut, where he had driven six weeks. Sundays included, for $2.50 a day, and he brought a sad story with him. After escaping several perils himself he had seen one of his camp mates go down to a cruel fate, while another was barely saved alive. These two, a Bangor boy and an old driver from St. John. N. B., had come up from the lower end of a drive, near North Stratford, Vt., to help break a big jam above. They walked through the woods to the point just above the jam and then started down stream for it on a log apiece. Before they knew they were in "white water" around some rocks; one log was lost and the two were clinging to the other. When they reached the jam the Bangor boy was crushed up against it, while the St. John man was swept under and lost beneath the wilderness of the logs. The young fellow, pinned by the big stick to which he clung, cried in vain for help, for the crew were out of hearing, and was just about to go under when another floating log struck his and swung it around in such a way as to liberate him. Then he managed to struggle ashore. and terribly injured was conveyed to the nearest house. River driving is a dangerous business, but there are plenty of men here ready to take its chance.—*Lumberman's Gazette.*

LOGS AND LUMBER.

THE Bay City, Mich., *Gazette* returns to the subject of the export duty and says:—"The Canadians ought to be able to see, if they cannot, that their export duty on saw logs and the American import duty on sawn lumber operate in about the same way to obstruct the sale of Canadian forest products in the United States," Oh, yes; the Canadians see that And they saw, too, that as they operate in about the same way, when the American import duty was double the export duty on logs the obstruction in the way of the sale of sawn lumber was twice as great as that in the way of the sale of logs, and their clear vision and common sense told them that such an arrangement would deplete their forests for the benefit of United States lumbermen, and to the disadvantage of Canadian manufacturers. They thought it much better to have even a smaller sale of timber, and to have more lumber sawn at their own side of he ine. they want the duties to be equal, either $2 or n 0

THE QUEBEC TRADERS.

The London, Eng., *Timber* of June 26th says:—The Hovding, Captain Beck which ship is known as the "Lightning Express" amongst the numerous timber ships that ply between the po t of Quebec and the United Kingdom, arrived in the Thames on Wednesday afternoon, having experienced the longest voyage since she has been in the Quebec trade. She went along at her usual speed until she arrived off St. Paul's, in the Gulf of St Lawrence, when she experienced strong northeast winds, and in consequence those vessels that sailed many days after her came up in the race, and several boats arrived in the Thames the same tide. She has a cargo of Quebec spruce deals consigned to Messrs. Bryant, Powis & Bryant, limited. Owing to neap tides she was unable to dock, and cannot do so until Tuesday or Wednesday next The Carin and Craigallion have also arrived from Quebec, and are now discharging in the Millwall docks on account of Messrs. R. R. Dobell & Co., as also the Clara, in the Surrey Commercial docks, for the same firm.

CLASSIFICATION OF LUMBER.

The Toronto *Globe* of July 9th says:—A meeting of general freight agents, respresenting the Canadian railways, and a special committee of the Toronto Board of Trade, representing the lumber interests of that body, was held at the Queen's hotel yesterday. The meeting had been called to adjust the differences which have been caused by the recent changes consequent on the adoption of a Weighing Association in Tor nto. There were present Messrs. John Porteous, general freight agent, A. White, John Earle, and A. Burns, district general freight agents, representing the Grand Trunk Railway; G. H. Bosworth, assistant freight traffic manager, E. Tiffin, general freight agent Ontario Division, and — Houston, Ottawa, representing the Canadian Pacific Railway; R. Quinn, general freight agent, and G. A. Mumford, assistant general freight agent, representing the Northern & Northwestern Railways; and E. A. Carter, representing the Bay of Quinte Navigation Company, and Messrs. Wm. Kerr, S C. Kanady, and H. H. Willmott, representing the Board of Trade. The questions at issue were fully discussed, and it was eventually decided to submit to the Board of Trade a proposition to accept the classification of the Canadian Freight Agents' Association, which gives a certain weight to green lumber, another to partially dry, and another to fully seasoned lumber. Each shipper will be required to certify to qualities and the seasoning of the lumber so that the rate can be arrived at. The representatives of the Board of Trade promised to submit the proposition to the Board, and the general expression of opinion was that the matter would be satisfactorily adjusted on this basis.

BUILDING IN NEW YORK.

The *Record and Guide*, of New York, states that the June returns show a larger business in buying of real estate and building, than did the corresponding month last year. There were during June 1,244 conveyances of property, or 230 more transactions than for the corresponding month of last year. There was also an increase of investment amounting to $500.000. Plans fo building were filed to the number of 495, to cost $6,732,755, against 320 plans in June last year, costing $5,151,425. Our authority concludes from this showing that the effect of the May strikes was not so serious as many had supposed. For six months, ending July 1, building operations in New York called for an expenditure of $37,500.000 On this basis it is estimated that about $75,000.000 will be expended for new buildings in New York the present year, against $44,000,000 last year. In Brooklyn, however, building shows a falling off, as compared to last year. In the first six months of 1885 2,036 new structures were projected, calling for an outlay of $10,567 022 This year plans filed were for but 1,878 buildings, to cost $9,267,417.

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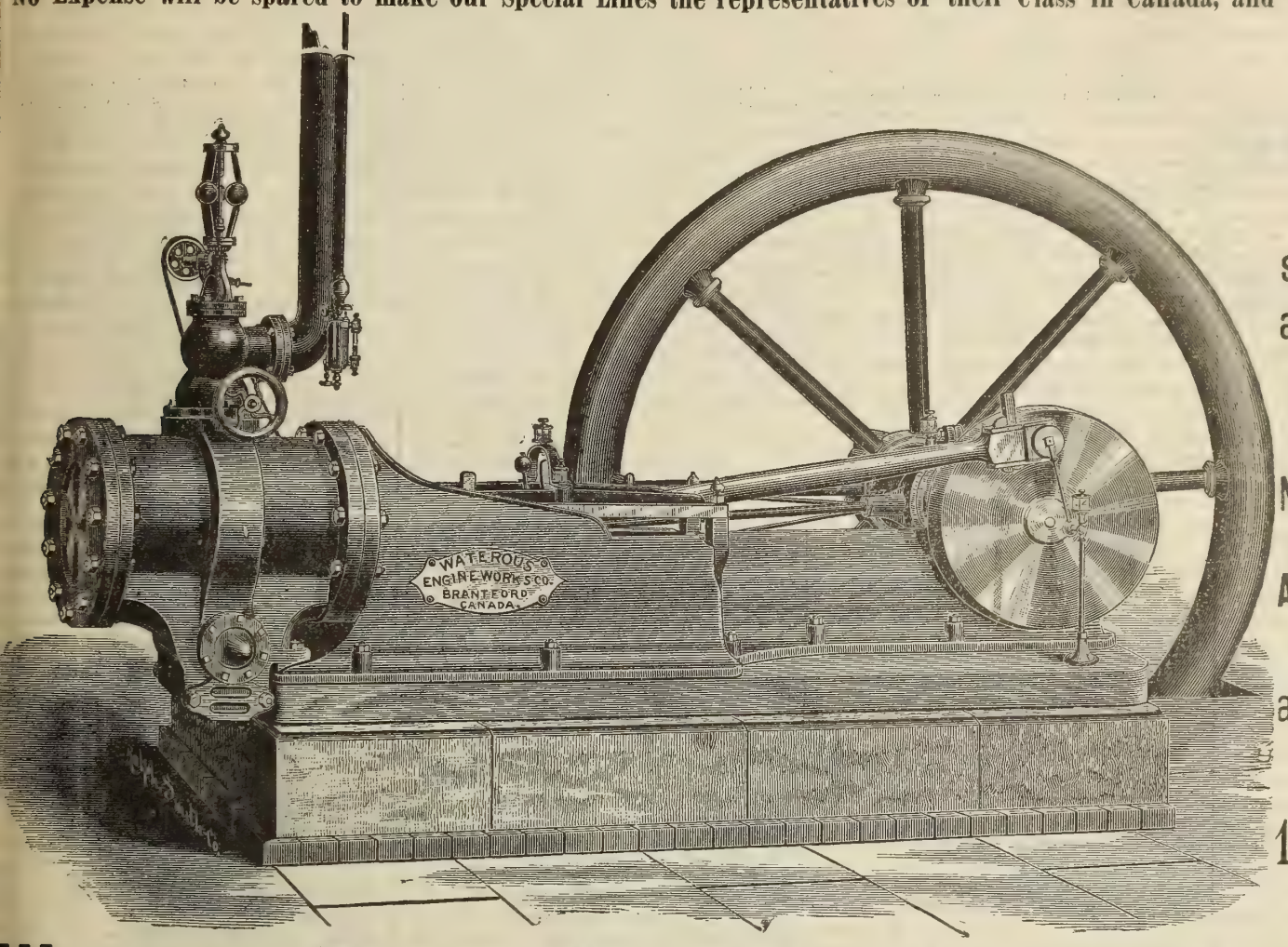

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The London papers are fairly unanimous in insisting upon the resignation of Mr. Gladstone without waiting for an adverse vote of the House.

Russia in future will not confer orders or decorations on British, American or Swiss subjects, because their respective governments do not decorate Russian subjects.

Baron H. de Worms, who was Parliamentary Secretary to the Board of Trade in the Salisbury Cabinet, has brought an action for divorce against his wife, whom he accuses of adultery with Baron Meron.

The French Government has ordered the immediate distribution of 16,000 repeating rifles among the troops, as an offset to the action of Germany in arming her battalions in Alsace-Lorraine with a similar weapon.

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AUSTRALIAN FORESTS.

In South Australia, as in other Australasian Colonies, they have wisely adopted a system of scientific forestry, giving much attention to the conservation of existing forests and the formation of new plantations. Large tracts have been reserved for fo ests.

From the South Australian *Advertiser* we take the following extracts from a report of a visit by Ministers and members of the Legislature to some of the forest reserves:—

SOUTH AUSTRALIAN FORESTS.

Not long after Mr Brown's arrival in South Australia the Forest Board was abolished and the department placed under the Commissioner of Crown Lands, with Mr. Brown at its head, Mr. Melville retaining his position as secretary. From that time to the present the work has made steady and valuable progress, as the following figures will prove:—At the present time there are 139 595 acres of country devoted to forest purposes in this colony, independently of reserves on the Murray Flatt, the area s of which have not yet been declared On June 30th, 1885, there were in the northern district the Bundaleer, Wirrabara, Mount Remarkable, Penwortham, and Mount Browne forests, 89,769 acres. Central district—Port road reserve, and Goolwa forest, 203 acres Western district—Wallaroo forest, 4,174 acres. Southern district—Mount Gambier, Mount Burr, Mount Muirhead, Glenroy Flat, Mundulla, Bordertown, Cave Range, Penola, and Mount McIntyre forests, 45,449 acres. In these various localities the total of lands enclosed for planting amounted to 5,727½ acres, which area has been increased since the conservator made his last annual report. Since the organization of the forest department in 1876 the total revenue to June 30th, 1885, shows £50,919 12s 9d; total expenditure do. do., £52,752 8s 8d; revenue last year, £6,202 14s 5d; expenditure last year, £6,028 18s 4d; total number of trees alive from last year's operations, 162,000; total number of trees alive from the planting operations since 1876, 1,200,000; raised by conservation in indigenous forests, 600,000; number of trees reported to be alive of those given away to landowners, 400,000; probable revenue over expenditure this year, £1.200; estimated value of plantations at the end of present year, £130,000. These are figures which speak for themselves, and no doubt when they are presented to Parliament they will occasion close scrutiny, and obtain for the conservator a large meed of commendation. But as to the actual value of the forest and of its real importance to the State, members of Parliament generally have but very vague notion. It is only by a visit and personal inspection that they can form anything like an adquate idea of the work that has been done in connection with the nurseries and plantations. Protecting the natural-grown timber is a matter that could be done to some extent by regulations from the department with officers to carry them into effect, but it is in the nurseries and plantations where the skill of the scientific forester is shown, and upon what is done here depends our forests of the future.

TREE PLANTING AT JAMESTOWN.

The visitor who may have known Jamestown a few years ago would fail to recognize its once open and dusty streets in the umbrageous and pleasing aspect they now present. Tree-planting has been very largely indulged in by the corporation, to whom the young trees were furnished gratuitously by the Forest Department. The enclosures down the centre of the main street, the public reserves, and the sides of the creek all display a very neat growth of forest timber. There are no less than 75,000 forest trees at Jamestown within the corporation plantations, and though their value a few years hence will represent a considerable sum of money, their cost to the Government at the time they were presented to the corporation would not be more than one half penny each. Jamestown is blessed with a stream of water which runs all the year round and a nice sheet is formed between the railway station and the township where the creek has been dammed back. Forest trees, however, are not dependent on irrigation. If the young plants have been properly reared, and are put in the ground in avenues, or 8 or 10 feet apart at the proper time of year, they will flourish and do well, this being exemplified in the healthy appearance of the trees after the present long dry summer. The owners of various farms around Jamestown have also availed themselves of the chance of procuring plants from the department, and Mr. Brown sets as much value to the country in the dissemination of these plants as he does in rearing them in the forest. He contends that the benefits will be almost incalcuable if farmers as a body will plant groves or avenues or rows of trees about their farms In addition to the protection from the weather which it affords to their stock the rainfall will be increased and become more general than at present. The showers will be less tropical in their character, and consequently the effects of the rainfall will be more lasting. There are dozens of farmers and private people in the Jamestown district who have planted the Eucalyptus globulus (Tasmanian bluegum), and the Eucalyptus corynocalyx (sugar gum), which are the two hardiest and best known of their species. One farmer, Mr. Mitchell, has 10 000 trees on his estate, Mr. Crane has a similar number, Mr. Neil about 5.000, and altogether, within a radius of seven or eight miles of the township, there are now 100,000 trees growing, where formerly there was scarcely a tree visible in the landscape. Although the original settlers in the areas were glad to find the country so bare that no clearing was needed before they put the plough in the land, they have since discovered that timber is needed, at least for fencing and firewood, and for various purposes in connection with the working of a farm. By-and-bye too they will be able to supply the larger timber to railway contractors and others, just as the department is doing now, and thus will realise a substantial profit from their treegrowing.

BUNDALEE FORESTS

Stretching away for miles on either hand nothing but a bare, dead-looking country, with perhaps here and there a ploughed paddock, or bits of straggling scrub, met the eve after the visitors had turned their back upon Jamestown till approaching Mount Robertson in the hundred of Belalie, and on the east of Yangya to the north of Mount Campbell they descried the forest of Bunda'eer in the distance. Situated at the foot of a long chain of ranges the reserve includes various descriptions of soil from rich black alluvial in the swamps to brown and red sandy loam, very rich chocolate, and other varieties in the bottom lands and around the ironstone and limestone ridges. Gravel beds, slate reefs, sandstone, and rough rocks abound on the higher elevations, through which watercourses find their way to the creek which runs from the north through the main part of the forest to the southeastern boundary. The site is 1,800 feet above sea level, and the rainfall last year was 23 inches spread over 57 days. The area of this reserve was 22,000 acres; area planted, 2,300 acres; number of trees planted last year, 146,298; number of these now alive 106,000; revenue in 1884-5, £2,834 8s 7d; expenditure in 1884-5, £1.548 11s 6d; total number of trees alive from the planting since commencement in 1876 about 600,000; total revenue since 1876, £25,731 19s 10d; total expenditure since 1876. £17,211 8s 7d. The reserve is divided into plantations A B C D E F G, where according to the soil the various kinds of trees are placed. Plantation F for example is devoted to Eucalyptus globulus; E. corynocalyx, E viminalis. Pinus insignis, P. pinaster, auracaria excelsa, cupressus sempervirens and Abtres douglasii. In plantation G there are gums only, viz., three kinds named above, and in addition the Eucalyptus rostrata, E gunnii, leucoxylon, and gomphocephala. In the nurseries on this reserve there are now about half a million plants and the following are the popular names of the different varieties: Sugar gum, Tasmania bule gum, manna gum, white swamp gum, red gum, South Australian blue gum, tooart gum of Western Australia, English oak, remarkable pine, maritime pine, Aleppo pine, the bunya bunya, Indian cedar, pepper tree, white mulberry, white cedar, tamarisk tree weeping willow sycamore, cork elm, English elm American white ash, upright poplar, seedling olives, common erect cypress, American catalpa tree, and Canadian maple. As the party approached the forest they gave vent to exclamations of surprise and admiration at the 75 000 Tasmanian blue gums which extended on their right hand for miles along the road at an average height of 40 feet in rows about 10 feet apart. This vigorous picture of life and beauty formed a marked contrast to the barren plain on the left, which extended as far as the eye could see; and when on nearing the forest cottage the Pinus insignis, with its deeper green foliage, was met with, standing in equal rows to the height of twenty feet and many thousands in number, there were more ejaculations of astonishment and gratification Undoubtedly the legislators who had heard and read of the forest operations had litttle or no idea of what was meant by them. The blue-gums, to which we have referred, were planted nine years ago, and are now of a size nine inches through, fit to be cut for telegraph poles. This season 5.000 will be cut for this purpose, representing 10s. each to the Telegraph Department. This is merely a thinning out process which will take place each season to allow room for the growth of larger timber, which in time to come will furnish the colony with railway sleepers. It takes nearly 30 years to bring a gum tree to perfection, but the pines mature in about 20 years and then furnish deals for building purposes. Of this tree there is a very number thriving wonderfully well, and of 30,000 planted open root (like cabbages) 98 per cent. are surviving. The Tasmanian gums planted in the same manner thrive nearly as well, as also the sugar gum, but most other varieties are planted out in bamboos. Over 43,000 of the latter are alive and thriving out of 45,000 planted out last season. Some years ago it was supposed that pines must be planted out in pots, but here there is ocular proof to the contrary. Four year old pines raised from seed reach 16 feet in height, and the Tasmanian gum 20 feet in the same period. The visitors left their vehicles at the forest cottage, and under the guidance of Mr. Brown climbed the hillsides, where three hundred acres enclosed two years ago now carry 90,000 young gums, and 150 acres were shown that last season was ploughed eight inches deep, and planted half with pines and half with sugar gums. Of these 97 per cent. are doing well, notwithstanding the very dry season, and are now eighteen inches and two feet in height.

WIRRABARA FOREST RESERVES.

The latest figures at our command up to June 30th of last year give:—The area of this reserve, 48,600 acres; area planted, 450 acres; number of trees planted last year, 43,640; number of these now alive, 35,000; revenue in 1884-5, £1,925 11s 2d; expenditure in 1884-5, £1,450 1s 5d; total number of trees alive from the planting since commencement in 1876, 250,000; total revenue since 1876, £15.697 12s 9d; total expenditure since 1876. £12,690 16s 3d; total number of trees raised in natural forest and pruned since 1876, 500 000. To these figures must be added the planting, etc., which have taken place during the present season which will show a vast increase on the above, and which will be placed before parliament when the time comes around for the conservator to present his yearly report. Within the forest there are six saw mills in full work, and a number of sawpits cutting sleepers for the Silverton railway. A halt was made en route at one of these mills where the Commissioner of Public Works officially inspected the sleepers that were being cut, and was very well satisfied with their quality. They are of redgum and sugargum, both close grained substantial timber. The railroad authorities are very strict in respect to these, and rejected some 15,000 which were not considered worthy, but these will certainly be useful for other purposes. Mr Brown in his last annual report says:—"Hitherto the sleepers for our northern railways have been procured chiefly from Western Australia and Victoria, notwithstanding thas large quantities of useful timber were available in the forest under review. Owing, however, to the searching enquiries made by the late Commissioner of Public Works (the Hon. T. Playford) in regard to the lasting qualities of the respective timbers, it was decided to make use of the Wirrabara timber as far as possible for the Silverton railway. In consequence of this decision the number of sleepers referred to are now being contracted for in this forest. Messrs. Moorhouse & Jesser, of Laura, the successful tenderers, being under agreement with the department, the above named contractors have engaged to take the required number of sleepers, or as many of these as the forest will provide, at the rate of 4d per sleeper, upon the understanding that all the waste timber left in the forest and at the saw mills, in connection with their production, remains the property of the department. The contractors have erected two powerful mills, and engaged the service of another saw mill plant which was in the forest previous to their contract. Should the 200,000 sleepers be procured from the forest, a sum of £3,333 odd will accrue to the department therefrom. This does not include the waste timber, of which there will be a very considerable quantity, and from the sale of which a sum of at least £200 may be looked for. Apart altogether from the revenue which will be derived from the sale of these sleepers, the removal of the old matured trees will be of incalculable benefit to the forest as a whole. There is a very large number of matured trees in this forest which are now only incumbering the ground, and their removal is advisable not only in order to utilize the timber at its best stage, but also to make room for a younger crop of trees, so that a regular rotation of timber may be available from the reserve. By doing this and encouraging the natural growth by systematic conservation, the output capabilities of the forest may in time be made to yield a regular and permanent supply of valuable timber both for the maintenance of our public works and the requirements of the surrounding country. In order to increase the lasting capabilities of the sleepers it is specially contracted that no trees will be felled whilst they are in full sap. By adhering to this most desirable condition it is estimated that from three to four years will be added to the durability of the sleepers. A large number of trees having been rung during the dormant period of the sap, the cutting and hauling of these to the mills will thus be carried on at all seasons without detriment to the timber." Messrs. Moorhouse & Jesser have already supplied or stacked at the Laura station 170,000 out of the 200,000 required for the Silverton line. Other contracts besides that for Silverton are also being in progress of fulfilment. There is ample material in the forest for works of this nature, as the area extends for thirty miles, with an average breadth of six miles at the foot of the Flindert Ranges. Of the trees planted in this forest 250,000 are now alive and doing well, and these consist mostly of Pinus insignis, American and English walnuts, American catalpa, Canadian maple, cork, English elms, and the sugar gum. The grazing rents in this reserve last year amounted to £1 344. Shortly after two o'clock the party arrived at head quarters in the forest, and after dusting down partook of a relishable luncheon laid within a grove of young English ash trees at the foot of the garden belonging to the Areas Garden Company. This is a lovely spot where the natural attractions have been added to by the careful industry of the skilled horticulturist and gardener, as beautiful flower-beds, fruit trees, and all kinds of vegetables are to be seen there in the highest state of culture. Some speechifying was indulged in at the luncheon, when well-deserved compliments were paid to the Commissioner of Crown Lands for organizing the trip, to Mr. Krichauff for his early efforts in the direction of forest culture, and to the conservator, Mr. Brown, for his marked ability, skill and energy in bringing the plantations and reserves to their present state of perfection. The distance to be travelled to reach Laura before dark and the dangerous state of the roads prevented more than a causual glance being taken of the wattle and pine plantations and the nurseries at Wirrabara, but sufficient was seen to impress everyone present with the practical results that have been already achieved, and the great importance of forest reserve work as a lasting and remunerative national industry.

40,000 saw-logs belonging to the Gilmour Company have been abandoned at Partridge Creek, owing to low water.

Chips.

THE Midland *Free Press* says there is not quarter enough dock room for handling the lumber that is arriving at that place for re-shipping by rail.

THE Montreal *Star* says:—"An immense raft containing 400,000 feet of lumber, principally pine and oak, arrived off the city on Saturday night from Calvin & Son's lumber depot at Garden island, near Kingston. The agent, Mr. Guerin, and the thirty men employed on the raft, are staying at the London house. The journey was a very quick one, the distance being covered in four days. At every rapid different men are utilized; the Coteau rapid is considered the most difficult one, especially with a high wind. Last year the firm sent about 8,000,000 feet of lumber in 16 rafts. The other lumber company on the river is the Collinsby company. Although the journey is difficult and dangerous not a man has been lost for five years."

MR. PRINCE, manager of Eau Claire Lumber Company, arrived in Calgary, N. W. T., last Sunday, says the *Tribune*, and has already begun preparations for building a mill 32x100, with a capacity of 50,000 feet of lumber, 15,000 shingles and 15,000 feet of lath per day. The site is on the Bow river, near the corner of section 16. A dam about 15 rods in length will be thrown across the arm of the river between the main land and an island in the river. A wing dam about fifty rods in length will be constructed along the island to prevent the logs stranding. Mr. Price expects to have the mill ready about the middle of October. A gang of men have been sent to the mountains to take out timber, etc, which will be brought down by train. About 50 men will be employed and Mr Prince expects to be able to supply the Calgary market with lumber and wood at right prices.

Walnut in British Columbia.

The New Westminster *British Columbia* says:—Some time ago we called the attention of our readers to the question of growing walnut trees in this country. The subject is one that ought to be decided by a practicle test, as it is of very great public interest If walnut can be successfully grown, it would prove to be a source of immense wealth to the country. On this coast growth is very much more rapid than in the east, because the growing seasons are so much longer. The supply of black walnut is every year be oming less, and it will soon be wholly exhausted unless steps are taken to increase it by artificial means. It is estimated that in 10 or 12 years a walnut farm would begin to make returns in the shape of nuts, and in 25 years the timber would be worth a great deal. The rich flats in the valley of the Fraser ought to produce magnificent walnut trees.

Serious Fire.

WINNIPEG, Man., June 9.—A serious fire occurred at Rat Portage to-day, whereby the chief portion of the town has been destroyed. About 1 o'clock this morning fire was seen issuing from the Rideout House, at present unoccupied. It spread rapidly, consuming in in course the Hudson Bay store, S. W. Humble's liquor store, D. L. Ferguson's jewellery store, Gore's Hall, Drewry's hotel, and other buildings were seriously damaged. The total loss is estimated at $75,000. The fire is supposed to be the work of an incendiary. This is the third time the town has been seriously injured by fire during the past few years.

Socrate's Spouse.

Who knows what excuse there may have been for Xantippi's sad temper? Many women are snappish, querulous and sour simply because they are suffering. Dr. Pierce's "Favorite Prescription" is a certain cure for every feminine weakness and derangement, and will restore health and good spirits to the most nervous and disheartened invalid, thereby making her a blessing to her family and the world. A single bottle will prove its surpassing merit. Price reduced to one dollar. By druggists.

FROM ALL OVER.

A girl baby was born in Knowlton, Que., recently with four teeth.

Reports from the locality of the Keppel tragedy are not satisfactory. Hen roosts are being robbed by wholesale. Farmers are concerned for the safety of their property, and many suspicious characters infest the neighborhood.

If any of our readers that are afflicted with rheumatism have never tried West's World's Wonder or Family Liniment, we advise them to do so at once, and be convinced of its extraordinary merits. It is a never-failing remedy for cuts, sprains, bruises and all complaints requiring external treatment. Price 25 cents and 50 cents per bottle. Sold by J. D. Tully.

The programme for the International Sangerfest at Berlin, August 11, 12 and 13, has been issued and includes an interestiug series of musical and other events. Haydn's "Creation" will be given by 650 voices. The principal soloists will be Mrs. Caldwell, Mr. Jenkins and Mr. Warrington.

For the past quarter of a century West's Cough Syrup has given relief to thousands, and no medicine compound can show such a vast number of unsolicited testimonials. Ask your neighbor as to its merits. It is an unfailing cure for coughs, colds, hoarseness, asthma, bronchitis, consumption in its early stages, and all throat and lung diseases. Price 25c. 50c. and $1.00 per bottle. Sold by J. D. Tully.

Mrs. Agnew, of Tara, has two adopted children, a boy and a girl, aged ten and four years respectively. For some time Mr. Agnew has kept a gun in his barn, loaded with a small charge, for rats. On Sunday last the children were playing in the barn, and the boy picked up the gun and asked the little girl to stand off a piece until he tried if he could shoot her. She complied, and he fired and lodged two grains of shot in her face and several others in her left shoulder. The child was not seriously injured.

Perhaps the most extraordinary that success has been achieved in modern science has been attained by the Dixon treatment for Catarrh Out of 2,000 patients treated during the past six months, fully ninety per cent. have been cured of this stubborn malady. This is none the less startling when it is remembered that not five per cent. of the patients presenting themselves to the regular practitioner are benefitted, while the patent medicines and other advertised cures never record a cure at all. Starting with the claim now generally believed by the most scientific men that the disease is due to the presence of living parasites in the tissues, Mr. Dixon at once adapted his cure to their extermination; this accomplished the Catarrh is practically cured, and the permanency is unquestioned, as cures effected by him four years ago are cures still. No one else has ever attempted to cure Catarrh in this manner, and no other treatment has ever cured Catarrh. The application of the remedy is simple and can be done at home, and the present season of the year is the most favorable for a speedy and permanent cure. the majority of cases being cured by one treatment. Sufferers should correspond with Messrs. A. H. DIXON & SON, 305 King street west, Toronto, Canada, and enclose a stamp for their treatise on Catarrh.—*Montreal Star* 1y22.

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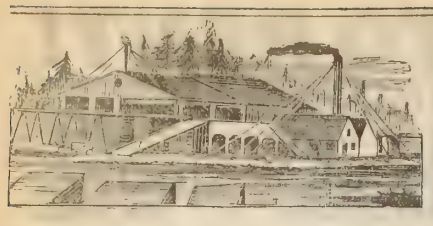

THE CANADA

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PETERBOROUGH, Ont., JULY 15, 1886.

ONTARIO FORESTRY REPORT.

THE annual forestry report of Mr. R. W. Phipps to the Ontario Government is now before us, and it shows that Mr. Phipps is active and zealous as ever in his conduct of the Forestry branch of the Agricultural Department. His report conveys much useful information which should be attentively studied, and his suggestions are worthy of adoption before it is too late.

The most important improvement recorded for the past year was the establishment of a staff of over forty, at the joint expense of the lumbermen and the Government, for the purpose of preventing fires and enforcing the Fire Act.

The effort made to arouse public opinion on the necessity of taking steps to conserve our existing forests and to form new plantations where required, cannot be said as yet to have had much practical effect, though much has evidently been done already to open people's eyes, and there is some encouragement to continue in this course of education.

With this view Mr. Phipps still persevers in this report as elsewhere. He again urges the benefit of keeping a part of the land in forests, the moisture supplied in dry seasons, the protection from inundations and the shelter afforded to the crops in winter, both by retaining the snow and warding off cold blasts. The money value of plantations is fully pointed out, information being supplied from various sources, from trips taken by Mr. Phipps himself in several States, reports from other States and details of accounts of the pecuniary results in the mother country. It shows conclusively that plantations can be formed and managed very cheaply, as compared with the satisfactory results obtained.

As to the conservation of our existing forests, though some advance has been made, it is very certain that public opinion has yet to be aroused on this important subject. The interesting report from the State of Maine, under very similar circumstances to those prevailing in a large portion of our own country, shows how easily a great improvement on our present system may be made, even before the time arrives when Canada will be prepared to adopt scientific forestry as practised in Germany, France and other European countries and some British colonies.

Mr. Phipps adds to the value of his report by an almost complete list of our forest trees, with descriptions, use, habitat, &c. There is also an estimate of the pine timber remaining in each of the States, a useful glossary of scientific terms, and that rare and welcome aid to utilizing the information supplied, a very full index.

We have reserved to the last some consideration of the most important subject of all. Mr. Phipps deals with the question of establishing forest reserves, but the restricted territory to which he refers, shows how sadly the field is already circumscribed and how very soon it will be too late to adopt this wise system. It is not a matter that will permit delay. Quebec sets Ontario a good example in this respect, having made provision for extensive forest reserves, where the land is better fitted for arboriculture and perpetual forests than for agriculture. What bad economy it is to attempt to unite the two may be gathered from many an incidental passage in this report. Burnt timber and poor farms seem to be the result of the combination. In Australia they are now establishing enormous forest reserves with fairest promise; yet, we remain lethargic though it will soon be too late. If Mr. Phipps could succeed in persuading his department to introduce such a system he would add immensely to the value of his already great public services.

THE TRADE OF LONDON.

The aspect of the Surrey Commercial Docks this week appears unchanged, very few vessels discharging from the quays, and those out in the stream, overside into lighters, are mostly firewood ships with cargoes of ends, &c., in which there still seems to be something doing. These and the pitch pine cargoes form the chief of the arrivals the past few weeks. There is no plainer sign of trade depression than the dock deliveries, and these, so far from improving, are getting less and less as the season rolls on.

We are not comparing them with last year's, but even if we did the advantage recorded last week over the corresponding week of 1885 is not maintained, the record in the present number giving 1885 the advantage on deals of 383 standards; and though less flooring went into consumption by 36 standards, the delivery of ponded timber for 1885 exceeded last week by 531 loads; this difference, however, might probably be traceable to Whit-Monday. There is also a considerable quantity of goods being delivered outside of the docks, of which the only record to be found is in our import column. A large well-known firm in Lambeth have just completed taking their third cargo overside, and this, of course, becomes an important factor in the apparent falling off in the deliveries.

Freights, we are all aware, have reached a pitch at which it will not pay to keep steamer's fires going, but bad as these rates are, if they could be readily secured, owners might yet keep their vessels at work; but there is no certainty of obtaining charters, and steamers have often to rove from place to place in search of cargoes, eating themselves up with expenses, with very little prospect of making up the loss. We chronicled a vessel at Petersburg, which had been lying there some time, going all the way to Gefle to accept a cargo for London at 19s. This state of things seems at length to have become intolerable, and amongst those disinclined to work at a loss is the Bedale, and as soon as she has completed her discharge, she will, we are informed, be laid up till better times.

Another vessel lying up, that not long since brought a cargo, is the steamer Hollamshire, and we hear of numbers of others also being taken out of employment. Though very self-sacrificing on the part of the owners, we fear that it will not effect any material alteration in tonnage, the ships wanted being very disproportionate to the amount of unfixed tonnage still afloat. Sailing ships, we hear also, are being taken out of work, owing to the little there is for them to do, and those which are looking for employment apparently are not anxious to accept the present low rates to the pitch pine ports. These latter places are certainly not liked by the generalty of wood traders, the delays taking all the profit of the voyage. Profit at the present quotations seems almost farcical, but there must be something got out of the charters, or else the ships could not trade to such remote ports.

We notice one of the early arrivals from Archangel, the SS Pickwick, with a cargo of Russanoff's deals, for Messrs. Simson & Mason is at the Centre Yard quay, but she seemed all alone in her glory. The flooring seems to be moving off rather more freely, and we observed several waggon loads of prepared stuff being loaded. In the stave yard sheds, Nos. 10 and 11, is a cargo marked FB, FxB, and F—B, from Porsgrund. These are Messrs. Franklin & Baker's manufacture, and the first cargo of boards they have shipped. The white seemed to us to be very good, and looked quite equal to Dram. Both the 1st and 2nd were well made and clean. In the red we saw nothing specially to comment upon, though here again there was not much room for fault-finding. If the class of shipment of which these form a sample is maintained, the marks are likely to become favorites with the London trade.

Among the cargoes that took our special notice coming on to the quay, were the planks ex Stratford, to which we referred in our last. These seemed to be about the best pitch pine planks that we have seen for some time. Remarkably clean, a total absence of wane, no knots, particularly free from centres, and rich in colour; the cargo was evidently a selected one, and in splendid condition. These goods, we understand, were the shipment of Sullivan, of Pensacola.

The absence of freshly piled goods is still a noticeable feature in the docks, most of the stocks having last year's bloom on them, and from the dock offices right away down to centre yard only one bright pile is observable, a thing without precedent, and at this season of the year quite unknown in the history of the docks. Like everything else, the present evil state of trade will work its own cure, and sooner or later an improvement must come.

The tonnage taken out of the market, the lessened production at the loading places, with the large increase in the colonial trade, will afford chance of working off a good deal of the present burdensome stock, and bring the demand rather more in proportion to the supply; but when will all this culminate? that is the the question. While the remedy is in operation trade still remains prostrate, and the convalescence, we fear, will be very gradual when the recovery sets in.

It seems an anomaly all these new enterprises while the trade of the nation is falling off, and it is a problem difficult of solution, how it comes about that new docks on a gigantic scale are built, while those that have the advantage of locality and priority find their profits daily diminishing through loss of trade. What to do with the big docks recently completed, and which were to be such an immense boon to the port, is likely to become the next question.

There is one use they may be turned to that will save the reproach of having wasted the money expended in their construction, and for which they are very suitable, make them into a great naval dock. Expecting them to be filled with shipping while on all sides vessels are being laid up for want of employment, is hanging to a straw; like many other big speculations that were undertaken too soon, they must pay the penalty.

Last year was notably a bad one for trade, but the import was much better maintained than appears to be likely this season. Buyers were more plentiful, and trade in a much more settled state. The bad feature of the present time is the great want of confidence that pervades the community, and for which there is, unfortunately, too much foundation.— *Timber Trades Journal.*

THE Rathbun Company have purchased more wharf property in Oswego. They have storage room now for 15,000,000 feet of lumber.

PEOPLE WHO LIVE IN TREES.

We read wonderful stories of the immense trees one sees in California, but they sink into insignificance beside the Baobab tree, which I found in many parts of Western Africa, principally just south of the desert of Sahara. It is not distinguished for its extraordinary height, which rarely reaches over one hundred feet, but it is the most imposing and magnificent of African trees; many, it is said, are over one hundred feet in circumference, rising like a dwarf tower from twenty to thirty feet, and then throwing out branches like a miniature forest to a distance of one hundred feet, the extremities of the branches bending toward the ground. The botanical name of the curious tree in Adansonia digitata. The first in honour of its discoverer, Adanson, and the second, descriptive of its five parted leaf. The leaves are large, abundant and of a dark green colour divided into five radiating lanceolate leaflets. The flowers are large and white, hanging to peduncles of a yard in length which form a striking contrast to the leaves. The fruit is a soft, pulpy, dry substance about the size of a citron, inclosed in a long green pod the pulp between the seeds tastes like cream of tartar, and this pulp, as well as the pressed juice from the leaves, is used by the native Africans for flavouring their food. The juice is greatly relished as a beverage, and is considered a remedy in putrid fevers and many other diseases.

The Baobab is said to obtain a much greater age than any other tree, thousands of years being hazarded as the term of life of some specimens. It has extraordinary vitality; the bark which is regularly stripped off to be made into ropes, nets for fishing, trapping and native clothing, speedily grow again. No external injury not even fire, can destroy it from without; nor can it be hurt from within, as specimens have been found in full splendour, with the inside of of the trunk hollowed out into a chamber which could hold a score of people. One-half of the trunk may be cut or burned away—even the tree may be cut down, and while lying on the ground so long as there is the slightest connection with the roots it will grow and yield fruit. It dies from a very peculiar disease—a softening of its woody structure, and it falls by its own weight, a mass of ruins. The native villages are generally built around one of these immense trees, and under its far spreading branches, which form an agreeable shelter from the sun, is the Kotla, or place of assemblage, where all the public business of the tribe is transacted. The circuit described by the extremities of the lowermost range of branches is fenced around, so that none but those privileged to attend these meetings can intrude. In thinly populated districts of Southern and Central Africa, where lions, leopards and hyenas abound, the natives live in huts like beehives, firmly fixed among the large branches of the tree. On the approach of night they ascend to their huts by means of rude ladders, while the lions roar about their camp fires until the approach of day drives them to their lairs. As many as thirty families have been found to occupy a single tree. In many instances, natives who till the ground at any great distance from their tribe build these huts for nightly accommodation. In travelling through the country one frequently sees these trees alive with baboons and other kinds of the monkey tribe, busy in collecting the fruit and indulging in ceaseless gambols and chatter; for this reason it is commonly called the monkey bread tree. When the tree is not occupied as a habitation, the hollow trunk is used by the natives as a sepulchre for executed criminals—the law of the people denying them the right of burial—inside of which the bodies dry up and to a great extent resemble mummies. To European this tree is a marvel; coming across one inhabited by monkeys, it is extremely dangerous to shoot any unless one is with a party, for, if any are wounded, the whole colony take up the battle, and more than once I found that a retreat in short order was necessary.

My first experience of living in the air was very novel; the first night was one continual growl, roar, etc., so much so that I found it an impossibillity to sleep: finally the most horrible squeal broke out directly under me; it was very dark and being unable to see any objects but knowing something was wrong, I threw a can

containing water out of the hut door down in the direction from where the noise proceeded, but with little results, though the squealing became fainter; in the morning a small pig we had been keeping and put in a pen over night was missing. What took him nobody ever knew, as no trace remained; it only went to illustrate how we might have fared had we been camping on the ground. Having found a friendly tribe who placed their huts at our disposal, this saved us much anxiety of mind, and a few days later a number of their men accompanied us a considerable distance to the south not, however, going outside the pecincts of their country.

This wonderful tree is also found in India, and is there held in great veneration by some natives, so much so that anyone guilty of cutting the trees down is regarded by them with great abhorrence.—*American Agriculturist.*

SLIPPERY ELM.

There is a number of the elm family, the slippery elm (*Ulmus fulva*), that is seldom mentioned, although it is widely diffused all over North America, so far as we know, and is one of the best known of all the elm family. Its distinguishing characteristics, leaves broader, slightly inclined to silver hairiness underneath, wood coarser, firmer and more durable, and its foliage more umbrageous than the other varieties. We have never read a description of this tree and have never known it to be used for any purpose except fence rails, journal boxes, bushing for old time grist-mill spindles, cogs, rounds for "trundle heads" and such like. It is not used for any purpose now as we are aware of, and its growing scarcity will probably prevent its utilization for any purpose. The inner bark contains a very large amount of mucilage that is peculiarly soothing as, an emolient to swellings colds, bronchial and a great many other affections. The demand for the bark for medical purposes has almost entirely destroyed the slippery elm in thickly settled sections, and it is now kept for sale in the drug stores. Another cause which operated greatly to destroy this tree in the South was the great fondness of the children and negroes for its inner bark for chewing purposes. Thirty or forty years ago it would have been hard to find a small boy black or white, in Middle Tennessee who didn't have a few pieces of Slippery elm bark about him. It is certainly wholesome and probably nutritious, and in this respect far superior to various chewing gums of to-day.—*Southern Lumberman.*

ASH FOR CARRIAGE WORK.

An authority on carriage building says, in seasoning ash, we must take into consideration the large quantities used in carriage building, also the bulky nature of the timber whilst in its unconverted state, which compels us to use the simplest and readiest means in seasoning without sacrificing the qualities of the timber. The best way to do this is to convert the bulk into plank as soon as possible, and, whilst seasoning to assist nature in every way without forcing, and when nearly seasoned to cut into sizes fit for use. For instance, brougham pillars brackets, beds for under-carriages, and especially the heavier sizes. Before stacking ash, it is well to see the character of the timber, for if it is of a twisted nature it must be stecked one plank over the other, if not it may be placed on edge or on end, which will season it better and quicker. Besides being used in framing and such parts, it is largely used for bent work, such as steamed rims for wheels, futchels for carriages, top-sails in white chapels segment pieces in brougham fronts. But the action of steam in dissolving the gummy matters within it deprives it of much of its native toughness.—*Timber Trades Journal.*

MURDER ON THE GATINEAU.

OTTAWA, July 7.—A resident of the Upper Gatineau, who arrived in the city last night, gives the following information of a fatal affray which occurred in that region a few days ago between two lumber drivers, who were coming down the river. Some little difficulty had taken place between them over the work which each man should do, which finally led to blows and a rattling fight ensued. One of the men by the name of Joseph Phillips was getting the worst of the encounter, when he seized a handspike that was lying near by and struck his opponent, whose name is not known, a terrible blow over the left shoulder, breaking the collar bone and felling him to the ground. He was about to repeat the blow when the the wounded man putting his right hand into his rear pocket pulled a self cocking revolver and shot at Phillips. The ball entered just above the heart. Phillips died instantly. The murderer is in a precarious condition. The affair took place some sixteen miles from Gilmour's camp.

ATTACKED BY CATTLE.

On Saturday last, while "Bill" Mackay, of Apsley one of Kirby's gang on the drive, in the employ of the Rathburn Company, was in search of water on Hickory island, in the Trent river, he was attacked by a vicious bull. Thinking there would be little virtue in patting the animal on the neck at such a time, Mackay ran away from him and sought refuge in a small tree. The bull followed him and coming up to him began a loud bellow which attracted other cattle that were feeding on the island, and the whole herd numbering about forty, rushed to the spot and roared and galloped about like wild animals. Mackay shouted to his comrades, ten in number who comprehending at once the position in which he was placed, hastened to his help, and with pike-poles, and levers, and shouts and dog-barking, managed after a fierce fight to route the furious herd. Then they entered into a hot conflict with the bull, and he was soon vanquished. William dosen't know much about fear, but he got a fright when the cattle surrounded him which he will not soon forget.—*Campbel ford Herald*

LUMBER DRIVES.

EAU CLAIRE, Wis., July 7.—The drives in the lumber region, of which the Chippewa river and its tributaries are the waterways, have arrived at a stage where accurate figures can be furnished. On the Eau Claire and its tributaries 50,000,000 feet of logs were cut last winter, and 10,000,000 feet of old logs had been left over from the previou season Of this 60,000,000 feet old and new logs, about 45,000,000 have been driven out. From the upper Chippawa and its tributaries about 45,000,000 feet have been driven from Little Falls dam above Chippawa Falls The total of all logs this spring as named at the close of the logging season 750.000 000 feet. Of the 315,000,000 yet left on the Chippewa and all tributaries including the Eau Claire, a large proportion will yet be brought down. All the saw mills in the valley have had a full supply of logs. Driving will go on until late in the fall.

Forest Fires.

MILWAUKEE, July 8.—At a fire at Romeo eleven dwelling houses, one boarding-house, two warehouses, a sawmill, a planing mill, eight million feet of lumber and five million shingles were burned. Loss $130,000; insurance $50,000. About 60 men are thrown out of employment and 27 families left destitute. The woods south of Romes are all on fire, men and women are out fighting the flames. Van Hosker's mill and buildings have been destroyed. Loss, $100,000.

THE Witby Ont., *Gazette* says:—A railway official was in town on Friday making arrangements to repair and extend the side lines of the railway at Whitby and Port Whitby so as to give better accommodation to the Georgian Bay Lumber Company, who will begin in a few weeks to send at least 24,000,000 of feet of lumber to the port here for shipment over Lake Ontario. The Company shipped from here last fall, and many seem to have formed the impression that the lumber trade would return to Port Hope. It seems that the reason that the shipment did not begin earlier is because the company never move the lumber until the middle of July. It is expected that twenty hands at least will be employed at the docks until the close of navigation.

SUBSCRIBE for the CANADA LUMBERMAN.

FOREST FIRES.

CADILLAC, Mich., July 7.—Fires in the wood are burning fiercely, and every one is fighting the flames. The greatest danger seems to be in from the north, and the wind is blowing strong from that way. Herring, a small town north of here, is reported in great danger. The van eer and pannel mill a short distance from town is in immediate danger.

EAST TAWAS, Mich., July 7.—Forest fires are raging here It is reported that large quantities of railway ties are burning along the line of the Detroit, Bay City and Alpena Railroad The crops are drying up.

ST. IGNANCE, Mich., July 7.—The forest fires have nearly burned themselves out after doing an immense amount of damage. The loss is placed at $75,000, besides damage to standing timber which cannot be estimated. No more damage is apprehended. All the crops in this region are parched for want of rain, and a great many fields look as though fire had run through them. It has been excessively hot and dry for two weeks, and the farmers are praying for rain.

SPENCER, Wis., July 7.—The entire hamlet of Romeo was burned this afternoon, including the saw mill, plaining mill, five million feet of lumber, and the store, boarding house and dwelling of Wm. Van Hosear; loss, $150,000. The woods are on fire and further particulars cannot be obtained.

SHELTER BELTS.

THE annual Forestry Report of Mr. R. W. Phipps is deserving of careful perusal and consideration. The whole subject is one of great and growing importance but there is one branch of it that is particularly and especially important to our farmers, and through them indirectly to the whole community which must be effected by the well-being of the greatest industry of the country. This point, that of "shelter belts" or plantations to act as screens, is thoroughly discussed by Mr. Phipps in his report. He shows plainly the great benefit that may be derived in various ways from such belts, by shelter from the cold northerly winds, by retention of the snow to protect the young crops in winter, by shade for stock in the summer heats, &c. Details are given to show how such plantation can by successfully established and at little cost. Statistics prove that besides their beneficial effects, a pecuniary return can be obtained from these timber belts, even at an early date, sufficient to compensate the farmer for his expense and trouble. Even they who would argue that a crop of trees would give too slow a return of which they could not hope to reap the advantage, may be convinced that there would be a more speedy benefit. Any one wishing to sell his farm would find that in a very few years he could obtain an additional price that would far overbalance the cost of such an improvement. If he wishes to retain his farm for the benefit of his sons, he could hardly find a better way of increasing the value of the property he would have to leave to them. But in fact unless far advanced in years he might well look forward to obtaining himself a very handsome profit on his expenditure in the indirect form of better crops and the direct form of a return from the plantation itself.

Mr. Phipps makes all this plain in such full detail that we would strongly advise our farmers to read his report for themselves. It can be obtained on application addressed to him at the Department of Agriculture, Toronto.

LOGS AND TIMBER.

The Minden *Echo* says:—Four saw log and one timber drive, all belonging to J. M. Irwin, Esq., of Peterborough, are now passing through this village. The saw log drives contains twenty thousand each, making a total eighty thousand logs, the greater part of the logs being 16 ft. long and are the largest and finest logs that have passed here for a number of years. The timber drive contains 1500 pieces of very choice waney timber. All of the timber and logs were made this past winter, in the townships of Eyre and Havelock under the management of Mr. Geo. S. Thompson, of Lindsay, who is also superintending the drives. There is a crew of twenty men on each drive, making a total of one hundred men. Mr. C. Austin is pusher off the first drive and that overgrown and well-known genial Irishman, Mr. P. Maher, commonly called "Paddy" pusher of the second, Mr. G. Johnson, the third, Mr. Thos. Preston, the fourth, and on the last is the easy going, never in a rush, Capt. V. H. Anderson, of Bobcaygeon, who was such a favorite of General Wolseley's that he sent the captain here home from Egypt covered with medals and glory."

THE NORTH SHORE.

SUDBURY, Ont., July 10.—Atcive work is going on among the mines at this point. Mr. Ritchie, of Ohio, purchased a quantity of mineral land and has 36 men employed in developing it. Some work has also been done on the Beaver mine, north of the main line, with very satisfactory results. From the Stobie mine a quantity of ore is being shipped and a practical test of its value will thus be obtained. The Murray, Faulkner, and McConnell mines are not yet in operation, and two new fines have been made this season whose value has not yet been settled. Some work has also been done on the Eyre mine, but no shipments have yet been made from any of them.

Work on the Algoma branch of the C. P. R. has been resumed, and the engine goes down ten miles already. The lumbering operations of the C. P. R. seem very successful. A large quantity of wood, &c., has been got out by the settlers, and two fire inspectors traverse the country to guard against forest fires. A Gospel tent is pitched near the station, and two young men hold religious services every evening, and a Sabbath school and Bible class meet in the court house on Sundays. Settlement on the adjoining lands has begun, and society is gradually settling down from the construction of a line through the wilderness to a country village with a tributary rural population. The fly season is nearly over and the berry picking has fairly begun. Strawberries, blueberries and currants are now in season, and raspberries are on the way.—*Mail.*

Bush Fires.

SUTTON, Ont., July 10.—Advices from Ravensboe, York Co., state that bush fires are raging near the Sutton Branch of the Midland Railway. The woods are on fire for miles around that village, and it is in great danger of being destroyed. Scores of settlers have deserted their homes, and are hurrying with their effects away from the bush. The loss to settlers will be very great,

CHICAGO, July 7.—The "bull" movement in wheat was continued yesterday. The sudden change to a season of intense activity from one of settled dulness caused hundreds of members to regret the rashness that caused them to seek a Summer respite from an afternoon session. Not a few express regret that some power was not vested in the President at once to re-establish an afternoon session. There is on every hand the utmost confidence that the "bull" movement has come to stay, and that the tendency will be rapidly upwards. It is reported that the bucket shops are 16,500,000 bushels short to their customers.

For Sale at a Sacrifice.

A SAW MILL

SITUATED in excellent locality with an attachment of 200 acres of well timbered land through which flows the Nottawasaga river. Best water privilege in Simcoe. Capacity of mill eight thousand feet daily. Enough custom work to pay running expenses. Satisfactory reasons for selling, Box 60, Alliston, Ont. 2t.13

Wanted.

THREE HUNDRED THOUSAND feet of dry inch basswood culls.

BELDEN & McDOWELL,
Syracuse, N. Y.

3t.14

NORWAY PINE.

Until recent years Norway pine in Michigan was regarded as not of much value. It was esteemed by lumbermen about as hemlock is now. In lumbering operations hard pine was discarded and only the soft variety cut for the market. Within recent years, and since the demand for all kinds of forest products has become colossal, Norway pine has gradually come into use in the form of dimension, until now there is a large demand for it. All around lake Michigan, and on the Huron shore, Norway is coming down to the mills in increasing quantity year by year. When once to the lakeside, vessels easily transport it to to the great markets. In the large cities, like Chicago, Milwaukee, Detroit, Toledo, Cleveland and Buffalo, large quantities of Norway pine are consumed in local building operations. It has become a favorite in heavy buildings, in the shape of dimension, on account of its strength. In this city, where more dimension is used than in any other west of Philadelphia, probably the larger portion is Norway pine. It mainly comes from east shore of lake Michigan, though numerous cargoes arrive every season from lake Huron ports. The demand in this city is on the increase, and will be as the city and suburbs grow. It is also shipped to near-by points, but for long distance shipment it is not liked by the wholesale dealers, though some of it, when bone dry, is worked into bills ordered for territory beyond the Mississippi.

It is estimated by a competent judge, who has for fifteen or twenty years been familiar with the timber resources of every county in the lower peninsula of Michigan, that about one-third of the standing pine in that part of the state is Norway. Much of this is of the sapling variety, and unfit for anything but common, short and slim jim piece stuff. Heavy timbers and car sills must be sawn from the larger and more ancient growth. Of late years, in operations on the older streams, the policy of clean cutting off the land logged has been pursued. This takes in the Norway along with the white pine, and necessarily includes sapling as well as ancient growths.

Of late years the demand for Norway car sills has become a prominent feature of the mill business in the interior of the state, and particularly with the mills scattered along the lines of railroad. But this demand fluctuates with the conditions of the times and the varying prosperity of the railroads. With the decline of construction which began in 1883, and emphatically after the collapse of the stock market that followed the Grant & Ward failure in May, 1884, there came a falling off in the car sill requirement. Rolling stock building fell to a minimum, so that the call for car sills was slow and scattering. Railroad mills suffered in consequence. But with the measure of revival in railroad matters that began to be manifest early last fall, came increased inquiry for car sills. At first it was fitful and cautious. Mill operators, that occasionally got a nibble of an order, sold the stuff cheap, and dared not indulge much confidence in the outlook. At first they were willing to contract heavily at $7.75 a thousand. In October or November they would have been glad to contract all they could have sawed for months at $8.50 to $8.75 a thousand. In December an entire mill cut at Cadillac could have been obtained $10.40, at the mill, and could have been delivered in this city at $13 to $13.50 a thousand. Two or three months latter dealers were mentally clubbing themselves because they did not close bargains at those figures, for prices went up to $13 at the mill and $16 delivered in this city or contiguous points. In fact, before navigation opened in the spring, orders were placed in this city at $19 a thousand. During the season of navigation prices are modified and kept steady by reason of low lake freight rates. Stuff cut inland twenty or thirty miles, or nearer, is run to a lake port and reshipped at rates lower than by an all-rail haul.

It is a matter worth inquiring about to know why car sills car sell delivered at $16 a thousand, while Norway short, heavy timbers, up to 12x12 inches in diameter, have to beg for $10.50 a thousand. The answer is, simply because car sills can never be kept in stock, or put on the open market; they have to be sawed to specification. And specification in the matter of car sills is of great variety, though all are on a basis of 4¼x8¼ to 6x8 inches in cross section, but they vary in fractions of an inch, and possibly an entire inch in isolated cases, above the initial dimension. No mill operator can saw and pile up car sills and wait for a buyer. No buyer for a car manufactory can contract ahead of the work actually in shop. Each order for cars is accompanied by specifications as to the size of the sills. When these are ascertained, the order is sent to the mill. If a car works were mortally certain of having a contract to build a million cars, not an order for a car sill could be given until the specifications had been received by the master builder, not even if lumber were on the jump upward in price three points at a jump.

Hence we have the remarkable phase of the car sill trade that has been witnessed within the past nine months. Last August nobody knew anything about car sills beyond the fact that there was no call for them. In September there was a whif of demand; in October, a gentle breeze; in November, a fair wind; and after January 1st, a stiff gale. Since the opening of navigation and the strikes in May, the demand has slowed down a little, but it is now by no means dead, or dealers would not be able to get $16 a thousand for them, while other forms of stock dimension can be had by the cargo, and much of it just as good timber, for $9 to $10 a thousand.

Now why did the car builders have to give $17 to $19 a thousand for car sills in February and March last, when the mills would have been glad to have sawed them by the million in August before for $7.50, and delivered them for $10 a thousand? Simply because the car builders, though they anticipated a demand for cars, could not place orders for sills until orders and specifications for cars were in their hands.

The competition between Norway and southern pine car sills is a matter of some interest. In the item of strength the yellow pine had the lead. But, as a dealer in this city remarked, mere superiority of strength does not always win. A car sill need not necessarily outlast the other portions of the car. In a smash-up a yellow pine sill would break as well as a Norway sill. Cost has something to do in determining the purchase of sills. Yellow pine may make a superior support to a car, but where Norway is good enough, and about $8 a thousand cheaper, that settles it with many builders and buyers.—*Northwestern Lumberman.*

CALIFORNIA FORESTS.

A special edition of the San Jose, Cal., *Mercury*, an excellent specimen of newspaper enterprise, containing a description of the principal features and industries of the state, gives the following in regard to the forests:—

THE REDWOODS.

Eastern tourists find the redwoods in the vicinity of San Jose the most convenient to visit. As it is the only tree of its kind in the world, and the California coast the only place where it grows, our visitors will doubtless wish to know something about it. It is essentially the product of a moist climate, and is practically limited to such portions of the coast range as are composed of or covered by the sandstone of the petroleum formation. In Santa Cruz, Monterey and Santa Clara counties the territory producing this valuable tree is only from three to eight miles wide. It grows in clusters and is not found, like the pine and fir, in forests of a uniform density. Consequently, many portions of the redwood territory contain little or none of the timber which grows most plentifully along the deep, moist ravines. The redwood forests were a wonder to the first immigrants, who had been accustomed to think a tree three feet in diameter a giant, and one twice that a fable, to be told in the same breadth as one of Baron Monchausen's stories. When they found trees twelve or fifteen feet in diameter, with a trunk towering a hundred feet high, without a limb, their stories were hardly believed and tested the credulity of our eastern friends, until overshadowed by the discoveries of their relative, the Sequoia gigantea of the Sierra Nevadas.

Notwithstanding the beauty of the forest, the settlers proceeded to chop them down with the same eagerness that they would shoot a seven pronged buck or a stately elk, until one is about as scarce as the other;—though the new railroad recently built from San Jose to Boulder Creek reaches a virgin tract of redwoods. Marvellous stories are told of the amount of lumber obtained from one of these giants. One man in the vicinity of Saratoga built a house and barn and fenced in forty acres with a high rail fence from a single tree. It was common to split straight boards twelve feet long, a foot wide and a half inch thick, which could be easily dressed into siding for a house. It was not uncommon to cut 75,000 feet of plank from one tree. Two hundred thousand shingles, or "shakes," were often made from one trunk. When a tree failed to split freely, it was left to be destroyed by fires, which were thoughtlessly kindled by nearly all who worked in the forests in early days, the victims of fire being as numerous as those of the axe.

METHOD OF LUMBERING.

At first the destruction of the forests was limited to such portions as was accessible to waggons, but as the demand for lumber increased and railroads facilitated the carrying of lumber to distant points, new methods were invented which made it comparatively easy to strip the ravines and mountains to the very heads. This is accomplished by what is called a skid road. As this is in universal use from the most southern point of the redwoods in Monterey and Santa Clara counties to Puget Sound, our readers will be interested in a description of it. A mill site is selected as near the redwood groves as the nature of the ground will permit the building of a waggon road, the place being generally where several wooded ravines converge together. The waggon road is sometimes very expensive, being carried across rocky canyons, or around steep side hills involving the cutting away of huge redwood roots or the blasting out of hard ledges of rock. Some of these roads are built on declivities where "getting off the grade" means a rough and tumble descent hundreds of feet into a rocky gulch below. The mill being located, then commences the building of a skid road up the ravine to be first worked out. A road eight or ten feet wide is made with a grade as uniform as the ground permits. Sometimes the roadway has to be raised eight, ten, or perhaps fifteen feet, with log pens filled with earth. After the grade is completed the road is laid with timbers resembling railway ties, two or three feet apart, and sunk into the ground the depth of the stick. At either end the ties or timbers are held in place by braces extending from one to the other, locked in by tenons and corresponding notches. Without these braces the first log coming down the road would be certain to leave it in ruins; with them a road will bear the transporation of logs an entire season, or until the gulch is exhausted of timber. When finished the road, with its cross-timbers just above the ground, resembles a winding stairway, and the dense shade of the overhanging trees gives it a romantic and enchanting appearance.

WORK REQUIRING SKILL.

A trip up the stairway a half-mile or less to the scene of active operations takes the romance out of the scene. Great trees are being felled, sawed in proper lengths, and tumbled or slid down to the roadway. Generally the bark is removed from the logs to facilitate their sliding. In case the road is steep it may be omitted. On a flat road the trees must not only be pelled, but the skids must be greased to facilitate the sliding of the log train, for several are fastened together by dogs and chains to make an even run, one log pulling its neighbor along or holding it back, as the case may be. A "bull-whacker," who has worked his team of four yoke of cattle up these stairs with his terrible bunch of braided thongs, now hitches to the train and starts his team. If the road is well constructed and he has judged correctly of the force of gravity and the resisting friction, he engineers the train safely to the mill. If he thinks the log will slide and overtake his team, he puts a chain around some of them, making what he calls a rough lock. If the train is too heavy he detaches some of the logs, so the cattle can pull the remaining part. It requires a great deal of experience and good judgment to "gulch" logs. Sometimes with all due caution a train of logs will start into rapid motion down the incline. Then the only way to save the team is to lash them into a run to keep them before the logs. If overtaken the team is likely to be maimed, crushed or killed by being dragged over the rough load. A good teamester, who can gulch logs without injury to his cattle, gets the highest wages. When an ox is injured it is slaughtered and dressed for beef. Many of the logs are so large that they have to be blasted before they can be got into the mill. A twelve-foot plank is a useless thing, except for a sample of California productions, and withal is very expensive. Very little lumber is wanted more than two feet wide, so when a huge log is drawn to the mill it is halved or quartered to reduce it to workable proportions.

TIMBER ANNUALLY CUT.

The United States commissioners of Forestry in 1880 estimated the annual destruction of timber as 186,635,000 feet of lumber. This includes all the mills in the redwoods of California. The amount of timber left on the Mountains around Santa Cruz was estimated at 1,555,000,000 feet. This is probably a low figure, as the "great basin" (so called), fifteen miles long and six miles wide, from its inaccessible situation has not been touched. Much of it is estimated as yielding 1,000,000 feet to the acre, and all of it is as well or better wooded than the portions already cut over. The companies now working in the redwoods in the vicinity of Santa Cruz, with the approximate quantities cut annually, are as follows:

Mills	*Feet*
Loma Prieta	5,000,000
Hptos mill	3 000,000
Ryder and Co	2,500,000
Olive & Foster	1,500,000
Grover & Co., two mills	5,000,000
Union Mill and Lumber Co	3,000,000
E. B Morrill	2 500,000
S. H. Chase & Co	1,000,000
Pacific Manufacturing Co	2 500,000
Harmon Brothers	2,000,000
S. C. V. M & L. Co	4,000,000
Glenwood Lumber Co	1,000,000
Charles McKlernan Co	1,500,000
Whitehurst & Hodges	2,500,000
Total per year	36,500,000

In addition to this must be considered the timber cut for fuel and mining purposes. The Santa Clara Valley Milling and Lumber Company take out of the Santa Cruz mountains the equivalent of their sawed lumber in wood and hewed timbers. Every road leading to the redwoods is thronged with wood teams on account of parties not mentioned in the above enumeration, enough to swell the whole annual consumption to at least 50,000,000 feet of timber from the Santa Cruz mountains alone.

REPRODUCTION OF THE FORESTS.

The redwood, unlike all other conifers, propagates itself principally by suckers from the parent stem. When a patriarch dies a thousand young trees, so to speak, spring from his loins, the most vigorous surviving. Nearly every cluster of tree is arranged in a circle, the diameter being sometimes as much as forty feet, indidating the former existence of much larger trees than the present, perhaps equal to the sequoia of the Sierria Nevada, where millions of young pines succeeded the scattering trees destroyed by the miners often numbering hundreds to the square rod. If any care were exercised in the preservation of the redwoods not large enough for lumber, the present quantity of growing timber might be maintained, but the lumbermen make it a point to "work the claim out," cutting the timber all away in one season, as the skid road is usually destroyed by the winter rains. A few owners are preserving the trees not only for their intrinsic value, but for the benefit they confer on the country by inducing rainfall, preserving the springs, etc. It would be well if more of such men would become proprietors in the redwoods.

THE "gate" in the Conger lumber Co.'s mill at Parry Sound, and the mill was partially closed for some days.

CAPACITY CIRCULAR SAWS.

The following is from Emerson, Smith & Co's hand book for sawyers: "How much lumber to each horse-power will a circular saw mill cut? is often asked. A horse power is that which will raise 33,000 pounds, one foot high per minute; 12 superficial feet of heating surface on a boiler, is supposed under ordinary circumstances, to generate steam for one horse-power. In a large mill of thirty horse-power capacity, each horse-power ought to manufacture 1,000 feet of lumber; but in smaller mills, proportionately less. A ten horse-power ought to manufacture or saw 5,000 feet per 12 hours. Mills of larger power than 30 to 40 horse, ought and generally do, overrun 1,000 feet to the horse. The friction of a small mill being proportionately greater than that of a larger mill, the leverage upon circular saws of same size being the same in each, and the power required to keep up the momentum being the same in both, is the cause of this dis proportion in capacity. In very hard timber 16 teeth to every inch of feed is a suitable number. And in soft timber, 8 teeth, and in medium or mixed timber, hard and soft, 12 teeth to every inch of feed is plenty. The above rule applies to saws not thinner than No. 8 gauge. Saws No. 8 gauge and thinner require proportionately more teeth; thicker than No. 6 gauge require proportionately less teeth.

Each tooth in a circular saw, No. 9 gauge, and thicker, that is used on a board mill, will cut on an average from 500 to 1,000 feet of lumber per day and consume from one-half to a full horse power.

A SAW WITHOUT TEETH.

A saw without teeth that will cut steel rail in two minutes is in operation at the Central Hudson shops in Greenbush, N. Y. The saw is run by a ninety horse power engine, more power than is required to run all the other machinery in the shops, and is 38 inches in diameter and $\frac{3}{8}$ of an inch thick at the edge. The disk is made of Bessemer steel and runs at a very high rate of speed. While in the operation a Band of five encircles the saw, and the many sparks flying from the revolving disk resembles a display of pyrotechnics. To keep the saw cool and to prevent it from cracking, a tank of water is placed above the machine from which a small stream runs down and drops on the saw while in motion. By this plan one saw will cut nearly 3,000 rails before it is worn out. A steel rail after about six years' constant use, becomes battered at the ends, and by cutting them off the rails can be used in branch and switch tracks. Rails are cut by this machine for the whole line of the Central Hudson railroad. The saw while cutting, bears down hard on the rail, the end of which is left as smooth as the bottom of a flat-iron. One remarkable thing about the machine is that the chips cut from the rail fly back under the the saw with such force as to form a solid piece of steel nearly as firm as the rail itself.

A BIG POPLAR.

The Cornersville (Tenn.) correspondent of the Marshall *Gazette*, writting to that paper says: "The big poplar tree in Dogget's cove has been a noted landmark for nearly 70 years, and is more talked of, perhaps, than any tree in the state. Its size has from time to time been given all the way from 29 to 33 feet in circumference. Passing that way recently I went to the tree, viewed it and measured it carefully. The bark, which was three or four inches thick, had most of it fallen off, and I found it to be 26 feet and, perhaps two inches in circumference, clear of any spurs. It has the appearance of being slightly hollow, and is in dying condition. The trunk is fully fifty feet to the first limb. It is a monster tree and there is a vast amount of good timber in it, but it will soon be ruined. This section has always been noted for its large fine trees. A beech tree standing on the old county line, about five miles north-west from this place, and which was blown down some six or eight years ago, had a perfectly straight trunk of nearly 60 feet, clear of limbs, and was 5 feet 5 inches in diameter, and in consequence, difficult and hard to handle."

BRITISH COLUMBIA saw mills are said to be kept very busy, and are scarcely able to keep up with the orders that are coming in.

WISCONSIN LOGS.

A careful inquiry among lumbermen leads to the discovery that about two-thirds of the log crop is hung up, and cannot be delivered at the booms without a freshet. Of the 200 000,000 feet of logs banked on the Wisconsin and its tributaries north of the city, less than 70,000,000 feet have as yet reached the booms. About 35,000,000 feet are laid up in the Tomahawk, having made all stages of progress from the source to the mouth. The remainder, about 95,000,000 feet, are in the main river between Eagle and Stevens Point. About ten days ago a jam formed on Grandfather, which, from last reports, remains unbroken. This caused an abandonment of the Tomahawk drive, and a cessation of labor by the association. The drive for the season is virtually ended, and unless there comes a freshet not a log can be moved. Quite a number of the mills have hardly enough stock for a two weeks' run. The weather during May was unprecedentedly dry, and all the driving streams have shrunken and dried up much earlier than usual. Add to the dry weather the forest fires which have burned many thousand acres of pine, and the outlook for lumbermen and timber owners is not rosy. Indeed, it is a matter of serious moment to the entire people of this valley. Without logs the mills will be closed. This means hard times for laborers and merchants and will bring distress to many a family. It is beyond all human power to afford a remedy, and it behooves the laborers and workingmen to make hay while the sun shines. Let them practice economy, act soberly and be industrious.— *Wausau Central.*

A BENEFIT EITHER WAY.

American owners of timber limits in Canada acquired them with the intention of taking over the logs and manufacturing them in Michigan. The increase of the export duty to $2 per thousand feet makes this design difficult of execution. It is probable that some logs will be taken over, in which case the Canadian treasury will get the benefit of the extra duty; and some mills may be erected by Americans on Canadian streams, by which the manufacture of lumber here will be extended. Owners of Canadian limits, residents on the other side, are reported to be about to try both experiments. One of these limit holders has sold at a good profit. The future state of the American market for lumber will probably determine whether logs will hereafter be shipped to the States in large quantities or manufactured here. Meanwhile there seems to be a disposition to prepare for both contingencies; and if expensive mills be once put up in Canada, the motive to work them, while any profit can be made, will keep them in operation.— *Monetary Times.*

THE Monetary *Times* says:—There has been shipped by the Collin's Inlet Lumber Co., so far this season, to outside markets, some two and a half million feet of lumber, leaving about the same quantity still in the yard. We learn from the Manitoulin *Expositor* that the drives finished last Saturday. Cutting commenced in May and will be continued till October. About 75 men are employed by the company. The same journal states that the largest load of timber that ever left Canadian shores on on bottom was contained in the barge L. Hotchkiss. It was consigned to the Michael's Bay Lumbering Company at the south side of the Manitoulin Island on the 18th, and was composed of 18,000 ties, 12,000 pavement posts and 500 telegraph poles, a number of the latter being 55 feet long and two feet at the butt, the whole measuring 18 feet from the deck. This company has shipped, or will ship this year, half a million pieces in ties and posts, a million eet of lumber, and about 15,000 telegraph poles. Shipments are expected to be finished about the end of October.

DURING 1885 there was shipped from California to Australia 5,950,000 feet of redwood pine. This, in one way, indicates the possibilities of Canadian trade on the Pacific ocean when the line of steamers are running from the terminus of the C. P. R.

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do	*May 11th,*	*do*	*September 7th,*
do	*June 8th,*	*do*	*October 5th,*
do	*July 13th,*	*do*	*November 2nd,*

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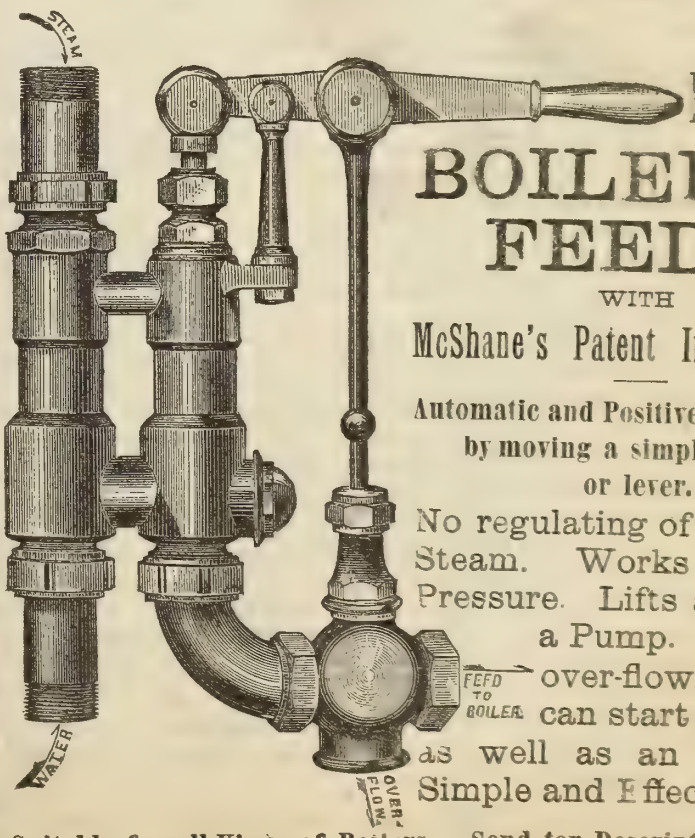

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ST. JOHN, N. B.

Market Reports.

TORONTO.

From Our Own Correspondent.

JULY 9.—Our local trade is decidedly brisk at present, to whatever part of the city we go to piles of lumber and bricks meet the eye, so that it might be easily credited that all the yards are doing a rattling business. Dry lumber of most kinds is difficult to obtain, what little there is in stock is held by the retail dealers chiefly. Dimension stuff, cut to order, is hard to procure in sufficient quantities to meet the immediate demands of the market. This is mainly owing to the fact that quite a number of mills are running on stocks for shipment, instead of bill stuff, on which they were mainly engaged last season, and the few mills now cutting to order get nearly their own price for bills, and to complicate matters the lumbermen acting on behalf of the Board of Trade have entered into what must be considered a foolish arrangement with the railroad companies, whereby lumber will in future be carried by measurement, instead of by weight, as hereto fore. The weak spot in the bargain is not in carrying by the M, but in the figures charged for the carriage. That figure will simply make a difference of nearly one dollar per M from all cardinal points to this city, and instead of any benefit accruing to the lumberman by this advance it is similarly swallowed up by the railroad companies. When the lumbermen, not connected with the Board of Trade, empowered the deputation, appointed by the said board, to act for them, it was generally understood that they the deputation would act for the general good of the entire lumber interest, it is now plain how fallacious that belief was. The blunder will prove a costly one to consumers and dealers alike. The answer to this will no doubt be that the wholesale dealer will now know exactly what his lumber will cost him landed at any point, and the consumer must foot the bill. This kind of argument will not hold water, inasmuch as any increase in the cost of the lumber to the consumer is only a tax for the benefit of the railroad corporations and a dead loss to all others interested.

Under this new departure, coupled with the facts before mentioned, all green bill stuff is likely to cost, the retailer and consumer alike, fully $2.00 per M above the present prices before the end of the season is reached.

Troubles seldom come singly. I mentioned in a former letter the trouble experienced by lumbermen, by reason of the constantly increasing annoyance to which dealers are subjected by the petty orders issued from day to day by the N. & N. W. R. R. Co. for the better conducting of their business as they term it. If a dealer wishes to alter the destination of any car from dock to local, another dollar must be added to the company's exchequer, and if wanted from local to dock the same amount must be paid; besides the numerous orders given from week to week regarding the shutting of cars. The whole matter has become perfectly bewildering, not merely to a tyro in the business, but also to many who have spent half a life time in R. R. yards. The trouble seems to originate through the clashing of two or more departments, one of which promulgates some particular order for the better guidance of the yard master, and some other officer issues some thing intended to be a great improvement on the former, until at last the yard master is as perfectly befogged as the lumberman is irrated. So the mill men may congratulate themselves on living in Paradise as compared with the men handling their cut at this end of the road.

All kinds of dry dressing and better lumber will now command ready sale here, also dry sawn lath, the latter in especially good demand. Shingles XXX also meet with ready sale. No advance in prices have taken place on the latter although our market is understocked.

Mill cull boards and scantling	$10 00
Shipping cull boards, promiscuous widths	12 00
" stocks	13 00
Scantling and joist, up to 16 ft	13 00
" " " 18 ft	14 00
" " " 20 ft	15 00
" " " 22 ft	16 00
" " 24 ft	17 00
" " " 26 ft	18 00
" " " 28 ft	19 00
" " " 30 ft	20 00
" " " 32 ft	21 00
" " " 34 ft	22 50@22 50
" " " 36 ft	24 00
" " " 38 ft	27 00
" " " 40 to 44 ft	30 00
Cutting up planks to dry	20 00@25 00
" boards "	20 00
ound dressing stocks	16 00@18 00
Picks Am. inspection	30 00
Three uppers, Am. inspection	35 00@40 00
B. M.	
1½-inch flooring, dressed	25 00@30 00
1½ " " rough	14 00@15 00
1¼ " " dressed	23 00@25 00
" " undressed	14 00
" " dressed	16 00@20 00
1 " " undressed	12 00@14 00
⅝ Beaded Sheeting, dressed	18 00@20 00
Clapboarding, dressed	12 50
XXX sawn shingles, ₩ M	2 75@ 2 90
Sawn Lath	2 25
Red oak	20 00@25 00
White "	25 00@30 00
Basswood, No. 1 & 2	18 00@20 00
Cherry, No. 1 & 2	50 00@60 00
White ash 1 & 2	25 00@30 00
Black ash 1 & 2	20 00@25 00

MONTREAL.

From Our Own Correspondent.

JULY 10.—Fine weather has been characteristic of the past fortnight, and trade upon the whole has been of a satisfactory volume. Contractors have been providing themselves with considerable quantities in anticipation of future requirements, and there are indications of a good movement throughout the summer. The good demand for carloads which marked the early part of this month has considerably fallen off, but the business at the yards has remained active. A steady feeling prevails in regard to prices. The export from the opening of navigation to the middle of this week embrace 619,316 pcs. deals and deal ends, 59,772 pcs boards, 7,049 pcs. battens and ends, to Europe, and 2,208,875 feet to South American ports.

The following are the quotations at the yards :—

Pine, 1st quality, ₩ M	$00 00@40 00
Pine 2nd " "	00 00@30 00
Pine, shipping culls, ₩ M	14 00@16 00
Pine 4th quality deals ₩ M	10 00@12 00
Pine, mill culls, ₩ M	8 00@10 00
Spruce, ₩M	10 00@13 00
Hemlock, ₩ M	9 00@10 00
Ash, run of log culls out, ₩ M	20 00@25 00
Bass, " " ₩ M	18 00@20 00
Oak, ₩ M	40 00@50 00
Walnut ₩ M	60 00 100 00
Cherry, ₩ M	80 00 100 00
Butternut, ₩ M	35 00@40 00
Birch, ₩ M	20 00@25 00
Hard Maple, ₩ M	25 00@30 00
Lath, ₩ M	1 50@ 0 00
Shingles, 1st, ₩ M	2 00@ 3 00
Shingles, 2nd, ₩ M	2 50@ 0 00

CORDWOOD.

Prices are steady.

The following are the quotations at the yards :—

Long Maple, per cord	$ 6 00@6 50
Long Birch "	6 00@0 00
Long Beech "	5 00@5 50
Tamarack "	5 00@0 00

OSWEGO, N.Y.

From Our Own Correspondent.

Three uppers	$42 00@46 00
Picking	32 00@35 00
Cutting up	24 00@26 00
Fine Common	22 00@25 00
Common	14 00@18 00
Culls	11 00@14 00
Mill run lots	16 00@22 00
Sidings, selected, 1 in	30 00@35 00
" 1½ in	32 00@36 00
Mill run, 1x10, 13 to 16 ft	16 00@21 00
Selected	21 00@24 00
Shippers	14 00@16 00
Mill run, 1¼x10	17 00@20 00
Selected	21 00@30 00
Shippers	14 00@16 00
Mill run, 1 & 1¼ in, strips	15 00@18 00
Selected	22 00@30 00
Culls	11 00@13 00
1x6 selected for clapboards	25 00@35 00
Shingles, XXX, 18 in. pine	3 10@ 3 50
XXX Cedar	2 75@ 3 00
Lath 1½, No 1	1 85@ 2 00
No 2	1 00@ 1 25
Ash, 1st & 2nd 1 to 4 in	16 00@20 00
Basswood, 1st & 2nd, 1 & 1¼ inch	18 00@20 00
" culls, " "	8 00@11 00

TONAWANDA.

CARGO LOTS—MICHIGAN INSPECTION.

Three uppers	$42 00@44 00
Common	18 00@24 00
Culls	10 00@13 00

CHICAGO.

The *Northwestern Lumberman* of July 10th says :—

BY THE CARGO.

Arrivals during the week have comprised a larger proportion of inch lumber than had characterized receipts previously. A slight check has been given to the forwarding of piece stuff, as the purpose on the part of the manufacturers and their agents is to dole out consignments no faster than the market requires. The ard men are not buying dimensions to a lavisht ydegree to pile for future use, though the curren demand absorbs all that is offered.

The demand for cargoes at present is rather more active than it was last week. Receipts of piece stuff having been graduated to the actual requirement, sales are readily made at the previously quoted price of $9 a thousand, unless in exceptional cases. If there are lower prices nobody will confess it. Either $9 for short green stuff is the basis of the market or else there is the solidest combination between the yard and commission men to keep shady that was ever known—on the part of the yard men for the purpose of its effect on yard prices, and on the part of the commission dealers as natural consequence. Until this imaginary impeachment is verified we shall have to accept surface indications. If the market remains as firm as it is now a little longer, the chief danger of a slump this season will have passed. Last year at this time short green dimension was quoted at $8 75 a thousand; so it will be seen that values this season have gained but a point over prices last year. In the third week of July last year the price of green piece stuff advanced 25 cents a thousand, so that on July 25 we quoted $9 as the outside figure Will prices take a similar course this season? is a question that now interests both buyer and seller.

A cargo of Norway dimension, mostly short, but having some long lengths in it, was sold this week for $9.25 a thousand. This shows a tendency to overreach quotations when the cargo is desirable. Separate lots of slim jim dimension sell from $10 to $11, according to the quality and sawing; 2x12 and 14, and 3x12 and 14 bring $11 to $12 a thousand.

There is a large call for railroad bridge and culvert timber. Short, heavy timbers for this purpose are in urgent request. Prices vary, determinable by size and contract conditions, being altogether outside quotable accuracy. It is important to know, however, that such stuff is wanted. A bill is out for the Sioux City line of the Chicago, Milwaukee & St. Paul road—a short branch—that calls for 4,000,000 feet, which shows how railroad building absorbs the product of the mills. The vast mileage of railroad that is now under construction will require more and more timber and lumber as the lines near completion.

There is nothing new to be said of shingles or lath. Both are sluggish goods, and it is hard work to realize quotations.

The following are current quotations of cargo prices :—

Dimension, short green	$ 9 00
Dimension, short dry	9 50@10 00
Boards and strips, No. 2	10 00 12 00
Boards and strips, medium	13 00 15 00
Selected	21 00 24 00
Boards and strips, No. 1	16 00 19 00
Shingles, standard	1 70 1 75
Shingles, extra	1 89 2 00
Shingles, cedar, standard	1 65 1 75
Shingles, cedar, extra	2 00
Lath, green	1 25
Lath, dry	1 40

AT THE YARDS.

There is prevalent the usual July moderation of trade, though the dealers inclined to forget that the demand is tame during midsummer, and to regard the present dullness as extraordinary. As a matter of fact there is still a fair movement, for the time of year, if the shipping and local demand are aggregated. Within the past two or three days, however, there has been increased complaint of a falling off of country orders, the shrinkage possibly resulting from the effect the wide-prevailing drought is having on western crops.

Receipts of lumber and shingles for the week ending July 8, as reported by the Lumberman's Exchange :—

	RECEIPTS. Lumber.	Shingles.
1886	48,404,000	22,792,000
1885	50,248,000	13,342,000

FROM JAN. 1, TO JULY 8, INCLUSIVE.

	RECEIPTS. Lumber.	Shingles.
1886	595,103,000	315,084,000
1885	571,237,000	206,838,000
Increase	23,866,000	108,246,000

STOCK ON HAND JULY 1.

Lumber & timber	327,201,436
Shingles	246,867,500
Lath	33,277,45
Pickets	2,029,109
Cedar posts	125,204

ALBANY.

Quotations a the yards are as follows :—

Pine, clear, ₩ M	$55 00@60 00
Pine, fourths	50 00@53 00
Pine, selects	42 00@47 00
Pine, good box	22 00@23 00
Pine, common box	13 00@15 00
Pine, 10-in. plank, each	00 45@00 47
Pine, 10-in. plank, culls, each	00 25@00 27
Pine boards, 10-in.	00 30@00 32
Pine, 10-in. boards, culls	00 18@00 20
Pine, 10-in. boards, 16 ft., ₩ M	28 00@32 00
Pine, 12-in. boards, 16 ft	28 00@32 00
Pine, 12-in. boards, 13 ft	28 00@00 00
Pine, 1¼ in. siding, select	40 00@43 00
Pine, 1½-in. siding, common	15 00@18 00
Pine, 1-in. siding, select	40 00@42 00
Pine, inch siding, common	13 00@15 00
Spruce, boards, each	00 00@00 16
Spruce, plank, 1½-in., each	00 00@00 20
Spruce, plank, 2-in., each	00 00@00 30
Spruce, wall strips, each	00 12@00 12
Hemlock, boards, each	00 00@00 14
Hemlock, joist, 4x6, each	00 00@00 32
Hemlock, joist, 2½x4, each	00 00@00 14
Hemlock, wall strips, 2x4, each	00 00@00 11
Black walnut, gook, ₩ M	100 @120 00
Black waluut, ⅞ inch	80 00@90 00
Black walnut, ¾ inch	00 00@85 00
Scaymore, 1-inch	28 00@30 00
Scaymore, ⅞-inch	21 00@23 00
White wood, 1-inch and thicker	38 00@40 00
White wood, ⅞-inch	28 00@30 00
Ash, good, ₩ M	40 00@43 00
Ash, second quality, ₩ M	25 00@30 00
Cherry, good, ₩ M	80 00@85 00
Cherry, common, ₩ M	25 00@30 00
Oak, good, ₩ M	40 00@43 00
Oak, second quality, ₩ M	20 00@25 00
Basswood, ₩ M	25 00@30 00
Hickory, ₩ M	40 00@40 00
Maple, Canada, ₩ M	28 00@30 00
Maple, American, per M	26 00@28 00
Chestnut, ₩ M	38 00@40 00
Shingles, shaved, pine, ₩ M	0 00@ 6 50
" 2nd quality	0 00@ 5 00
" extra, sawed, pine	4 30@ 4 50
" clear, "	0 00@ 3 00
" cedar, mixed	0 00@ 3 30
" cedar, XXX	0 00@ 0 00
" hemlock	2 25@ 2 31
Lath, hemlock, ₩ M	0 00@ 2 13
Lath, spruce, "	0 00@ 2 25

BUFFALO.

We quote cargo lots :—

Uppers	$45 00@46 00
Common	17 00@18 50
Culls	12 50@13 00

LIVERPOOL.

The *Timber Trades Journal* of June 26th says :—Repo ts from the manufacturing districts generally speaking, show an improvement in the quantity of business done, if there be no absolute advance in prices obtained. This, however, has not yet affected the timber trade in this most desirable direction, but we can only hope that the day of better things is not far distant. The passing of the Manchester Ship Canal Bill, in which many of the local timber merchants have taken great interest, may have some influence in the improvement to which we have referred.

We are glad to notice that our Manchester neighbors have decided to hold an exhibition in that city next year, in which the chief object, as far as can be carried out will be to show the improvements in all those manufactures in which she is so deeply concerned that have taken place during the reign of Her Majesty. Committees have already been formed to arrange preliminaries, and as soon as the elections are over they will doubtless go to work with the energy so characteristic of the citizens of Manchester.

The import into Liverpool has again been in excess of the wants of the trade, both in spruce deals and pitch pine, with the natural result that both these descriptions of timber are today in a weaker position than hitherto, though the actual quotations are perhaps unchanged.

No public sales of whitewoods have been held during the past week, nor are any announced up to the time of writing.

LONDON.

The London *Timber Trades Journal* of June 26th says :—The coast trade must be described as extremely quiet, a few contracts only having been closed during the past week, and these only for minor parcels. Whether or not a general election, as conducted now-a-days, really effects the trade of the country seriously is an open question, but there can be no doubt that buyers seem only too willing to take advantage of the opportunity to look on and wait the course of events. There is a general fear that market cargoes will be pressed for sale later on, but, as far as we can hear, shippers show no intention of sending forward unsold goods.

The market for redwood battens continues dull, and few sales are being effected. 5ths

2½x7 in. from the lower ports are quoted at £5 5s. f.o.b., and 5ths at £4 5s., but we blieve that sellers are prepared to accept somewhat less for fair lines. Even at these figures, and calculating freight at 20s. to the Surrey Commercial Docks, there is little temptation for London buyers to operate, no profit being noticeable on 4th battens, even at £6, c.i.f., if the receivers have to incur the cost of landing the goods. 5th battens would naturally yield a fair mar gin, but these cannot be bought without the other qualities; so that buyers have no inducement to purchase for forward delivery, until they can discover some signs of better times. Some profit is certainly attached to sales of parcels for outside delivery, but this is a branch of trade which can only be pursued to a limited extent, although it has assumed considerable dimensions during the last and present seasons.

Whitewood is easier and battens from the lower ports can be purchased readily at £4 10s., which figure cannot now be obtained for specifications containing a large proportion of 2½x7. Both 6½ in. and 6 in. remain scarce, and the price for these dimensions has consequently been very slightly modified. We understand that the Swedes have sold the major part of their 3x9 white on the continent, but the prices obtained have not transpired except in a few instances.

Messrs. Foy, Morgan & Co. on Wednesday had the advantage of following on a month of singular quietude in public auctions, and it was therefore not much matter for surprise that buyers mustered in strong force at the Baltic this week. In addition to the Petersburg goods there was the bright pine, in handy sizes and widths, and of good quality, to tempt bidding, and as far as the prices go we consider the cargo of Quebec bright 2 in., per York City, being very well sold; 1st, broads reached £22 5s., and 1½, also wide stuff, selling at £19 15s. and £20 a couple of lots of dry, per same ship, going up to £20 10s.

The timber per Niphon, at £3 12s. 6d. (one lot fetched another half crown), realized quite as much as expected, for it would not be easy to say what the timber is most suited for.

As long as the raw wood can be obtained at the present rates, we think very little business will be done in the other descriptions. The advantage on the side of the bundle trade is that for cheap work it can go with battens and low-priced wood right on to the works, and to small housebuilders this is a highly important consideration.

There is a general impression amongst the trade that the log timber to the London market will shortly be almost nil, on account of the large quantity of thick, wide planks sent to the market which timber in the log used to supply; but we heard the same opinion expressed 20 years ago, and yet the dock ponds are well supplied. The dock authorities say it is that department of the docks which pays the worst, but we can hardly see how that can be. There is no expense on the stuff; it lies at rent for a considerable time, and requires no particular looking after; but the company must know best. That the trade, however, will die out we do not believe, and the thousands of sizes which would have to be shipped to supplant it none of the present generation will live to see.

GLASGOW.

The *Timber Trades Journal* of June 26th says:—Trade here continues quiet. A public sale of log timber took place at Greenock a few days ago, but there was not a large attendance, and of the goods offered only a small proportion changed hands, transactions being confined to some lots of yellow pine; other woods put up, oak, elm, etc., were withdrawn, as bids were under the figures required by exposer: note of prices realized is appended.

The new season's imports of Quebec log timber now at hand will, it may be expected, give some animation to the market. The first of the Quebec timber fleet has just arrived at Port Glasgow, after a voyage of 32 days, particulars of cargo not reported in time to be included in accompanying import list.

Arrivals at Glasgow for the past week consist largely of American oak planks in parcels per steam liners, and include also an import of deals per steamer from Quebec and Montreal, the total of Canadian deals landed at Glasgow this season now amounting to 64,376 pieces, at this time last year the total was 70,070 pieces and in 1884 91,850 pieces.

At Greenock the imports for the week comprise a cargo of pitch pine and one of greenheart. The arrivals of pitch pine at Clyde ports this year (represented by a carrying tonnage of 17,677 tons) are slightly in excess of last year's at this time; and for same period in 1884 the tonnage was 20 632 tons. Arrivals of North of Europe wood goods at Grangemouth continue very light, the carrying tonnage for the past four weeks being 3 610 tons, as against 15 001 tons for corresponding period 1885, and 9,545 tons same period 1884.

AUCTION SALE.

On 17th inst., at Greenock, Messrs. Singleton, Dunn & Co., brokers:—

Quebec yellow pine timber—

40 c. ft. avg. per log	1s. 0½d. & 1s, per c. ft.	
35 "	11½d.	"

Quebec red pine—

25 c. ft. avg. per log	10d.	"
20 "	9¾d.	"

QUEBEC.

A despatch from Quebec says:—The timber market continues very dull and sales are made with considerable difficulty. One old raft of 1882 timber, containing small waney and square pine of about 44 feet, was sold at 14 cents, while a choice Kippewa raft of 53 feet with a small portion of waney board, 21 inch, has been closed at 25 cents per foot. For red pine there is some inquiry for shipping parcels which are worth 20 cents to 25 cents for good timber. No sales in hardwoods are reported.

The number of sea-going vessels entered inwards at the Quebec custom house from the opening of navigation up to yesterday is 228. The clearances to the same date including steamers, are 158, leaving 70 vessels in port and outports.

SUPERVISOR OF CULLERS' OFFICE

Comparative statement of timber, masts, bowsprits, spars, staves, etc., measured and culled to date, at Quebec:—

	1884.	1885.	1886.
Waney White Pine	614,299	393,028	636,108
White Pine	627,940	581,864	397,781
Red Pine	27,196	12,965	136,766
Oak	320,641	691,650	398,537
Elm	226,120	266,317	150,565
Ash	95,258	86,770	28,237
Basswood	205	....	80
Butternut	811	1,004	57
Tamarac	1,965	36	2.346
Birch and Maple	178,495	264,979	153,769
Masts and Bowsprits	— pcs	— pcs	— pcs
Spars	32 pcs	— pcs	— pcs
Std Staves	16.6.2.22	39 0.3.28	19 8.2.3
W. I. Staves	69 8.1 25	64.2.1.17	8,1.2.16
Brl Staves	0.6.2.13	48.5.0.22	.....

JAMES PATTON,
Supervisor of Cullers.

Quebec, 2nd July, 1886.

RAFTS ARRIVED.

JUNE 30—P. Maclaren, white pine, ash, &c., Ontario, St. Lawrence Dock Co.'s cove.

JULY 5—Thomas Buck, elm, Michigan, New Liverpool cove.

JULY 6—Barnet & Mackie, white and red pine, Nipissing, Cape Rouge.

JULY 6—J. Bustall & Co., oak, ash, elm, &c., Ontario, Woodfield cove.

JULY 7—Cook & Gibbons, elm, ash, etc., Ontario, St. Michael's cove.

T. McLaren, white and red pine, Ontario, St. Lawrence Wharf and Dock Co.'s cove.

TIMBER MARKET REPORT.

Messrs. Alfred Dobell & Co., in their Liverpool circular of July 1st say:—We have to report another dull month in our trade and with the present political disturbance any improvement could hardly be looked for. Still, all things considered, the consumption during June has been fully up to what was expected. The sales by private have been:—Spruce deals—St. John, N. B., at £5 17s 6d and £5 15s per standard, ex quay; Bridgewater, N. S., at £5 12s 6d per standard, ex quay. Birch—Pictou, about 16 inches average, at 11½d per foot, ex quay; Prince Edward's Island, about 16 inches average, at 10½d per foot, ex quay. Pitch Pine—Pensacola, 40 feet sawn on private terms. Oak planks—Waggon sizes, 1st quality, at about 1s 10d per foot, ex quay. Pencil cedar—Florida wood at from 3s to 3s 3d per foot. The sales by auction have been:—Spruce deals—Several parcels of St. John, N. B., were offered early in the month, but the bulk were withdrawn, the sales being limited to a balance lot ex C. S. Parnell, from S. John, N. B. Pitch pine—A cargo from Pensacola 35 feet sawn, was offered but the bulk of the 11 and 12 inch wood was withdrawn; a cargo from Darien, 35 feet sawn, was offered at the same time, but was withdrawn with the exception of a single lot. Teak planks—A parcel from Rangoon averaging about £13 10s per load.

EDUCATE THE MIND AS WELL AS THE HAND.

Every man who is engaged in any kind of mechanical labor should cultivate studious and observant habits. There is scarcely description of knowledge but which he will at some time have use for, especially if he ever hopes to rise above the position of ordinary mechanical labor. No man can ever hope to attain distinction as a mechanic unless he educates his mind as well as his hands

One of the most important acquirements of a mechanic is that he should be able to readily and lucidly convey ideas to another. There are indeed many men who while otherwise competent to direct others have failed from lack of this faculty, or have refused good positions because they knew their weakness in this respect. Perhaps as many foremen fail from this cause as from any other. Undoubtedly, this faculty is one to be acquired; it is not one, if there are such, that is born with a man. Every man who works at a mechanical business should labor in the direction of acquiring the habit of concisely expressing his ideas, making this a part of his mechanical education. Talking of such subjects will help a man; writing of them is excellent practice.

A good mechanical eye is also a most essential requisite in a good mechanic. No one can ever attain distinction as a mechanic unless he is able to detect ordinary imperfections at sight, so that he can see if things are out of plumb, out of level, out of square and out of proper shape, and unless he can also detect disproportioned or ill-shaped patterns. This is a great mechanical attainment, and one which can be readily attained by any ordinary person. Of course there are defective eyes as there are other defective organs; the speech, for instance is sometimes defective, but the eye is susceptible of the same training as any organ. The muscles, the voice, the sense of hearing, all require training. Consider how the artist must train the organ of sight in order to detect the slightest imperfection in shade, color, proportion, shape, expression, etc. Not one blacksmith in five ever attains the art of hammering square, yet it is very essential in his occupation. It is simply because he allows himself to get into a careless habit; a little training and care is all that is necessary for success.

But in these cases the fact is, that eye is not half as much at fault as the heedless mind. Some carpenters acquire the careless habit of using a try square every time they plane of a shaving, in place of giving their minds right to their business and properly training their eyes, and unless they cultivate this power of the eye they will always be at journey work. Look at the well-trained blacksmith; he goes across the shop, picks up the horse's foot, takes a squint, returns to his anvil, forges the shoe and it exactly fits the foot. Contrast him with the bungler who looks at the foot, then forges the shoe, then fits the foot to it, often to the ruin of a fine horse. Now, the fault lies in ever allowing himself to put a shoe on that is not in proper shape for the foot; he should determine to make the shoe fit the foot instead of the foot fitting the shoe, and he should follow it up until the object is accomplished.

A very good way to discipline the mechanical eye is to first measure an inch with the eye, then prove it with the rule, then measure a half inch, then an eigth, and so on, and you will soon be able to discover at a glance the difference between a twelfth and a sixteeth of an inch; then go to 3 inches, 6, 12, and so on. Some call this guessing; there is no guess work about it. It is measuring with the mind and eye. Acquire the habit of criticizing for imperfections every piece of work that you see; do everything as nearly as you can without measuring (or spoiling it), or as nearly as you can trust the eye with its present training. If you cannot see things mechanically do not blame the eye for it; it is no more to blame than the mouth is because we cannot read, or the fingers because we canont write. A person may write a very good hand with the eyes closed, the mind, of course, directing the fingers. The eye is necessary, however, to detect imperfections. Every occupation in life requires a mechanically trained eye, and we should realize, more than we do, the great importance of properly training that organ.—*Mining and Scientific Press.*

WOOD-WORKING PATENTS.

The following list of patents relating to the wood-working interests, granted by the U. S. patent office, June 29, 1886, is specially reported by Franklin H. Hough, solicitor of American and foreign patents, 925 F street, N. W. Washington, D. C., who will furnish copies of patents for 25 cents each.

344,580—Lathe—W. W. Hubbard, Philadelphia, Pa

344 469—Saw gauge—W. H. Wilson, Westfield, N. Y.

344,355—Saw mill dog—A. Delaney & J. M. Bond, Richmond Va.

344,356—Saw mill dog—A. Delaney & J. M. Bond, Richmond Va.

344 366—Saw mill set works—C. Esplin, Minneapolis, Minn.

344,365—Saw setting device—H. C. Hart, Unionville, Conn.

344,568—Sawing machine, circular—E. S. Collins, Meadville, Pa.

PATENTS ISSUED JULY 12.

344,926—Lathe, automatic—F. M. Stevens, New York, N. Y.

345,110—Mortising, boring, &c.—R. T White, Boston, Mass.

344,867—Planing and matching machine—C. F. Ritchel, Bridgeport, Conn.

345,868—Mortising machine—M. Rothschild, Shamokin, Pa.

345,256—Saw frame—H. L. Pratt, Brooklyn, N. Y.

345,121—Saw swaging machine—M. Covel, Chicago, Ill.

345,071—Saw table gauge—J. H. Palm, Minneapolis, Minn.

345,070—Sawing machine, circular—J. H. Palm, Minneapolis, Minn.

PLANTING TREES FOR TIMBER.

Prof. Lazenby, of Carroll University, says: To make timber plentiful, and to render our climate more genial, we must reclothe all rugged broken land and rocky crests, in fact every acre that is not cultivated, or is cultivated at a loss, with valuable forest trees.

First—All ravines and steep hill-sides, all land too rocky to be thoroughly cleared of stone and plowed, should be devoted to trees.

Second—Protecting belts of trees should be planted wherever buildings, orchards, gardens, etc., are exposed to cold, sweeping winds.

Third—The banks of streams, ponds, open ditches, etc., should be planted with trees that they will be protected from abrasion by floods and rapid currents.

Fourth—All public roads should be belted by graceful, stately trees.

We should perserve, improve and extend our existing forests by keeping up a constant succession of young growing trees of the best varieties. To do this it is necessary:

First—To allow no stock to run in woodlots for purpose of forage. This should be a rule inflexible and relentless.

Second—Young growths in forests should be thinned moderately and judiciously. Worthless varieties should be cut out and the valuable sorts should be trimmed up so that they will grow tall, forming trunk rather than branches.

Third—Timber should be cut with intelligent reference to future growth. Valuable trees that you wish to propagate should be cut in the spring. Those that you wish to exterminate should be cut in August.

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For Holding Logs upon a Saw Mill Carriage while being Sawn into Lumber.

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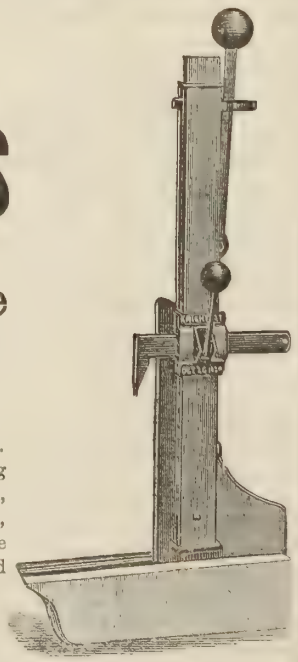

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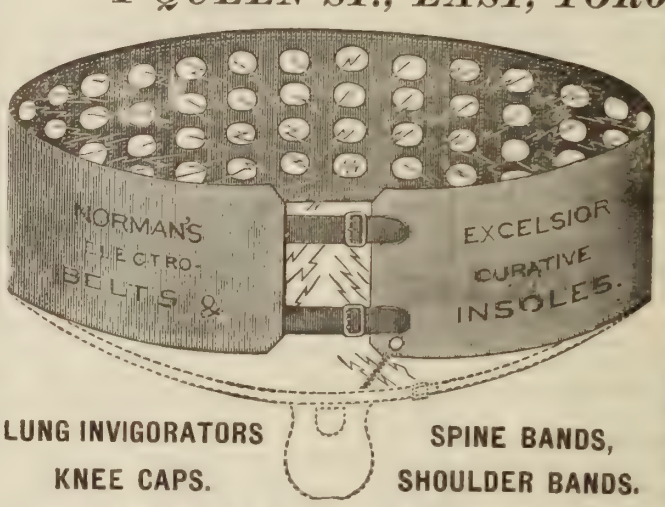

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☞TO ADVERTISERS.

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Examine the field, count the cost, and you will at once decide that the CANADA LUMBERMAN is the

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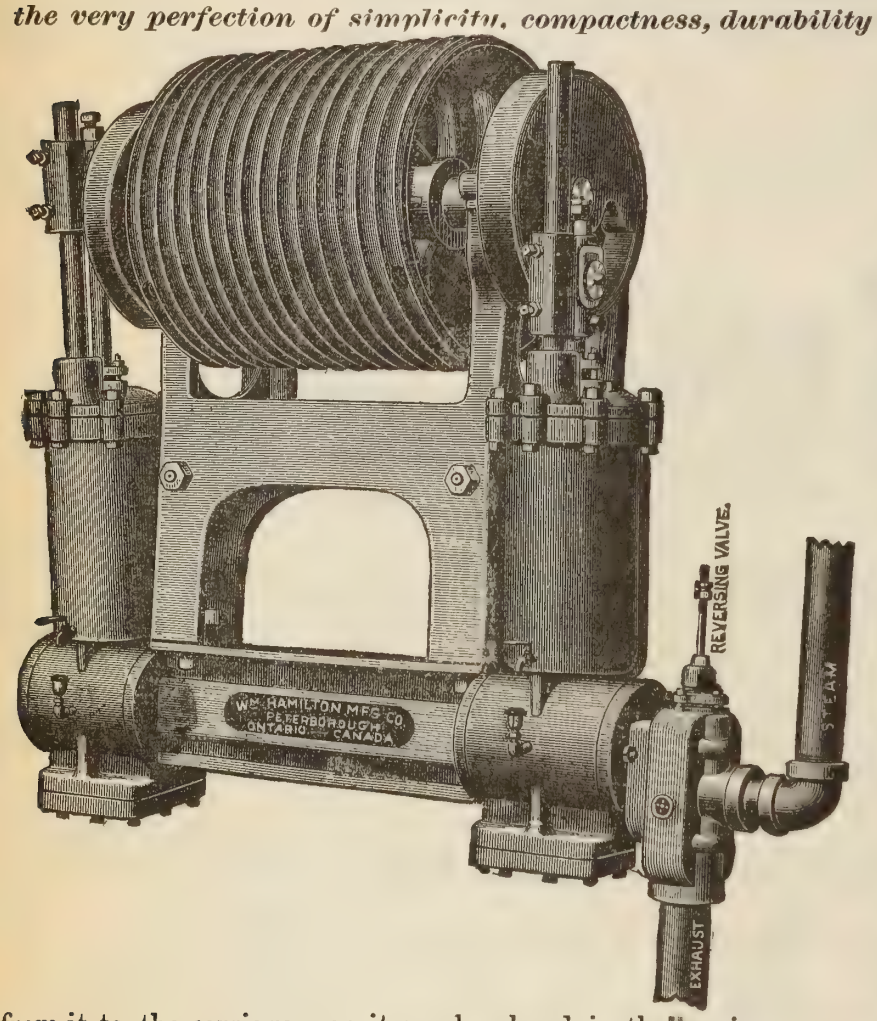
CUNNINGHAM'S
PATENT OSCILLATNG TWIN ENGINE
FOR STEAM FEED IN CIRCULAR MILLS WITH RACK OR ROP.

This Engine has practically but two moving parts, aside from cranks and shafts. The whole array of eccentrics valves, valve rods, connecting rods, cross heads, slides, levers, rock shafts, bell cranks, etc., is done away with, and the very perfection of simplicity, compactness, durability and cheapness attained.



The above engraving illustrates the Twin Engine, 10x16, for Rope Feed, for Saw Mill Carriages. The spool is 27 in. diameter, 30 in. face, is grooved 2 in. pitch for 1½ in. rope. The shaft is steel, 4½ in. diameter, with disk cranks. No connecting rods, eccentrics or valve rods to get loose and out of order. The ports are in the trunions, and worked by an oscilliation of the cylinders, and are held in their place in the downward motion by a steam cushion below. The sawyer's valve is a perfect balance, and by moving this valve the engine can be reversed, stopped or started almost instantaneously if necessary, as the sawyer has perfect control of it by his lever either to go fast or slow. Should the sawyer let go of his lever either by mistake or any other cause, it is balanced so that the valve will come to the centre and cut the steam off both cylinders and stop the feed. When standing, the lever is locked or fastended, so that is is impossible for it to start off itself. The engine stands upright below the carriage, and bolted to two upright beams, placed on the mill for the purpose. When a rack is preferred in place of the rope, we put on a steel wheel 30 in. in diameter, and the engine placed high enough to work into the rack on carriage bar, or if the beams come in the way, an idler wheel can be used between engine and rack segs; or, the engine can be placed at a distance and have a shaft from it to the carriage; or it can be placed in the engine room, where it is under the control of the engineer for oiling, thence by shaft and pinion to carriage rack bars. These engines are well adapted for cutting long logs, or where the logs are mixed, the advantage of this feed will be apparent to mill men. When the carriages are used in two or more sections, the couplin and uncoud ling of each section is quick and simple.

There were two of these feeds working this summer and giving the best of satisfaction, one with rope feed at James Playfai & Co's Mill, Sturgeon Bay, near Waubaushene, and one at the new mill furnished by us to Francis Carswell & Co., at Calabogie Lake, on the Kingston and Pembroke R. R. This mill is working with the Rack and Pinion feed, and drops from fifteen to seventeen stock boards per minute. We have also sent one to the Rathbun Company, Deseronto, to put in to feed their heavy Circular Mills. They will also commend themselves for various other cases, especially for running Elevators, hoisting Engines, and wherever a simple and easily reversible motion is required.

We would also call attention to our Improved Band Saw-Mill for cutting logs

☞ ***We guarantee this to be the best Mill of his kind got up, and would ask any one wanting a good Band Saw Mill to communicate with us. We would also call the attention of Mill Men to our new IRON GANGS, CIRCULAR MILLS and MILL MACHINERY. For further information, prices, &c., address the Manufacurers,***

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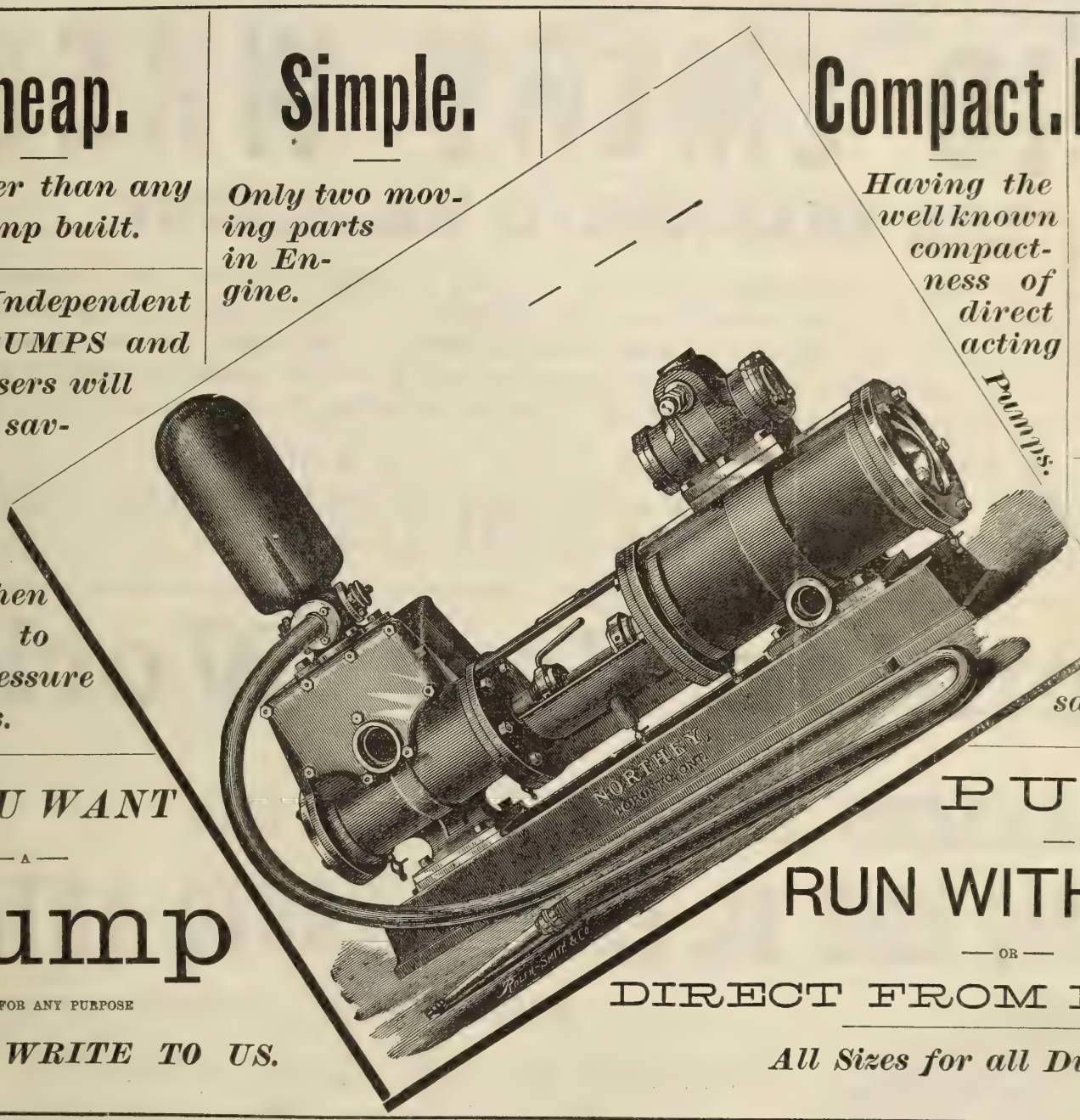

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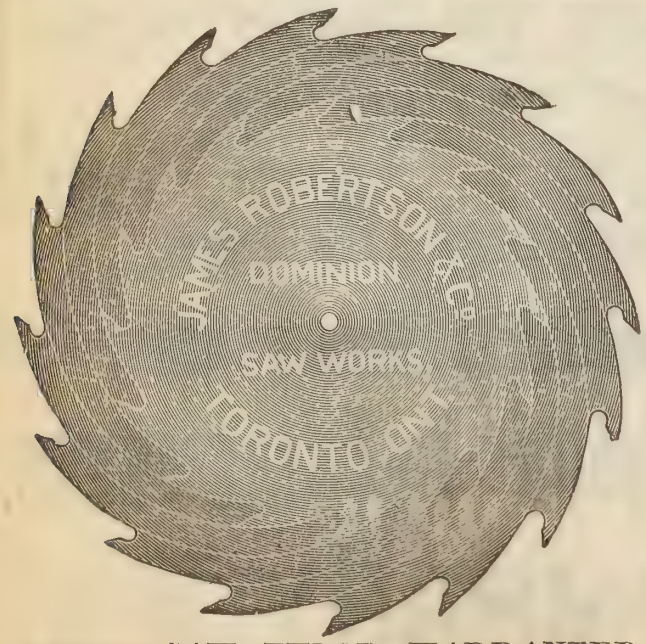

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VOL. 6. PETERBOROUGH, ONT., AUGUST 1, 1886. NO. 15

NOTES FROM THE WORLD OF WOOD.

A process has been discovered by which wood may be compressed into various designs, having all the appearance of carving, and with a finer finish. The process consists in paring hardwood shavings as thin as wafers, which are then placed in a chemical solution. When in a properly pliable condition, the mass is introduced into molds made from steel plates, and pressure is applied, which forces the wood pulp in every line of the mold. When it becomes dry, it is removed from the mold and has exactly the appearance of a wood carving, with the grain of the wood as perfect as though it had never been reduced to a pliant condition. The process is a German invention, and large numbers of different designs are now being manufactured in the the city of Berlin.

The tradition is, if the oak gets into leaf before the ash, we may expect a fine and productive year. If the reverse is the case, a cold summer and unproductive autumn are anticipated. Statistics have been collected on this point extending over 30 years. The oak displayed its foliage several months before the ash in 1818 to 1820, 1882, 1824 to 1827, 1833 to 1837, 1842, 1846, 1854, 1868 and 1869, all inclusive, and the summers of those years were dry and warm, and the harvest abundant. The ash displayed its foliage full a month before the oak in 1816, 1817, 1821, 1823, 1828 to 1830, 1838, 1840, 1845, 1850 and 1859, and the autumns were unfavorable.

The forest trees east of the Rocky Mountains have been divided into four groups, as regards their geographical distribution within the Dominion: (1) A northern group, including the white and black spruces, larch, Banksian pine, balsam fir, aspen, balsam, poplar, canoe birch, willows and alder. (2.) A central group of about forty species, occupying the belt of country from the white pine line to that of the buttonwood. (3.) A southern group embracing the buttonwood, black walnut, the hickories, chestnut, tulip tree, prickly ash, sour gum, sassafras and flowering dogwood (4.) A western group, consisting of the ash-leaved maple, burr-oak, cottonwood and green ash

Of a monster oak felled in England in 1810 the main trunk, 10 feet long, produced 450 cubic feet; one limb 472 cubic feet, and other limbs respectively 355, 235, 156, 113 and 106 cubic feet; six other limbs of inferior size averaged 93 feet each, making a total of 2,445 cubic feet of sound timber. The bark was estimated at six tons. It took five men twenty days to strip and cut down this tree, and two sawyers were five months without losing a day (Sunday excepted) in converting it into timber The main trunk of this tree was 9½ feet in diameter. The whole produce of the tree in the market brought about $3,000.

A distillery has lately been put in operation at Charleston, S. C., for manufacturing oil from pine wood. The material is subjected to intense heat in sealed retorts, and one cord of it is said to yield fifteen gallons of turpentine, eighty gallons of pinewood oil, fifty bushels of charcoal, 150 gallons of wood vinegar, and a quantity of inflammable gas and vegetable asphaltum. The oil alone is worth about 25 cents a gallon and is used by painters and shipbuilders.

There is a small tree growing in a gulch near Tuscarora, Nevada, the foliage of which at certain seasons is said to be so luminous that it can be distinguished a mile away in darkest night. In its immediate region it emits sufficient light to enable a person to read the finest print. Its luminosity is said to be due to parasites.

It is said that one of the properties specially conducive to durability in timber is odoriferousness. It is also said that the increase in strength due to seasoning in different woods is as follows:—Elm, 12.3 per cent.; oak, 26.6 per cent.; ash, 44.7 per cent.; beech, 61.9 per cent. The comparative value of different woods in respect to crushing strength and stiffness is thus shown: Oak 40,74, ash 3,571, elm 3,468, beech 3,079. Regarding relative degree of hardness, shell hickory stands the highest, and, calling that 100, white oak is 84, white ash 77.

Lieutenant Immer Gossende, of the German navy, and Dr. Kummel have explored Northeast Guinea. They report that they reached a spot twelve days' march from the coast and discovered that their compass was useless, owing to the presence of a tree which possesses the properties of a highly charged electrical battery. Dr. Kummel was knocked down when he touched it. Analysis showed it to consist of almost pure amorphous carbon. It has been named Elsassia electrica.

The *American Architect* says that the Southern pine seems to be the natural habitation in this country of the cimex lectularius, or bed bug, which is found in immense numbers under the bark of old trees of that species. If the wood contains natural clefts, the insects and their eggs remain in these after sawing and are often carried in that way in the seams of large timber into buildings It is worth noticing that living trees of yellow pine sometimes keep houses near them infested with the vermin, which stray in all directions from their home.

The inventive genius of the Yankee is constantly widening the use for lumber. Last year a concern in Maine cut up, in the aggregate 1,200 cords of white birch logs into shanks and counters for boots and shoes. Special machinery is used for the purpose, and the white birch is displacing leather board to a considerable extent. The more extended use of the hard woods in shoe making is among the possibilities of the near future.

Among the latest invention is that of a match which may be used over again an indefinite number of times. The wood is soaked with a peculiar chemical solution which renders such reusing practicable.

The following trees were in ancient times dedicated to heathen gods: The cornel, cherry-tree and laurel to Apollo, cypress to Pluto, myrtle to Venus, oak to Jupiter, olive to Minerva and Pallas Athene. It is curious to note that the laurel, cypress, myrtle, oak and olive are all funeral plants. The olive with the Greeks was an emblem of chasity.—*Exchange.*

SAW MILL AT CAMBELLFORD.

On Tuesday last we spent a few minutes looking at the operations of Rathbun & Co.'s saw mills in this village, and while there learned from Mr. Joseph Clairmont, the trustworthy manager, that the average daily product of this manufactory is 800 railway ties and between 10,000 and 11,000 lath, besides a quantity of lumber.

There are 25 men now working steadily every minute of the day, as busy as the machinery beside them, handling the logs which come down the river, and cutting them up into ties, lath and lumber.

Ten saws are in constant motion. Two large saws are rapidly revolving on the first floor, at the north end of the building, butting and edging the logs which come up from the water where they are boomed, on what, in the absence of the proper name we will call a carrier The large logs are handled with ease by the dexterous workmen, who first saw off the ends and then slide them on a truck which moves backwards and forwards on a track to and from the edger. This large saw does rapid execution, and the railway ties are cut as quick as thought and removed by men at the other end of the track, who slide them through an opening in the building and deposit them on waggons which are drawn to the cars. The slabs from the logs are then put through a planing machine and converted into lumber, while the small pieces are placed on a carrier and deposited on the second floor where men quickly cut them up into lath. They are as busy as bees, too, turning out 10,000 per day.

In front department of the building is a machine for planing and edging lumber, which is fed by Mr. J. D. Amey. Near it is the invention of one of the Rathbun company, a gummer, for sharpening saws, which is worked by Mr. Ducheman. By the aid of this machine which carries an emery wheel making 1,600 revolutions per minute, a large saw is sharpened ready for work in twenty minutes.

The shingle machine is not yet in operation but will be shortly. The engine which drives the machinery, with improvement and the care of a tidy engineer, looks like a new one. Near it is a pump and hose ready for use to quench a fire.

The railway track has been laid along Ranney street to the mill, and will be ballasted and completed in about ten days. A switch is to be laid in front of the mill, and another at the rear, on which cars will be run and loaded as the ties come from the saws. Fifteen car loads of ties were taken away on Monday.—*Herald.*

THE BUISNESS OUTLOOK

The New York *Saw Mill Gazette* says:—The semi-annual report lately issued by the mercantile agency of R. G. Dun & Co., shows a material improvement in the business outlook throughout the United States. Notwithstanding the strain resulting from labor troubles the record of business failures during the first six months of the present year shows a marked decrease as compared with the failures of the same period in the preceding year. The liabilities of insolvents for the period referred to in 1886 were considerably smaller in amount than they were in the corresponding period of 1885.

The report calls attention to other encouraging features of the times among which are the virtual decision of the conflict of labor against capital, and the fact that values of all kinds have apparently reached their lowest point. The power of the labor organizations to resist the ordinary laws of trade is not so seriously estimated as it was a few months ago. Confidence has been restored and there is a manifest disposition to extend business operations and engage in new enterprise. Good crops are now assured, generally speaking, and the fall season is looked forward to as likely to yield satisfactory returns in trade circles. The abundance of money, the result of the growth of the country in wealth, is one of the characteristics features of the times and is also a most influential factor in the business situation. In confirmation of the views expressed in this report Messrs. Dun & Co. present statements by their agents with reference to the condition of trade at all the leading business points in the country.

As regards the lumber trade, the outlook is in most respects encouraging. The temporary check to building operations caused by the labor troubles, has been succeeded by a marked activity in this trade throughout the east and west. The present consumption of lumber in the building trade is almost equal in amount to that called for at the same period last year, and it is possible that the demand for lumber for railway construction will soon exceed the mills. In hardwoods the transactions are moderate but the market is firm. Walnut is in special demand, and holders of good lots are not inclined to make concessions in prices. In sash, doors and blinds the business being done is not large, but much activity is not to be expected at this season, and it is evident that prices are being fairly sustained.

REPORTS from Temiscamingue state the timber drives on the Kippewa and Upper Ottawa are successful this season, notwithstanding that fears were entertained at an earlier date concerning the insufficiency of the spring floods.

Chips.

A FIRE in Knapp, Stout & Co. Company's yard, at St. Louis, July 18, consumed about 25.-00,000 feet of lumber in pile, involving a loss of 000

LAMOUREUX BROS., of Edmonton, are preparing a second raft for shipment to Battleford. It will consist of 175,000 feet of lumber, 100,000 lath and 100,000 shingles.

BY a new process hats are now made of wood pulp. They are said to be very fine, and more serviceable than anything heretofore on the market. Great is wood pulp.

CAPITAL is said to have been secured for building a railroad from Fargo Dak., northwest by way of Turtle lake, to the boundary of Manitoba 600 miles. It is said that a survey will at once be made.

MR. JAMES CROSSEN, of the Cobourg Car Works, obtains the contract for rolling stock of the Northern & Pacific Junction Railway. The specifications are said to confirm to those of the Canadian Pacific Railway.

THE contract of the locomotives for the Northern & Pacific Junction Railway has been let to the Kingston Locomotive Works. It calls for the delivery of two engines in Sept., three in October, and remainder in November.

A YOUNG man, named Gingras, was struck on the head by a flying splinter of wood at Drum's cabinet factory, Quebec, on July 23rd, and will also probably die. A ship laborer, named McCaulay, was dangerously injured by falling into the hold of the bark Kate Maguire.

WM. GOLDER, a bark peeler, has been found dead in the woods on the Leswick, N. B., his skull fractured and his neck broken. Beside him on the ground lay a tree, the falling of of which was the cause of his death. Golder was a man about forty years of age, and lived in Tripp settlement for a good many years.

MESSRS. RANKIN, ASHER & HENDERSON, of Dover, Ont., are erecting a saw mill on lot 19. con. 9, Dover, with a capacity of 12,000 daily. Messrs. McKeough and Trotter have the contract for the machinery, and will have it running for the fall work. The erection of the mill promises to prove a great convenience.

THE machinery department at the Colonial Exhibition is under the direction of Mr. James Clark, of Cobourg, wh has put the hall into shape without a single accidant or breakage that I have heard of. The *Canadian Exhibitor*. the journal of the Canadian department well says that no other choice of a mechanical superintendent could have been made by Sir Charles Tupper.

TWO orders-in council have been passed one authorizing that a charter be granted the other issuing it, to Archbishop Duhamel, Rev. Father Grendreau, L A. Oliver, A. Desjardins and E. Tasse, empowering them to construct a line of railway six miles long from the Ottawa river near the Mattawan at the foot of the Long Sault rapids to a point at the foot of lake Temiscamingue, with a capital of $100,000.

THE correspondent of the *Canadian Manufacturer* at the Colonial Exhibition says that in manufactures of wood of all kinds the Canadian have distinguished themselves. Messrs. Tees & Co., of Montreal, Messrs. Stahlschmidt & Co., of Preston, and the Schlicht & Field Co., Toronto, have done a "roaring trade" in office desks, letter cabinets, etc, which seems to be looked upon as both cheaper and better finished than the English article.

THE Menominee *Herald* estimates that at least 80,000 000 feet of lumber will be sent east from the Green Bay mills the present season, of which nearly 50,000,000 feet have already been heard from. The H. Witbeck company have sold 12,000,000; the Bay Shore Company, 12,-000 000; Dunham & Avery, 10,000,000, and A. Spies 400,000 feet, all of which will be shipped to the eastern market—mostly to Buffalo, during the season of navigation. Besides the above amounts, the Oconto Lumber Company has sold 25,000,000 feet of its cut to Buffalo parties.

MESSRS MASON & Co., says the Ottawa *Journal* have received an order from Messrs Hutchison & Wood to supply 1,000,000 ft. of lumber for the construction of the bridges on the new Short Line Railroad between Merrickville and Kemptville which is the extent of their contract. Messers McRae & Co., of Ottawa, have also received an order from the same firm for a large quantity of Portland cement for the stonework in connection with the bridges.

THE Chicago *Northwestern Lumberman* says:—"There are two new lumber papers in New York engaged in the amusing business of trying to scratch each other's eyes out. They remind one of two cats with their tails tied together and hung across a clothes line." We had often herad that western editors were remarkably hard hearted (as well as hard headed), but did not believe that even a western editor would watch two cats fighting, in the manner described, until the *Lumberman* made this confession.

JOHN E. STEWART, one of the corporators of the Tobique Valley railway company, has been negotiating with capitalists in Boston with a view of the immediate construction of the line from Perth on the N. B railway up to the Tobique river past Plaster Rock. This road was subsidized by the Dominion parliament last session, and an attempt will, it is said, be made to secure a local subsidy. The Tobique Valley railway runs for about forty miles through a rich agricultural region, passing through heavy timbered land.

The Monetary *Times* says:—The effect of the export duty, placed by the Dominion Governmenton pine logs exported from this country has already been that of increasing the manufacture of sawn lumber on this side of the border. We are told that more than one firm in the Georgian Bay district whose pine was expected to go to the American side to be manufactured, will be converted into lumber in Canada. Evidently there firms regard it cheaper to pay $2 duty on lumber than to pay the same duty on the logs aside from the additional cost of manufacture, arising from the higher price of labor paid on that side. It is tolerably clear that the doubling to the duty will materially check the exportation of logs.

LAST year the extensive mills and woodenware factory of Messrs. Wm. Cane & Sons, Newmarket Ont., was burnt down and as soon as the firm decided to rebuild all the old employees, voluntarily offered to donate a week's work each, as an evidence of their goodwill and regret for the firms heavy loss. Another pleasing instance of co operation, in a like manner is now recorded, as we learn that: "Each one of Mr. Tilson's employees, of Tilsonburg, has subscribed a week's wages to assist him to build his oatmeal mill. The amount thus donated will be between $700 and $800. This is something new, and speaks volumes for the harmonious relations existing between the employer and employees."

Lumber by Railway.

The Montreal *Star* of July 20th says:—A new departure has taken place in the shipment of lumber from the western districts. Previous to the opening of the C. P. R. the whole of the lumber and square timber was forwarded by water to the loading port. Mr. G. M Bosworth, the freight agent of the C. P. R, stated to a *Star* reporter this morning that the great lumber merchants in the districts round Georgian Bay and Lake Nipissing had forwarded no less than 3 500 car loads of square timber, represeuting 2 000,000 square feet, to Montreal within the last two months. The timber consists almost entirely of pine, and is sent on to Quebec for shipment to various ports.

LUMBER FOR CANADA.

DETROIT, July 27.—The deparature of the great log boat Michigan, which left Alpena in tow of a powerful tug bound far French River, Georgian Bay, for a load of logs for Tawas parties, yesterday, was witnessed by a large crowd. Notwithstanding the gradual decrease of the timber in Michigan, remains the fact of millions of dollars invested in costly mills and railways

Within the past two years Michigan lumbermen have turned their attention to Canada, and extensive purchases of pine lands have been made near the shores of Lake Huron and along the large streams emptying into that inland sea. To move their mills to that side of the lake for the purpose of cutting up the pine involves great expense. Then, too, they must encounter the tariff on imported lumber on seeking an American market. To somehow get the logs to this side would solve the difficulty, as there is but a small tariff on these. Transportation by rafts has been attempted in a few instances, but the risks are very great, as Lake Huron is a decidedly stormy body of water, and the breaking up and scattering of a single raft would sadly trench upon the profits of a season's business. Hence the experiment of the log boat, which is intended to bear the same relation to water transportation that the log train does to the railroad. If it can be managed successfully and not too expensively it promises to solve a very important problem in connection with the lumber business of Michigan for the next 20 years.

The pioneer boat, named after the state, is 294 feet over all, 42 feet beam, with 16 feet depth of hold, and has a tonnage of 1 227. She has one boiler 15 feet long, 7½ feet in diameter, and two engines. One engine has a 16 by 12 inch cylinder. The other engine has two cylinders, 14 by 12 inches each and is connected with two 10 inch pumps and also with an apparatus for hoisting anchors of which she carries two, one weighing 1,600 and the other 8,000 pounds. The chain of the large anchor weighs 20 pounds to the link and is made of 1⅞ inch wire. The apparatus for hoisting logs on board is a slip that extends on an incline to the water, in which an endless chain runs and on which are hooks which carry the logs up the slip, which is jointed at the rail and extends across the deck. Here men with cant hooks will receive and roll the logs off on to the skids, where they are held until wanted in the hold, they being there dropped into five feet of water. The water comes into the hold through a ten inch aperture in three hours, and the two eight inch pumps empty the hold again in four hours. There are two of the slips. The logs are hoisted out of the hold at the after hatches (of which there are seven) by two upright slides with arms upon which the log rests. When the log gets on deck it rolls on to a set of rollers that carry it overboard. It is claimed that the craft can be loaded in less than 20 hours. She has a full set of canvas on four spars. 10 men for a crew, and will carry about 700,000 feet of logs. The question of expense would seem to be the only one to be settled by experiment. It is probable that no special interference would be encountered from boisterous weather, and there seems no reason to doubt that as in the ore and grain carrying trade from three to six of these immense barges could be loaded and towed across Lake Huron by a single powerful tug.

IN NEW QUARTERS.

Messrs. Lord & Thomas, of Chicago, the well-known and popular Advertising Agents, have removed to new quarters which are so spacious, so elegant, and so original and novel in their appointments, that they deserve more than a passing notice The building Nos 45, 47 and 49 Randolph St, between State and Wabash Ave., is at once the most striking in appearance and the most elegant in Chicago, built of sandstone it is 70 by 174 feet practically fire proof and and lighted on four sides. Three large elevators and two spacious stairways, give abundant facilities for passengers and freight. Messrs. Lord & Thomas occupy the entire third floor, giving them a superficial area of neerly 12,000 square feet. This beautiful lighted room is unbroken by partitions save a private office in one corner and work passes with great regularity. While the entire appointments are elegant, the filing department is arranged on an entirely new principle, which amounts to an important invention. Heretofore Advertising Agents have filed their Newspapers in wooden pigeon holes, which not only excluded the light, but caught and retained the dust, and thus proved a nuisance. The new filing department of Messrs. Lord & Thomas is made entirely of wire work; a separate compartment is made for each Newspaper, Magazine and Periodical in the U. S. and Canana, about 14,000 in all. The various sections are suspended from the ceiling, and hang clear of the floor, leaving a space under each one so that the entire floor can be swept. Space will not permit us to describe this important improvement in detail. The principals upon which it is constructed will be covered by letters patent. The Chicago Safe and Lock Co. have con for the firm one of the largest safes ever built in Chicago. Our friends who wish to see a copy of our paper when in Chicago, can always find it on file at the Agency of Messrs. Lord & Thomas.

JOTTINGS AT WAHNAPITAE.

A correspondent writes from Wahnapitae to the Toronto *Globe* as follows:—Last September the Emery Lumber Company commenced operations on their limits, five miles north of the C P. Railway orossing at this place, with about 150 men During the winter they took out over 52 000 choice saw logs, driving them in May to the mouth of the Wahnapitae, at French river, close to the Georgian Bay, in four weeks, where they load them on their barge Wahnapitae which is estimated to carry two and a half million feet of lumber, and has this week sailed with a load of three thousand logs for Tawas, Michigan, where their mills are. It is said that they intend taking out double the quantity this season, commencing next month. Jinnings & Gorman have taken out this season over 3,000 pieces of board and square timber from their limits, north of here, which they shipped per C. P. R to Papineauville, on the Ottawa.

McArthur and Brothers this season got out between three and four thousand pieces off their limits south of here mostly board timber, which they run down the river to the Georgian Bay, from thence to the Midland railway; and are going to put in more camps this season. There are men for several firms in the States looking for limits on this river; the last one, from a firm near Chicago, is exploring here, and he says the lumbering capacity of this river, so far as he has seen it is at least 100,000,-000 feet per year.

I am creditably informed that this river gives access to a very large extent of excellent pine land to the north of this, which is all green woods—all of which is not yet surveyed, or sold by the Crown Land Department. As soon as it is opened for sale the Americans say they will be on hand to purchase.

I see the Government has put an export duty on saw logs, I suppose to paevent them being taken to the States to be manufactured in place of Canada. This seems nothing more than just for Canada, as the manufacturing of the logs into lumber on this side will cause much improvement, and villages to grow at places where there is nothing else comparatively to induce such improvements The Americans have two objections to manufacturing lumber here:—First, by shipping by the C. P. R. they will have to tranship in order to get their lumber to the States; secondly, they want a certain rate for a term, say ten years, to secure them against the rate on lumber being raised after they have their mills erected.

I think the C P.R would be consulting their interest as well as the country their line passes through, between South Bay and Lake Superior, by giving lumbermen a reduction equal to cost of transhipment, and for the term of years, as the chances are that in not getting this they will build they mills at the mouth of the rivers at the Georgian Bay, and drive the logs down where they can load on vessels from the mill yard, and so the railway lose the traffic on the only production there is to give them local freight.

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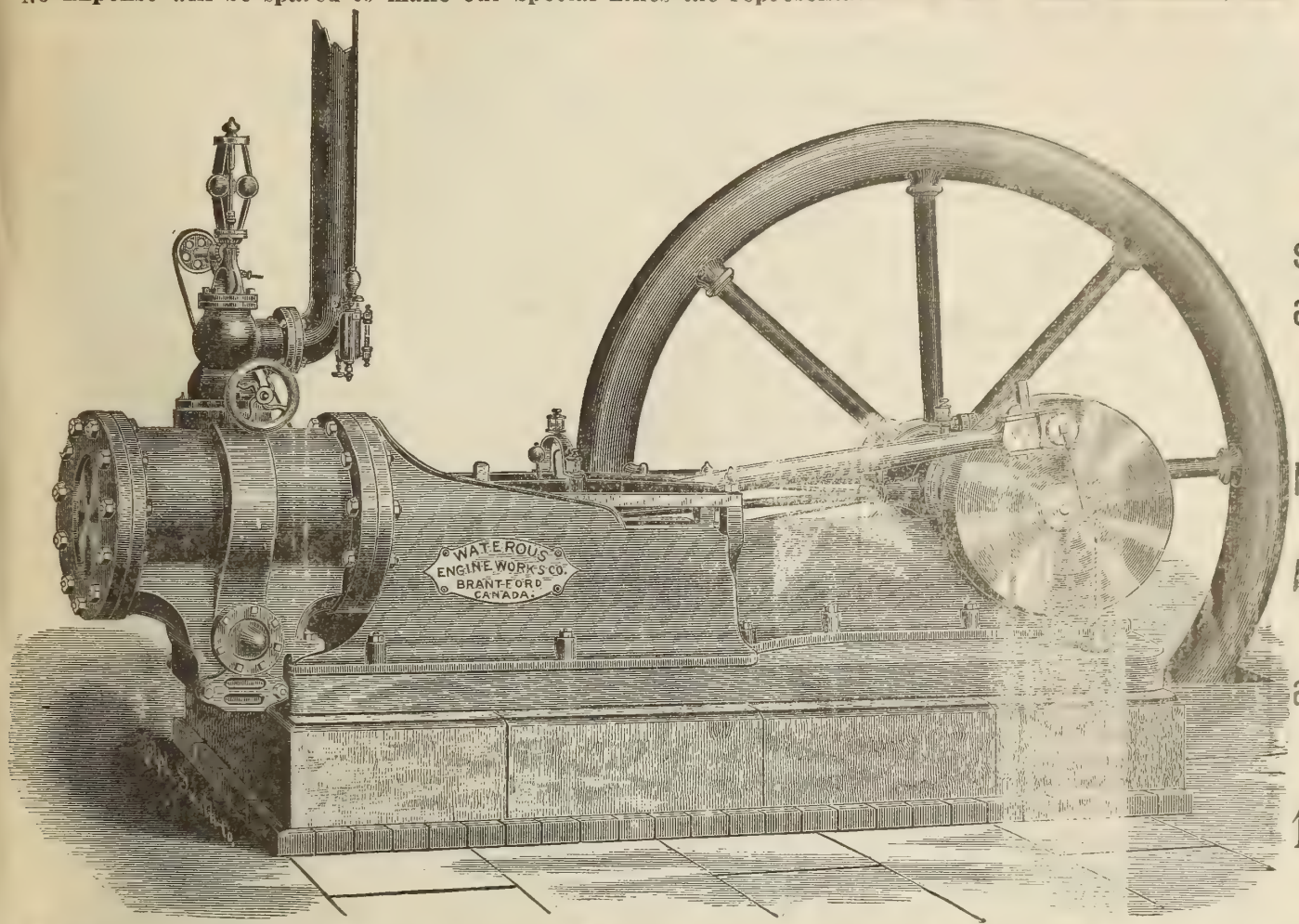

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PERSONAL.

MARY DAWSON, of Victoria, British Columbia, the Widow of the Late JOHN DAWSON, late of Saanich B. C. and formerly of the County of Peterborough, Ontario, is desirous of communicating with the relatives of her late Husband. Letters addressed to her at Victoria, B. C., in care of Messrs. Eberts & Taylor, Barristers, or in care of the undersigned, will be duly forwarded.

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PINE PLANTATIONS.

In his official report Mr. R. W. Phipps gives the following account of his personal inspection of pine plantations on the Massachusetts coast :—

All this country around was occupied long ago by the earliest settlers—the men of the Mayflower period. This is the "old colony" of Massachusetts. This rolling land near the sea was rich, was heavily forested, was cleared, cropped and re-cropped, till its fertility was gone. Long lines of ruinous stone fences, centuries old, recall the period when the soil was worth such careful division. Much of it had long lain idle and barren, the home of a few wandering sheep, in great ranges of wind-swept hills and hollows, with, in sheltered places, some growths of oak and poplar. Just here was peculiarly barren. Twenty-five years since one gentleman, Mr. Fay, began to plant pine trees largely, and still more largely to sow their seed broadcast. Many followed his example, and groves sprung up in all directions. There are now more than ten thousand acres of pine plantations, sown or planted, in this vicinity alone, many of them containing trees forty feet in height.

This planting has greatly sheltered and improved the country, and re-settlement—the influx of the class of residents before mentioned—followed fast on the growth of the trees. In one place I was shown what conclusively proved the case of tree planting on hills to hold moisture. "This twenty acres," said one resident, "which, as you see, is high land, when treeless, every spring poured down such floods as filled all the deep gullies around. Now that I have had it for years in groves of pines, the moisture is held in the land, and there are no torrents in spring whatever. The water goes the year round to nourish the creeks." The result of planting in this district is, in fact, that while here twenty years ago was little but a succession of bleak and barren hills, there is now such scenery as my first paragraph described. Nor are the planted groves of small extent. One gentleman, showed me eighty, another one hundred and twenty acres, in one block each, planted by themselves, of rich pine plantations, the trees being 30 and 40 feet in height.

What I want to give my readers an idea of is the way in which this result was secured. Either the seed was sown broadcast on the rough pasture field, or it was sown in the bottom of plough furrows run across the field five feet apart and covered half an inch, or the small pines were taken less than a foot in height and planted with the spade five feet apart each way. These methods have each met with excellent success. The land is a light and rather barren sandy loam, much of the same kind as our poorest Ontario soils. As to the kinds used, they are the Scottish, Austrian, Corsican and our own native white and red pines. Planting and sowing are each done in early spring.

There is no reason why these methods should not succeed in Ontario. Whoever wants a good plantation along the north or west of his lot, or has anywhere—in gully, or field, or hillside—land which gives little return, could not do better than sow it with pine seed. It is easily obtained, easily sowed, and in a few years the annual thinnings will give all the pine fuel he can use, and sticks for many building purposes besides, while as shelter the trees will be invaluable. Words can hardly tell the difference in climate obtained by a thick pine wood along the north and west of a farm. Of course if the planter be disposed to purchase young seedlings—which can be had at less than a cent apiece—he saves some years. But many rough places could be much more easily sown than planted.

James H. Bowditch, Esq., gives the following valuable statistics in reference to these plantations :—

It is here we find the native pitch pines (Pinus Regida)grown from seed almost as easily as the ordinary garden vegetables, the sandy soil and moist atmosphere favoring its early growth. No old planter on the Cape would think of planting saplings ; he invariably sows the seed. Now, where are these plantations, how are they managed, and who are the owners ? Let us begin at the end of the Cape and work south.

A five hours 'drive' from Boston 'on the Old Colony railroad brings you to north Truro, the next town to Provincetown, at the extreme end of Cape Cod. Near here we find twenty different parties whose plantations cover in the aggregate 562 acres, all planted from seed, and all consisting of the common pitch pines, in the various stages of growth, from 1 inch to 15 or 20 feet. As our object is to know just how these plantations 'are cultivated artificially, we will explain briefly in detail.

Ten years ago these well nigh barren and entirely profitless lands could be purchased for 25 cents per acre, now, in the same unimproved condition, they are worth in no case less than $2 per acre ; not a very heavy price you may think, but when a man sells by the hundred acres it makes a difference in the value received. These broad acres have usually no vegetation whatever, save a light growth of the coarse beach-grass, and, in some localities, the low-spreading poverty grass, so-called, and a little moss.

In most cases there is no fencing whatever, a fact greatly to the advantage of the planter in his profit account ; the division line between different owners being frequently a simple plowed ridge. We now have the land for planting.

Just before the first heavy frost, usually the latter part of October, the seed is gathered in burrs, balls or cones (thus variously called) from the pitch pine trees, put up in barrels or boxes, away from mice and squirrels, in a cool place, and before spring they will have mostly opened, when the seeds can easily be taken out. Some people heat them a trifle in the oven to make the seed render a trifle more easily, but it is a dangerous practice, and likely to injure the germinating power.

From one to three-quarters of a pound of clean seed is ample to plant an acre of ground. They may be planted at any time in the year, but probably the best time is early spring, as soon as frost is out of the ground. The method now most generally followed, where from 10 to 50 acres are to be planted, is to run a plough over the whole track, turning a single medium furrow, the furrows being five or six feet apart. A few planters make the distance apart four feet ; a few from eight to ten feet.

The seed is either planted by hand in hills about three feet apart, dropping three or four seeds in a place, and just covering it very slightly with earth, with a hand hoe, or a regular seed planter is used. The latter is probably the easier method, the one most generally practised, and often quite as successful as the more laborious hand planting. A boy may follow after and cover any seed left exposed. I find the cost of planting is variously estimated at from $3 to $5 per acre. The market value for seed last season on the Cape ranged from $1.25 to $1.50 per pound. It takes about a bushel of cones to render a pound of seed. After planting, no further care whatever is given to the area so stocked in most cases. In some places there may be gaps fifty feet long, but these spaces fill up in time of themselves from seeds of the young growing trees. If you hire a team and drive over the country, a look at the various plantations will abundantly repay an interested observer. A fifteen acre piece with trees about three or four years old, said to belong to Mr. Harvey Collins, seemed very thick and thrifty.

Mr. John Henricks has tried the following tree seeds, namely :—White and Norway spruce (Abies Alba and A excelsa), white, Austrian, Scotch and Corsican pines, (Pinus strobus, P. austriaca, P. sylvestris and P. laricio). The experiment was made in this wise : A tolerably good soil was well ploughed and prepared, and seed planted about one quarter of an inch deep. The whole was covered with boards at first, raised slightly when the seeds sprouted. The white and Norway spruce and white pine seeds scarcely germinated at all. The other germinated and grew well, where planted in cultivated land or nursery rows. When planted in furrows or hills in sward land, they suffered from drought, and made but slight growth. Probably not over twenty-one per cent. of the hills are now standing. The Scotch pine did somewhat the best.

In this method of planting forests, whether by broadcast or furrow planting, it is necessary of course, in order to cover the ground, at first to raise far more trees than are ultimately needed, and it has been long a disputed question whether it is best to let a young forest thin itself, the stronger trees killing out the weaker, or whether, after a time, to thin out artificially.

Some gentlemen here are of opinion that it is better to thin by hand. In support of this opinion an interesting illustration is given by the Hon. Levi Bartlett, of New Hampshire In that state a tract had been cleared and burned over in a very dry season, about the year 1,800. It immediately seeded itself with white and Norway pines, and about twenty-five years after came into his possession. He at once thinned out the growth on about two acres, taking over half the number of the smallest trees, the fuel much more than paying the expenses of clearing off. From that time nothing was done with the lot for the next twenty-five years—having sold it, however, during that time. Upon examining it he found that, by a careful estimate, the lot which had been thinned was worth at least a third more per acre than the rest which had been left. It was worth at that time at least $100 per acre. He thought that had the land been judiciously thinned yearly, enough would have been obtained to have paid the taxes and interest on the purchase, above the cost of cutting and drawing out, besides bringing the whole tract up to the value of the two acres which had been thinned out.

At the time when this part was thinned, twenty-five years from the seed, he took a few of the tallest, about eight inches on the stump, and forty to fifty feet high, and hewed them on one side for rafters for a shed. At the next twenty-five years, fifty from the seed, he and the owner estimated that the trees left on the two acres would average six or eight feet apart. They were mostly Norway pines, ten to twenty inches in diameter, and eighty to one hundred feet high. He was greatly surprised seven or eight years after to see the increase of growth, especially the two acres thinned 30 years before. The owner had done nothing, except occasionally cutting a few dead trees. It was now the opinion of both that the portion thinned out was worth twice as much as the other ; not, however, that there was twice the amount of wood on the thinned portion, but from the extra size and length of the trees and their enhanced value for boards, logs and timber. There were hundreds of Norway and white pines that could be hewn or sawed into square timber, from forty to fifty feet in length, suitable for the frames of large houses barns and other buildings. There are some dead trees on the two acres thinned at an early day, but they were only small trees shaded out by the large ones. On the part left to nature's thinning, there was a vastly greater number of dead trees, many of them fallen and nearly worthless. Of the dead trees standing cords might be cut, well dried and excellent for fuel. Estimates were made that this woodland would yield 350 cords of wood, or about 150,000 feet of lumber per acre. Allowing that these were too large, the real amount must have brought a very large profit on the investment.

The opinion of leading planters of trees here of sowing or furrow is that, though not so successful with these, owing to the strong sea gales, as the pitch and Scotch pine, yet that the white or red pine would grow well from seed, by either method, in Ontario. As before remarked, there is much land in Ontario, side hills, waste sandy plains, burnt lands, and so on, where, if successful, the experiment would prove most valuable. If the ground be such as to receive the seeds—that is not a sod or hard clay—broadcast will do ; if harder a furrow is easily made. The shade of surrounding weeds, if not too dense, will not injure—a partial shade, in fact, is always beneficial. Wherever the pine trees are being cut down the large cones could be easily gathered, and put away till spring in a dry place, secure from mice when the weeds will easily drop out. There is no reason why this should not be done over much land, useless now, but which would then, for shelter and ultimate wood, be very valuable.

Subscribe for the CANADA LUMBERMAN.

GATHERING IN SOUTHERN PINE

A dispatch from New Orleans, of July 4th says :—On Monday last 20,000 acres of pine lands were entered in a body in Calcasieu and Vernon parishes in this state by a firm from Grand Rapids, Mich. During the last three or four years western firms, mainly from Chicago and Michigan, have gobbled up all the good pine land in this state and Mississippi. This has been done so quietly that the local saw mill men awoke to the fact that all the good timber in Louisiana had been cornered by Chicago dealers. The fiscal year for the Louisiana land office expired June 30th. From 1882 to June 30th, 1886, no less than 1,150,532 acres of pine lands have been purchased, largely by western speculators and investors. This includes one-fourth of the long-leafed pine lands of Louisiana and about one-half of what the Government owns in the state.

As the land entered is all selected, it naturally embraces the best. What remains unsold is generally of inferior quality and poorly wooded. The purchasers sent surveying parties down here to examine and report on the yellow pine of the south, the quality of the lumber and the value of the land. These reports were favorable and the western men went to work at once buying right and left, but very quietly and without attracting attention. The cost of these initial surveys and selections was only $70 000. The lands themselves were purchased from the Government at $1.25 an acre and probably cost the purchaser altogether not over $2 per acre, making the total cost of these tracts $2,300,000. They will average 10,000 feet of merchantable timber to the acre, 11,500,000,000 in all, or nearly one-half the amount of long-leafed yellow pine in Louisiana. The lumber at the mill is worth $7.50 per M feet, so that the owners of these lands can hope to receive $80,000,000 for their purchase, even if there should be no improvement in the value of their lumber, whidh is highly probable. It will be seen, therefore, that they have made extremely good investments, from which they may be expected to receive handsome profits at an early day.

The system pursued in Louisiana has been similarly carried out in the Mississippi and Texas. In Mississippi western men have bought 775,000 acres of pine lands, and in Texas 900,000 acres. There have been recently large shipments of this southern pine north. Only a few weeks ago 3,000,000 feet of it were shipped on one contract to Philadelphia, while Texas is sending a large quantity to supply Kansas and other prairie portions of the far west. But comparatively little has been done to develope these lands, and the purchasers seem disposed to make no attempt to do so, but to wait for an increased demand for lumber and improved prices in consequence of a smaller supply from the western states, like Michigan.

The recent heavy purchases have been due to the fear that Congress would withdraw the lands from the market and place them among the homestead entries. The investors are accordingly taking up all the best lands so as to secure them before congress passes one general law prohibiting the sale of tracts larger than a few hundred acres. This they have very effectually done, and Chicago, Saginaw and Grand Rapids capital will control the lumber industry of the southwest as effectually as it does to-day the lumbering in Michigan and the west.

Operations on the Saguenay.

QUEBEC, July 17.—Numbers of vessels are loading this year in the Saguenay for the account of Messrs, Price Bros. & Co. The cut of logs in the Saguenay district was very large last winter, and in most of the establishments on the North Shore, operations were conducted entirely on Messrs. Price Bros.' account. In the vicinity of Chicoutimi three hundred thousand logs were cut, and from Grande Baie from sixty to eighty thousand At St. Etienne Bay the cut was over a hundred and twenty thousand logs, the St. Marguerite river, and at Sault au Cochon eighty-one thousand. At the little Bergeronnes, eighteen thousand logs have been cut. The Messrs. Price have also bought the deals produced by the logs cut by the English Company of the Seigniory of Mille Vaches, the site of whose operations is Portneuf en bas.

Chips.

JOHN GILMOUR, lumberman, has been asked to accept the Conservative candidature for Ottawa county, in the stead of Alonzo Wright, the retiring member.

RECEIPTS of lumber at Selkirk, Manitoba, are now considerable, and a large force of men is engaged in unloading barges and piling in the yards.

PACIFIC coast cedar shingles at $4 a thousand and southern curly pine finishing lumber at $40 have invaded the Minneapolis market to the surprise but not the delight of the white pine dealers.

ON July 16th a young man named Hunter White, engaged in taking float wood from the river at Miller's dam, Trenton, Ont., fell off a pier into the slide, through which a drive of logs for the Gilmour Co. was running, and was crushed to death. The body has not yet been recovered. Hunter was 19 years of age and only out from Ireland a few days.

ON July 19th a large party of men reached Ottawa, who had been at work on French river, on the drive of Emmery & Co., who are cutting an extensive limit situated on the tributaries of that stream and shipping to Michigan. They report the drive as a very successful one. Eugene Marcier, the foreman of the gang, though a young man, has for some time been looked on as a first-class man.

THE first through train on the Canadian Pacific railway, from Montreal to Port Moody, which lately made the run, accomplished the distance, 2,875 miles, in 134 hours, or at an average speed of 21½ miles an hour. This is said to be better time than is made on the older transcontinental lines, but not so fast as it is intended when arrangements have been perfected.

MR. R. M. MARCHANT, says London *Truth*, has perfected an engine in which the steam is returned to the boiler, and, so to say, used over and over again. The saving in coal thus to be effected, is calculated at eight per cent. Besides saving coal, this invention will upset a pet theory of the engineering fraternity, who have alway considered this problem as impossible as perpetual motion.

THE Campbellford *Herald* of July 15th says: Rathbun and Gilmour's large drive of logs is still on the move. The tail end is now at Beaver Creek, and will not arrive for about three weeks. It is said to be one of the largest that has ever come down the Trent. Another drive will follow it from the Otonabee river. The drive which passed here last year contained nearly five hundred thousand pieces.

MR. H. P. MCCRANEY, son of Mr. W. McCraney, M. P., was in Vancouver during the first conflagration. He had a narrow escape with his life, and, as it was, lost all his clothes, except those in which he stood. Mr. McCraney having finished a heavy contract on the Vancouver Island Railway, recently purchased an interest in a saw mill in Vancouver city. He was one of the few fortunate ones whose premises were not burned out.

THE Ottawa *Citizen* of July 15th says:—Very few lumber sales are reported of late weeks. The excessive shipping during the early part of the season was owing to large contracts which had been made in advance during the fall and winter by American buyers, who seem now to be fully supplied. A very considerable quantity of three-inch lumber is being put through the saws for a Quebec dealer.

A LETTER from Tadousac, Que., says the cut of saw logs in that section has been very large this year. At Chicoutimi for Price Bros., 300,000 were cut, and Grand Bay from 60,000 to 80,000; 120 000 at l'Anse St. Etienne; 18,000 at Little Bergeronnes and 81,000 at Sault au Cochon. Messrs. Price also purchased the deals from the logs cut for the English company of the seigniory of Mille Vaches at Port Neuf, where they are loaded for the English market.

THE Muskegon *Chronicle* reports Hamilton's mill at that place as having cut 207,909 feet of pine in nine hours, a rate of cutting that would have turned out 230 000 in ten hours. The statement would be more valuable as a record if the equipment of the mill and size of the logs were stated.

THE Menominee *Herald* estimates that at least 80,000,000 feet of lumber will be sent east from the Green Bay mills the present season, of which nearly 50,000,000 feet have already been heard from. The H. Witbeck company have sold 12,000,000; the Bay Shore Company, 12,000 000; Dunham & Avery, 10,000,000, and A. Spies 400,000 feet, all of which will be shipped to the eastern market—mostly to Buffalo, during the season of navigation. Besides the above amounts, the Oconto Lumber Company has sold 25,000,000 feet of its cut to Buffalo parties.

The World's Biggest Raft.

A St. John, N. B., despatch on July 13th says:—The huge timber raft concerning which so much has been said and written, and which is expected to work such a revolution in the timber carrying trade, still lies high and dry on Joggin's shore, at the head of the Bay of Fundy. Albeit it is in a measure ready for launching and has been in that finished state for a month, it cannot start because the tide has not risen high enough and there are legal difficulties in the way. The latter consist in the builders' claim to be allowed for surplus lumber left over after building the raft. It is believed all will be settled by the end of the month.

The raft is now practically completed, only the outside chain fastening remaining to be put in place. This work could be done in a few days. The raft is 420 feet long, 50 feet wide and 36 feet deep. It is shaped like a torpedo and at its largest part has a circumference of 135 feet. Some idea of its immense size may be obtained from the fact that a mile of timber has been used in constructing launchways for it. There are 300 upright timbers to be cut away before the raft will descend on the slides. It is estimated that three days will be consumed in this job alone.

The raft will weigh 7,000 tons. Great interest has been manifested in this new enterprise, people are coming from the United States and distant parts of Canada to study the construction of the raft.

A Drowning Accident.

OTTAWA, July 21.—Additional particulars received of the drowning accident at Booth's mill, an the Lemoine river, state that a jam took place Monday week. The gang went to work to break it up. The jam broke suddenly, and the men made a rush for the banks. All succeeded in escaping except two men, one of whom, named Fred. Whistler, after rushing down with the current for some considerable distance, and being terribly knocked about by the mass of logs, lost his hold and vanished Shortly afterwards, some of the gang succeeded in saving the other man who was terribly bruised and knocked about, and was carried 120 miles to the hospital in this city.

Sawdust as Food for Cattle.

A German gentleman named Frederick William Wendenburg, of Bagenz, Prussia, has made application to the Government of Canada for a patent for a process of manufacturing cattle feed from sawdust or wood meal and other materials and also to have patented the use, application and employment of the same in Canada.

"Hail! Horrors, Hail!"

Is an expression of Milton regarding the "infernal world." It is not too much to say that those who suffer from catarrh would thus express themselves about that disease. Torture and despair mark their daily existence. However, every case can be cured by Dr. Sage's Catarrh Remedy. Its proprietors have for years made a standing offer in all the newspapers of $500 for an incurable case. It speedily subdues all bad smells, is thoroughly cleansing, antiseptic, soothing and healing in its effects.

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THE CANADA

LUMBERMAN

DEVOTED TO THE LUMBER AND TIMBER INTERESTS OF THE DOMINION.

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Communications intended for insertion in the CANADA LUMBERMAN, must be accompanied by the name of the writer, not necessarily for publication, but as a guarantee of good faith. Communications to insure insertion (if accepted) in the following number, should be in the hands of the publishers a week before the date of the next issue.

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The CANADA LUMBERMAN is filed at the Offices of MESSRS SAMUEL DEACON & Co., 154 Leadenhall Street, London, England, who also receive advertisements and subscriptions for this paper.

PETERBOROUGH, Ont., AUGUST 1, 1886.

TRADE WITH AUSTRALIA.

Canada has done a limited trade with its antipodean sister colony, Australia, but there appears to be no insurmountable difficulty in the way of the trade being largely augmented. In order to direct and develope this trade Mr. Alex. Woods has been appointed Agent General from Canada in Australia, by the Dominion Government. Mr. Woods has published a pamphlet on the subject, which contains interesting and valuable statistics and other information. His primary business, he states, is to develope commercial relations with that continent, bring the Canadian producer and Australian importer together, to let the one know the wants of the other, to show the Australian buyer what the Canadian can sell, to advise the Canadian producer as to the styles and character of goods suitable, or which can be made suitable, to the Australian trade, to give such advice or opinion on the commercial standing of the firms proposing to do business, as may be desired, so far as local knowledge may enable him, and thus to assist and increase the ability of the Canadian dealer to compete for the trade and to do so without more than ordinary commercial risks.

Mr. Woods intends to open a Canadian office and sample warehouse in one or more of the principal cities in the Australian colonies. In the office he will keep such information about Canada as it may be possible to supply through maps, directories, commercial journals, etc., and in the warehouse samples of such Canadian manusactures as may be adapted to that country, with price lists of the same in Canada, and such information as to freight and insurance as may be necessary to give the purchaser delivered prices.

During the last year the value of the produce shipped to Australia from Canada was $433,717; from the United States $10,534,138, and from Great Britain the year previous about $134,195,000. The total imports of the Australian colonies—besides what may be called intercolonial—are over $250,000,000 per annum. The Canadian exports to Australia have been comparatively insignificant, but as the lines of goods produced in this country are much the same as those of the United States, and as many of the lines of goods sent there from Great Britain can be produced here, the trade, especially with the facilities now and about to be provided, should be largely increased.

To give a clearer idea of what may be done we will quote some of the statistics furnished. During the year ending June 30th, 1885, the value of the exports from Canada to Australia were as follows:—Coal, $110; stone, $120; canned salmon, $57,571; pickled salmon, $23,622; spruce logs, $40; deals (pine, spruce and end), $13,815; lath, $15,915; planks, $155,036; scantling, $433; other lumber, $1,532; masts and spars, $140; agricultural implements, $256; books, $84,591; machinery, $32,063; sewing machines, $31; hardware, $379; boots and shoes, $50; organs, $8 350: pianos, $250; ships, $31,000; doors and sashes, $1,300; other manufactures of lumber, $100; other articles. $7,023. The following are the values of some of the goods exported from the United States to Australia:—Agricultural implements, $244,310; ashes, $40,273; dried apples, $80,028; green apples, $37,246; blacking, $25 263; books, etc., $124.940; boots and shoes, rubber, $48,422; boots and shoes, leather, $367; beer and ale, $74.385; carriages and horse carts, $388,331; casings for sausages, $90,633; cordage and twine, $26,138; clover seed, $31,198; cotton goods, colored $3,047; cotton goods, uncolored, $45,662; fish, $82,950; canned fruit, $102,504; harness and saddlery, $31,820; all sorts leather, $216,497; lamps, etc., $73,961; locomotives, $140,000; stationary engines, $9,205; boilers and parts of engines, $5,675; other machinery, $576,475; organs, $138,918; pianos, $10,863; nails and spikes, $19,073; lard, $12,201; whale and fish oil, $51,664; naphtha, $30,233; illuminating oil, $912 986; lubricating oil, $39,587; railway cars, $86 514; roofing slate, $44,950; refined sugar, $601,568; saws and tools, $360,879; scales, etc., $14,532; sewing machines, $129,524; stoves, ranges and parts, $45,019; tinware, $9 382; tobacco, $1,044,134; trunks and valises, $19,010; onions, $5,848; peas, $1,009; canned vegetables, $8 443; boards, deals and planks, $840.132; joist, lath, paling, boxshooks, etc., $83 967; doors, sashes and blinds, $156,516; mouldings, trimmings and other house furnishings, $62,071; household furniture and other woodenware, $622,100. Of the exports from Great Britain to Australia the following might be noted:—Boots and shoes, leather, $3,665,000; beer and ale, $5,520 000; cotton goods, $9.260,000; harness and saddlery, $645,000; machinery and mill work, steam engines and parts thereof, $538,764; other machinery, $846 042; paper, writing, printing and enveloped, $546,813; other paper, $102,046. Mr. Woods is of opinion that a market for some kinds of farmers' produce may be found in Australia, including oats, butter and eggs.

The completion of the Canadian Pacific railway and the projected steamship line on the Pacific Ocean, with the establishment of the Canadian agency in Australia, will afford facilities for trade that Canada has not heretofore enjoyed, and the development of the Australian trade may be looked for. The railway has already been used for making shipments of machinery to British Columbia, Peterborough being among the first to do so, and the line will be of greater value with the steamship connection.

Mr. Woods intends visiting the principal business centres throughout the country, previous to departing for Australia in the latter part of September, and in the meantime correspondence addressed to him at the Windsor hotel, Montreal, will be forwarded.

HOW IT WORKS IN ONE CASE.

IT appears that the export duty on logs is already beginning to bear fruit, and the apples are dropping into the Canadian basket. The Bay City *Gazette* says:—

"How the increase of the export duty on saw logs by the Canadian Government will operate in one case is told by F. E. Buswell, of Grand Rapids: 'We own 100,000,000 feet of pine, standing on Spanish river on the north shore of Georgian Bay, and we will work it up right on the spot.' said Mr. Buswell. 'We thought at one time we could ship the logs to our Grand Haven mills as raw material, but we have since come to the conclusion that we can better afford to manufacture on the Canadian shore and ship the lumber and pay duty. We will only have the duty to pay. Cutter & Savage, of Grand Haven, own 100,000,000 feet on the Spanish river, and Saginaw and Bay City men own a lot more. We will probably buy another lot this winter. We intend this year putting in about 15,000,000 feet of logs, and already have our men at work.'"

This is just what the advocates of the increase of the duty argued—that the United States dealers would not export the logs when they would not save duty by so doing, and that in consequence the lumber would be sawn in Canada and this country would reap the advantage incident to its manufacture. The advantage to the country will be considerable. Men will find employment, farmers will find a market and money will be circulated in the country that would otherwise go to pay workmen in the United States.

The principal advantage to the Canadian lumbermen will be, that although there may not be less lumber sent to the markets—and there probably will be less—the United States dealer who utilizes Canadian timber will not have to pay less duty than the Canadian dealer. Our United States contempories persistently ignore this feature of the case, but it is an important one to Canadians.

Again, it was argued that the increase of the export duty would stand in the way of the successful negotiation of a reciprocity treaty, or the removal of the United States import duty on lumber. The way the export duty works in the case cited by the *Gazette* does not bear out that objection. The United States duty would have been removed ere this but for the influence of the United States lumbermen, and when it becomes in the interest of these dealers to have the duty removed it will then go. As soon as they begin to saw lumber on this side of the line it will be to their interest to have the duty abolished, and the chief influence that now maintains that duty will then be on the other side of the question.

MORE FIGURES.

A SHORT time ago some figures were quoted in the CANADA LUMBERMAN from the Bay City *Gazette* as to the quantity of logs United States lumbermen proposed to carry across the lakes in the rough. The *Gazette* then said that one Saginaw firm only intended to export logs, and only 12,000,000 feet, and Alpena people probably 12,000,000 more, which caused it to come to the conclusion that the export duty was silly. In its issue of July 16th, however, it says:—

"The Emery Lumber Company having invested in 100,000,000 feet of pine in the Spanish river region of Ontario, propose to bring the logs to this district—their mill be at East Tawas—to cut, if they have to pay the $2 export duty. At any rate they propose to see if there is any money in the business."

Besides, the *Gazette* says that F. E. Buswell, of Grand Rapids, owns 100,000,000, and "Saginaw and Bay City men a lot more." Of course the export duty was a trifling matter—unnecessary, silly! And the fact that one of these firms has decided to manufacture the lumber on the Canadian side, instead of exporting the logs in the rough, only shows still more plainly how intensely silly the increasing of the export duty was! Probably Canada could stand more such silliness without a collapse, and perhaps the United States will see that reciprocity would not be such a bad thing after all.

Supposed Wreck.

CHICAGO, July 21.—Captain Roach, of the tug Morford, yesterday picked up in the lake, of Kenosha, the pilot house and poop deck of a lumber barge. The house was painted red and on either side of it were the letters "S.S." but Captain Roach was unable to trace the rest of the name. In the pilot house he found the wheel intact, and took it aboard the Morford and will bring it to Chicago. It is feared some vessel with her crew has gone to the bottom.

THE MONTANA FORESTS.

The bill establishing a national forest reservation in the Rocky Mountains of Montana ought by all means to become a law at this session of Congress. It was passed by the Senate last week, as it was by the same body in the previous Congress, when the House failed to reach it. The proposed reservation includes the headwaters of two of the greatest rivers of this continent—the Missouri and the Columbia—and their tributaries. No settlement will be allowed on the reservation, and no one will be permitted to cut timber. This measure involves the prosperity of vast agricultural regions, and thus is truly national in purpose. appealing to the interests of the entire country. If these forests should be destroyed the damage would be incalculable through the washing away of valuable arable land, and the injury to the streams by shoaling, and to their adjoining country by increasing the danger of floods, which are becoming more serious year by year. It may easily be seen how every community, from Montana to the Gulf of Mexico, is directly interested in the passage of this measure.

On the other hand, if the forests are preserved, an equable flow will be maintained in the streams, to be utilized in the irrigation of vast tracts, otherwise useless for agriculture on account of the light rainfall. In this way the land would become available for cultivation by the most certain methods in existence. With irrigation crops never fail, and thousands would find homes where now there is a desert. Therefore, the House should not again neglect to pass this bill, if it desires to perform a duty which will result in the extension of the agricultural area of the country, increasing the population of the Northwest, and promoting every interest connected with the food supply, from the great railway companies which transport it down to the immense multitudes who consume it.—*Boston Herald.*

BUSH FIRES.

The Manitoulin *Expositor* says:—Bush fires continue to rage in many parts of the island, particularly on the south shore in the vicinity of Michael's Bay and Providence Bay. The losses in many cases are serious, some farmers losing everything. The bridge and crossing between Michael's Bay and Providence Bay are reported burnt. James Kendrick's shingle mill, shingles and timber have been destroyed. R. Batty lost his house, barns, implements, fences and some sheep. John McKechnie lost his barns; Hugh Rennie, a house; Sam Sinclair, house, barns and implements. The M. B. L. Co.'s barn on Manitou river is burned. The fire is very close to Michael's Bay. A. W. Trewin's (until lately, Bowlers) mill is reported in danger. Unless rain comes soon, much more property will be destroyed. Trewin's mill is reported to be burnt.

The Parry Sound *Star* of July 23rd says:—Two or three small bush fires have already broken out in this neighborhood, but have fortunately been quenched by the recent showers before they had done much damage. We would remind our readers in this district that it is a misdemeanor to set out fire during this season of the year, and that it is attended with great danger, as a fire once fairly started in the woods is very difficult to control and may do immense damage. Campers on the islands, too, should be very careful in making their camp fires, first to select a place on which to build their fires where there is no danger of spreading, and then to carefully extinguish every spark before leaving it. A little care during the next two months will prevent the destruction of much valuable property. We hope that any person caught carelessly putting out fire will be promptly made an example of.

THE New York *Lumber* says:—While the metropolitan lumber trade is devoid of life, as it generally is during July and August, it may safely be assumed that the outlook for the fall trade is quite promising. We expect to see the trade booming about September.

SUMMERS, Smith & Summers, lumber merchants Toronto, have assigned. Liabilities, $19,000; assets $18,000.

TREE CULTURE IN THE WESTERN STATES

We had a visit yesterday of Mr. G. E. Brown, from Larchwood, Lyon Co., Iowa, who, with Professor Brown, of the Ontario Experimental farm, had been at the funeral of their father, Dr. Brown, of Port Elgin, the well-known British authority on arboriculture. Mr. G. E. Brown is practical forester to Mr. R Sykes, an English gentleman of wealth, who possesses 22,000 acres in the State of Iowa, 30 000 in Dakota, and 60 000 in Manitoba, almost all prairie. A work of great importance is being conducted at the former place, under Mr Brown's management. Mr. Sykes is adopting the share system of farming with settlers, usually in quarter sections (160 acres) for each family, houses being built, and the annual seed provided in return for one half the proceeds of the grain crops, which are principally flax, corn, wheat, oats and barley. Perhaps the most important feature of the extensive improvements being carried out is the clothing of the prairie with plantations. Already, in two years, there is a nursery of 20 acres devoted to the rearing of forest trees, from the seed bed as well as by selection from other parts of the States and importations from Britain. Mr. Brown has on hand now about 2,000 000 plants preparing for next year's operations. In systematic order they propose enclosing and planting clumps, belts and various sized plantations for the purpose of shelter, and directly remunerative results from sales of thinnings. The kinds of trees being tested are spruce, Scotch pine, larch, white pine, soft maple, white ash, box elder, European sycamore, mountain ash horse chestnut, birch and catalpa speciosa. An enterprise of this kind cannot fail in immense practical national benefits, and that very soon. Mr. Brown is but recently from Scotland, having been engaged there by Mr. Sykes to superintend the tree culture solely.—*Guelph Mercury.*

AT THE COLONIAL EXHIBITION.

The following notes are taken from a letter the Montreal *Gazette's* correspondent at the Colonial Exhibition in London :—

NEW BRUNSWICK WOOD TROPHY.

But the most distinctive feature of the whole of the central gallery is the admirable trophy of the New Brunswick woods. It has been my advantage to see many exhibitions, and I can without hesitation say that one so compact and yet so complete is variety and beauty can rarely be seen. The trophy has already been described in detail by the Canadian press. Suffice it to say that it embraces all the larger or commercial woods that are sufficiently abundant to form an important item of trade, as well as many smaller woods. The object of the display is being well accomplished. It arouses much enquiry as to the woods themselves and the manufactures made from them, and should largely assist in opening up extended markets hear for the wooden manufactures of New Brunswick. The painting of the fruit, foliage and flowers of each variety appearing on the panels, has aroused general admiration such as would be gratifying to the artist, Mr. John C. Miles, A. R. C. A., could he but hear it For the design and construction we have to thank, among others, Messrs. J. & J. D. Howe, of St. John, N. B., and Mr. Ira Cornwall, the agent for the province at the exhibition.

CANADIAN FURNITURE.

It is well arranged that, close to the commanding British Columbian pine trophy and to the neat wood display of New Brunswick, the Canadian furniture exhibit should be shown. Messrs. Toes & Co., of Montreal, have an excellent collection of writing desks and revolving bookstands full of ingenious devices. The desks are highly finished and have attracted so much notice on account of their ingenuity and comparative cheapness, that a large demand is anticipated from this side. Messrs Simpson & Co., of Berlin, Ont. ; Messrs. Stewart & White, of St John N B., and Messrs. McGarvey & Son, of Montreal, also have excellent furniture exhibits. It is true that in designs some of the goods do not affect the latest London and Parisian fashions, but in neatness, symmetry and finish they leave little if anything to be desired.

PORT OF QUEBEC.

According to a table published in the Quebec *Chronicle* in 1885, the total number of vessels which were reported inward reached 268 vessels. 283 081 tonnage, and 6 465 men. In 1886 the figures show 208 vessels reported inward 230,509 tons and 5 446 men,—a decrease of sixty vessels In 1885, there were 124 British ships and 144 of foreign origin which arrived in port, while in the present year, the number of British vessels was 96 and of foreign ones there were 112. For 1885 the returns show, besides 124 British. 136 Norwegian and Swedish, five German, one Russian and one Dutch In 1886 the returns stand thus : British 96 ; Norwegian and Swedish, 103; German, 4; Russian, 2; Dutch, 1 and Argentine Republic 2.

With regard to the showing of vessels outward bound, we find that in 1885, the total number which left Quebec amounted to 190, tonnage 182 711, men 4,154, and in 1886 the number of vessels was 153, tonnage 143,978, men 3,491. These latter belonged to the following countries : British 79, Norwegian and Swedish 104 German 4, Russian 1, Dutch 1, Argentine Republic 1. They were despatched to the following ports, viz. :—United Kingdom 125, British Colonies 15 and other foreign countries 13.

Forest Fires in Michigan.

TRUFANT, Mich., July 23.—Forest fires are raging around this place and the citizens are fighting the fire to prevent the destruction of the town. The air is blue with smoke and great danger is apprehended

SHELBY, Mich., July 23 —Forest fires are burning through Benona and Golden township, "Ocean" county, and the air for miles is filled with smoke.

HART, Mich., July 23.—Terrible fires are running through Juddland Place and their roaring is heard a long distance. The depot, fair ground and lumber yards are in danger and probably will go. A large force of men are out fighting the fires and the village is greatly excited.

Destructive fire.

STANTON, Mich . July 15 –A destructive fire occurred at Fish Creek, five miles east of here, yesterday afternoon. It originated in Wagar's lumber yard, adjacent to his mill, and soon licked up about 5,000 000 feet of lumber, over 4,000,000 shingles and a large amount of lath, tramways and everything about the mill The mill was all that escaped. Loss, about $80 000 ; insurance about $50 000. A high wind prevailed at the time and the fire was carried into the woods south and is still raging there, and is likely to do great damage yet. Ten cars standing in the lumber yard, were burned

THE Port Arthur *Sentinel* says :—Messrs. Vigar Bros applied to the council on Monday night for a lease of the ground on Water street, formerly occupied by Jerrett's planing mill. If the lease was granted at terms suitable to both parties they intended to proceed with the erection of a portable saw mill The Committee of Works recommended that the lease be granted if within the power of the council, from year to year only, without confering any permanent rights or privileges The council on motion of Councillors Margach and Meek, referred the application to the solicitor.

THE New York *Luwberman* has changed proprietorship and appears with a new name *Lumber*. It is now published by the *Fanancier* Company. It is a sixteen page paper, and contains a large quantity of interesting and instructive reading regarding the lumber trade, and columns of reports. It contains the elements of success.

THE Muskegon *Chronicle* reports Hamilton's mill at that place as having cut 207,909 feet of pine in nine hours, a rate of cutting that would have turned out 230,000 in ten hours. The statement would be more valuable as a record if the equipment of the mill and size of the logs were stated.

SUBSCRIBE for the CANADA LUMBERMAN.

MISCELLANEOUS.

During a violent thunderstorm which recently broke over a country town in France a curious incident happened. A young women caught in the storm was hastening homeward, sheltering herself as best she could beneath an umbrella from the dranching rain. Suddenly she experienced a strange and alarming sensation, the shock being simultaneous with a very vived flash of lightning. She felt "quite upset, greatly alarmed" by it, nevertheless, prodceeded on his way, and it was only on reaching her residence that she discovered what a narrow escape she had had. On removing her bonnet she found that her hair had been literally cut off, having the same appearance as though it had been shaved with a razor. The effect upon the girl's mind of the discovery was so great that she has been confined to her bed ever since the day of the storm. It is not the loss of her hair that affects her, but the recollection of the narrow escape she had has so entirely upset her nervous system that the medical men attending her express the opinion that it will be some weeks before she recovers from the shock. — *London Standard.*

MONTREAL, July 27.—The street decorations in connection with to-day's ceremonies were very elaborate. The banquet at the Seminary Hall this afternoon at which Cardinal Taschereau, Archbishop Fabre, Mgr. O'Bryan, Papal ablegate, and about 350 prelates and clergymen sat down, occupied an hour and a half. No toasts were proposed. After the banquet the Cardinal and party proceeded in carriages to the city hall, escorted by a number of the calvacade dressed in costumes of Louis XIV., where a levee was held at 4 o'clock. An address was also presented to the Cardinal from Laval University. The city hall was profusely decorated, opposite the mayor's throne in the council chamber being the arms of the Pope, Cardinal and Archbishop Fabre. The city was illuminated to-night, and a display of fireworks in Dominion square took place.

OTTAWA, July 26.—During the heavy thunder storm which passed over here last night three men were standing at the entrance of the Dowling House at Hull, when the lightning struck them. One of them, named Joseph Tremblay, had the sole of his boot torn off, but his foot was unharmed. Another, named Pierre Bedard, was so affected by the shock that he fell into a fit, which lasted three hours. He has not yet quite recovered from the effects. The electric fluid then ran into the house, struck the stove, ran up the chimney to the roof and displaced a large number of shingles. In another house Adolphe Laferriere, while leaning against the stove, was struck in the back and received a severe shock.

VICTORIA, B. C., July 27.—The first tea shipped passed Victoria yesterday on the way to Burrard Inlet. The general feeling is that it is fitting that its arrival should take place almost at the same time as Sir John's first visit.

PANAMA, July 26.—It is understood, though not officially proclaimed, that Senor Balmacedo, Liberal, has been elected President of Chili. The elections were attended with great bloodshed. Upwards of 40 lives were lost.

Belshazzer's Warning.

"Tried in the balance and found wanting," is the general verdict rendered against most of the so-called cures for lung troubles. Such a decision has never been given against Dr. R. V. Pierce's "Golden Medical Discovery." On the contrary, it is conceded by thousands who have tried it, to be the only remedy for consumption (scrofula of the lungs) and scrofulous diseases generally. It will not cure when both lungs are most gone, but if taken when the disease is in the first stages it never fails It is also specific for such scrofulous affections as fever-sores, white swellings, hipjoint disease, and great eating ulcers, and for blood taints generally, from whatever cause arising. By druggists.

West's World's Wonder or Family Liniment is a remedy that no well regulated household should be without, as it is a positive cure for Rheumatism. It is invalueable for Sprains, Cuts, Bruises, Burns, Scalds an all diseases requiring external application. rice 25 cents and 50 cents per bottle. Sold by J. D. TULLY

Wanted.

THREE HUNDRED THOUSAND feet of dry inch basswood culls.

BELDEN & McDOWELL,
Syracuse, N. Y.
3m14

TIMBER LIMITS.

TENDERS for timber limits on [illegible] Muskoka, Black and Trent [illegible] 270 square miles, containing [illegible] pine; also for four saw mills on Black and Trent [illegible] September, 1886.

Terms apply to J. D. SMITH, or the [illegible] or Port Hope, Canada.

For Sale at a Sacrifice.

A SAW MILL

SITUATED in excellent locality with an attachment of 200 acres of well timbered land through which flows the Nottawasaga river. Best water privilege in Simcoe. Capacity of mill eight th usand feet daily. Enough custom work to pay running expenses Satisfactory reasons for selling, Box 60, Allston, Ont. 2m13

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MANUFACTURERS OF

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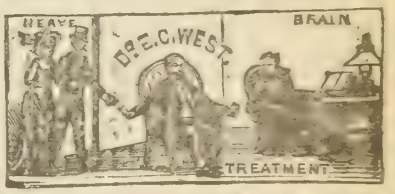
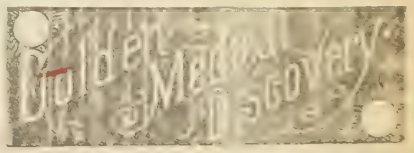


Dr. E. C. West's Nerve and Brain Treatment guaranteed specific for Hysteria. Dizziness Convulsions, Fits, Nervous Neuralgia, Headache, Nervous Prostration caused by the use of alcohol or tobacco, Wakefulness. Mental Depression, Softening of the Brain resulting in Insanity, and leading to misery, decay and death, Premature Old Age. One box will cure recent cases. Each box contains one month's treatment. One dollar a box, or six boxes for five dollars; sent by mail prepaid on receipt of price. We guarantee six boxes to cure any case. With each bottle received by us for six boxes, accompanied with five dollars, we will send the purchaser our written guarantee to refund the money if the treatment does not effect a cure. Guarantees issued only by J. D. TULLY, Druggist, Sole Agent for Peterborough.



Thoroughly cleanse the blood, which is the fountain of health, by using Dr. Pierce's Golden Medical Discovery, and good digestion, a fair skin, buoyant spirits, vital strength, and soundness of constitution will be established.

Golden Medical Discovery cures all humors, from the common pimple, blotch, or eruption, to the worst Scrofula, or blood-poison. Especially has it proven its efficacy in curing Salt-rheum or Tetter, Fever-sores, Hip-joint disease, Scrofulous Sores and Swellings, Enlarged Glands, and Eating Ulcers.

Golden Medical Discovery cures Consumption (which is Scrofula of the Lungs), by its wonderful blood-purifying, invigorating, and nutritive properties. For Weak Lungs, Spitting of Blood, Shortness of Breath, Bronchitis, Severe Coughs, Asthma, and kindred affections it is a sovereign remedy. It promptly cures the severest Coughs.

For Torpid Liver, Biliousness, or "Liver Complaint," Dyspepsia, and Indigestion, it is unequalled remedy. Sold by druggists.

PIERCE'S PELLETS — Anti-Bilious and Cathartic. 25c. a vial, by druggists.

AUSTRALIA.

Messrs. Lord & Hughes' monthly circular, dated Melbourne, June 12th says :—

Our last circular was under date 15th May, since which the trade has been steady, with no appreciable change in prices of any description of timber. The arrivals of Baltic, flooring and Oregon have been heavy, as also have been slates, which are in a very depressed state.

Trade from the yards show a slight falling off.

Red Deals.—Imports: 7,761 pieces. These arrived per the Dingadee, from Sydney, and were sold privately. Price not transpired. The Elizabeth's cargo was sold on the 8th inst., D O M brand realizing for 11x4, 9x4, and 11x3, 6d to 5⅝d; 9x3, 5½d to 4⅝d; 9x2½, 5 1 16d to 4¾d; 7x2½, 4⅝d to 4¼d all per foot of 9x3. Good quality Joiners' deals are in demand, but inferior fourths are difficult to quit.

Spruce Deals.—Imports: Nil. The Howard's shipment was sold on 25th ult., 11x3 realizing 4 1-16d, and 9x3, 2¾d to 2⅝d.

Oregon Timber.—Imports: 2,626,320 feet super. The arrivals have been Emerald, from Puget Sound; Thomas R. Foster from Burrard Inlet; Nicoya and Hesper from Port Townsend. The Thomas R. Foster's cargo has been sold privately; price withheld. The Fresno's cargo was sold on 4th inst., at from £5 7s 6d to £4 10s—average £4 18s 6d per 1,000 feet super, which is an advance on last sales.

Lumber.—Imports: Clear pine, 24,535 feet super; shelving, 41,123 feet super. The only arrival during the month has been the Samar, from New York. Sales of sundry shipments were at prices ranging for clear pine, £13 17s 6d to £13 10s; shelving, £10 5s to £10 per 1,000 feet super.

Flooring and Weatherboards.—Imports: 5,944,652 feet lineal. The arrivals have been —Mentone and Apollo, from Frederickstad; Northern Monarch, from Montrose; Don and Falkland Hill, from Glasgow. Sales have been made of shipments ex Howard, Inchgreen, Aurora, Celer, Palawan, Lorelei, Fritzoe, Falkland Hill, &c., at the following rates:—Baltic Red, 6x1⅛, 9s 6d to 8s 9d; 6x⅞, 7s 7d to 7s 3d; 6x¾, 6s 9d to 6s 6d; 6x½, 4s 10d to 4s 7d; 4-out 5s to 4s 10d. Baltic white, 6x1⅛, 9s 9d to 9s 3d; 6x⅞, 7s 6d to 7s; 6x¾, 6s 3d; 6x½, 5s to 4s 8d; 4-out, 5s; last month's rates being fairly maintained.

Kauri Pine.—Imports: 284,948 feet super. The arrivals have been—Peerless, from Wangaroa, and Clansman, from Mercury Bay. The balance of the Parnell's cargo was sold on the 8th inst., at a reduction on lastt quotations. The Peerless cargo is advertised for sale on Tuesday next.

Pitch Pine.—Imports: Nil. The shipment ex Sarah Hignett was sold on 21st ult, wide clear shelving realizing £10 12s 6d, 10-inch T. and G., 6s 6d per 100 feet lineal.

Cedar.—Imports: 244,700 feet super. The arrivals have been the Thyra, from New Guinea, and per coasting steamers from Sydney. The Thyra's cargo was sold on the 8th inst., at 28s to 14s 3d per 100 feet super; prices satisfactory considering the quality.

Doors.—Imports: 1,209. This parcel arrived ex Sydney steamers, and came to the order of the trade.

Laths and Pickets — Imports: Laths, 7,943 bundles. The arrivals are Emerald, Thomas R. Foster, Nicoya, and Hesper, from Oregon ports; Northern Monarch, from Montrose.

Slates.—Imports: 572,457. These arrived ex Wellington, from Tasmania; Samar, from New York; British Ambassador and Glenricht, from Liverpool. A small invoice of 20x10 American blue Bangor, ex Sarah Hignett, was sold on 21st ult at £7 per 1,000. Stocks heavy.

Plaster.— Imports: 500 barrels. This shipment arrived ex Samar, from New York. The only sale by auction has been a small lot of 50 barrels Albert brand, at 14s 6d per barrel of 400 lbs.

Cement.—Imports: 11,651 barrels. A line of 175 casks, Atlas brand, was sold on 25th ult., at 7s. 9d to 7s 6d per cask. Privately, sales have been made of Gibb & Co.'s Portland, at 9s 6d.

Galvanized Iron.—Imports: 960 tons. An invoice of Two Cones was offered on the 8th inst.; but bidding not being up to limits its wa withdrawn. Privately, sales have been making at full rates, a small invoice of Queen's Head having been placed at £17.

Explanation.—Red deals and spruce are sold at per foot of 9x3; T. and G. flooring at per 100 feet running; Oregon timber, redwood, clear pine, shelving, ceiling, per 1,000 feet super; Kauri pine and cedar logs at per 100 feet super; laths, pickets and slates at per 1,000 pieces. Shorts are all lengths under 12 feet.

CONSTRUCTION AND ARRANGEMENT OF SHAFTING.

The construction and arrangement of shafting, the great prime factor in transmitting power from the motor to the machinery of any establishment, is a matter of perhaps more importance than anything else in the arrangement of the plant, and because of the very high rate of speed necessary and the secure and sudden strains to which it is subjected, it is perhaps of more importance in a saw-mill than in almost any other wood-working establishment.

I recognize the fact that in this country the construction of shafting has received such attention from practical men, that the great problem has been worked out until the proper construction and plans of construction has been reduced to a perfection not attained in any other country.

In the construction of a modern saw mill in which will be used the various lumber producing machines of the present day there are three things to be considered with reference to the shafting, viz., size, strain and speed.

As regards the speed of the main-shaft I hold that the higher the rate of speed made consistent with good results the more economical is the operation of the machinery. In support of this theory I ascribe the reasons, that a high speed main-shaft will avoid the use of numerous counter-shafts, or the putting of very small driving pulleys on the various machines, and the reduction of power to the lowest possible minimum by direct connection; I do not hold, however, that the rate of speed of the main-shaft should be sufficient to give motion by direct connection the light machines, that require a very high speed to successfully operate, for all such should have an independent counter-shaft properly speeded to give the required speed to the machine.

Shafting should always be true, turned to a gauge and snugly fitted in bearings or boxes, having both vertical and lateral adjustment, and provided with the proper means for lubrication. The use of cheap shafting is the poorest economy. The advanced price for high grades, especially for Bessemer steel, will be found a good investment.

There are two important advantages to be gained from the use of steel over iron; the first is that steel shafts are stiffer than iron and may therefore be smaller, and the second is, they will run with less friction, because of the fact that the iron usually employed in the manufacture of shafting is seamy and otherwise unsound.

In saw mills when the speed, number of pulleys, and belt tension is excessive, the tortional and tending strains on a line shaft are very great, and should be borne in mind when making calculations as to the diameter of shaft necessary, and the centre to which the bearings are fixed.

There is no positive rule for finding the diameter of shaft required, but the following well-known and universally adopted one, is approximately correct, in determing the diameter of a wrought iron shaft capable of transmitting a certain or given horse power.

"Multiply the given horse power by 125 and divide the product by the number of revolutions per minute, the cube root of the quotient will be the diameter in inches." In order to attain the best results, experienced saw mill builders have found it advisable to add 15 per cent to the results thus obtained.

It has ever been a question of opinion with individual builders as to the size and length of the first section of shafting or that which receives the power direct from the motor. That it should be of greater diameter than the remainder of the shaft, common sense would prove, but how much larger, is as yet undecided by any fixed rule. Experience demonstrates that 1-6 to 1-16 larger is practical. In making a calculation as to the diameter of this section prudence would suggest the advisability of erring, if at all, on the side of st ength, for a bind or spring would necessitate stoppages for truing and lining up, that would very soon amount to much more than the increased cost of a larger shaft.

The distance between bearings should be very much less on this than on the other sections. In no case should they be further than five or six feet apart from each other. And in case of very great power a bearing should be placed on either side of the pulley receiving the power.

In fixing shafting the first important principle to be observed, is to have it perfectly level, which is obtained by the use of a straight edge and spirit level The straight edge should rest in the bearings and they should be packed until the spirit level stands perfectly true, after which the shafts should be trued with the level in various places. A very great mistake is often made by setting shafting with the walls of a building, which oftimes is out of true, and occasions stoppages that could otherwise be avoided. Care must also be taken that the pulleys on the main shaft and the machine pulleys, or the pulleys on the counter-shaft, are in line; there are two ways of lining these pulleys, one is by the use of a straight edge made to bear evenly on the edges of the driving pulley and setting the other pulley to it, so that its edges bear easily; or if the pulleys are a very great distance apart a plain line may be used in a similar manner.

In setting the shafting of a complete plant it is a saving of time to work very slowly. A ground plan should first be drawn, the locations of each machine marked thereon, taken its required speed and the speed of the line shaft and determine the size of the driving pulleys required. There is much disagreement as to which should be placed in position, first the the main-shaft and its connections, then the engine lined to it, or first set the engine, and line the shafting from it; both theories can be supported by almost convincing argument. Were I engaged to put up the shafting, and set the machines and engine, I would certainly put up the main-shaft and all its connections first, after which I would set the engine. My reason or so doing is that it is very much more practical to place a long main shaft parallel with the timbers of a building and set the engine afterwards to line, than vice versa.

In wood-working establishments whenever possible the main-shaft should be fixed under the machines to be driven and at an angle, if possible of 60° to 75° as it increases the driving power of the belt.

The connections are also out of the way of the operation and can be easily and securely boxed.

If it be possible in the arrangement of the machines to so locate them that they will be on either side of the driving shaft, the strain is thus equalized as the belts will pull in both directions.

Under no circumstances would approve of toothed gearing for saw mill purposes; because of the fact that toothed gearing requires more power to produce the same results, it becomes rapidly worn, producing more or less vibration, and necessitates frequent repairs.

When it becomes necessary to run a shaft at an angle from the power producing shaft, a belt connection led over guide pulleys is cheaper, less noisy, requires less power, and if well arranged will produce better results with fewer repairs than any other plan.

To make this connection properly requires the exercise of a mechanical calculation more difficult than at first thought would appear. The best plan is to mount the idle pulleys on a spindle fixed vertically in a ball and socket seating, which may be fitted in a bracket attached to a hanger or standard by prolonging the end of the spindle and fitting it with a screw, serated washer and nut. The spindle and pulley may be set at any angle.

The spindle carrying bracket should be so arranged with a vertical adjustment in the hanger or standard. The ball segment of course can be turned around as necessary and with the above plan the idle pulleys may be adjusted to suit any position of shaft, thus obviating the construction of a special set of hanger or bracket patterns for each separate case, and at the same time ensuring the correct running of the belts main pulleys.—*Saw Mill Gazette.*

GATINEAU DISTRICT.

The Ottawa *Journal* of July 20th says:—Ex-Alderman Samuel Bingham has just returned from River Desert, where has been engaged in superintending the timber drive from that place to the Gatineau boom at the junction of the Ottawa and Gatineau rivers.

Mr. Bingham states that the crops up the Gatineau as far as Desert are in a very good condition, but have been slightly injured by the late rains. He also stated upon being asked whether there was any truth in the rumor reported in several Montreal and one Ottawa paper in regard to a murder said to have been committed in those regions that the people of the Gatineau district were much surprised when he mentioned the fact, and that the people of Montreal and Otttawa seemed to know more about the matter than the people living in the district where the murder was supposed to have been committed.

Mr. Bingham stated that the timber drive was progressing very favorably, much better than was expected, as the late rains had kept up the water in the river, thus preventing the logs from sticking on the rocks and causing jams. Mr. Bingham expects, if the water does not fall, to have the tail of the drive into the Gatineau booms by the 15th of August.

WOODEN TURBINES.

Wooden turbines have of late been proposed to meet the demand for an efficient and cheap water motor for small powers, and there is every reason to believe that within certain limits they will meet with a very favorable reception. Turbines, it must be remembered, have the advantage of being small in bulk for their power, and equally efficient for the highest and lowest falls, and were it not for the fact that they are constructed wholly of metal their use would probably have long since become more general. Wooden wheels can in some cases be readily procured at a comparatively low price, and, as the question of first cost and ease of repairs enters very largely into the problem of successfully utilizing small water powers for some purposes, and is of greater importance than a high efficiency, turbines have often been unable to compete with wheels of other types. This state of things, it is thought, can be changed by using wood as the structural material, thus securing the advantages of turbines without they drawbacks, and it has been found that in this way their cost can be reduced to about one fourth of that of iron turbines. In some parts of Europe wheels of this class have been constructed partly of oak and partly of yew, and the results are understood to have been highly satisfactory in every respect.—*Carpentry and Building.*

Forest Fires.

Muskegon, Mich., July 17.—For the past twenty-four hours this city has been enveloped in smoke from fires in the surrounding forests. It is impossible to see any distance at all, and if it were not for occasional puffs of air from the lake, the atmosphere would be almost suffocating. There has been no rain for weeks and no sign of it The crops are suffering severely. From all quarters come reports of extensive forest fires. The farmers about Twin Lakes, Holton, Whitehall and North Holland have been battling with the flames for days, and many of them have been obliged to move their families and household goods on account of the threatened danger!

John O'Neill, a river man, was with a companion rolling a log off a rock in the Snake rapids, when the stick swung around and knocked both into the water. The other man swam ashore but O'Neill was drowned. The *Enterprise* says he belonged to Eganville and was the sole support of his aged mother.

NEW YORK.

The following is the official list of the prices obtained at the New York Lumber Auction Company's sale at New York on July 13th :—

Lot 1—Sap pine moulding strips, 1 inch, 12,866 ft, $13.

Lot 2—Brown ash, 1½ inch, firsts, 1,701 ft ; seconds, 1,286 ft ; culls, 405 ft, $24.

Lot 3—Brown ash, 3 inch, firsts 3,553 ft ; seconds, 3,195 ft ; culls 960 ft, $22 50.

Lot 4—Brown ash, 3 inch, firsts, 1,745 ft ; seconds, 1,405 ft, culls, 551 ft, $20.

Lot 5 –Quartered sycamore, 1 inch, firsts, 5,021 ft ; seconds, 3,025 ft ; culls, 1,149 ft, $30.

Lot 6—White pine shelving, common rongh, 1 inch, ,769 ft, $15.

Lot 7 —Brown ash, 1 inch, firsts, 3,076 ft ; seconds, 2,054 ft ; culls, 1,588 ft, $20.

Lot 8—Brown ash, 1 inch, firsts, 2,128 ft ; seconds, 2,175 ft ; culls, 1,256 ft, $19 50.

Lot 9—Brown ash, 1 inch, culls, 5,872 ft, $11.

Lot 10—Brown ash strips, clear, 1 inch, 3,006 ft, $13 50.

Lot 11—Whitewood, ¾ inch, firsts, 3,240 ft ; seconds, 3,675 ft ; culls, 344 ft, $23 50.

Lot 12—Whitewood, 1 inch, firsts, 3,543 ft ; seconds, 4,136 ft ; culls, 508 ft, $24 50.

Lot 13—Brown ash, 1 inch, firsts, 2,671 ft ; seconds, 2,312 ft ; culls, 1,141 ft, $16 00.

Lot 14—Brown ash, 1 inch, firsts, 2,080 ft ; seconds, 1,571 ft ; culls, 1,060 ft, $16 50,

Lot 15—Brown ash, 1 inch, firsts, 1,954 ft ; seconds, 1,602 ft ; culls, 1,218 ft, $15.

Lot 16—Brown ash, 1 inch, firsts, 1,740 ft ; seconds, 1,698 ft ; culls, 1,057 ft, $15.

Lot 17—Brown ash, 1 inch, firsts, 3,922 ft ; seconds, 3,607 ft ; culls, 2,275 ft, $14 50.

Lot 18—Brown ash, 1 tnch, firsts, 6,582 ft ; seconds, 6,455 ft, $16.

Lot 19—Sap pine moulding strips, 1 inch, $17 50.

Lot 20—Whitewood, ⅝ inch, firsts, 8,691 ft ; seconds, 5,916 ft ; culls, 484 ft, $22.

Lot 22—White pine box 1½ inch, 10,037 ft, $14 75.

Lot 23—Cherry, 1 inch, seconds, 744 ft , culls, 1,834 ft, $21.

Lot 24—Whitewood, pl. 2 s., ⅝ inch, firsts, 2,360 ft ; seconds, 2,731 ft ; culls, 58 ft, $20 50.

Lot 25—Whitewood, 1½ and 2 inch, firsts, 3,996 ft ; seconds, 2,756 ft ; culls, 81 ft, $28.

Lot 26—Whitewood, 1 inch, firsts, 1,426 ft ; seconds, 3,790 ft ; culls, 3,143 ft, $19 50.

Lot 27—White pine shelving, com. rough, 1 inch, 6,352 ft, $16.

Lot 28—Whitewood, extra wide, ⅝ inch, firsts, 4,168 ft ; seconds, 1,275 ft ; culls, 91 ft. $28 50.

Lot 29—White pine selects, 1½ & 2 inch, culls, 937 ft ; picks, 1¼, 1½ & 2 in., 2,470 ft ; box, 1½ inch, 51 ft, $23.

Lot 30—W. pine selects, 1 inch, 494 ft ; picks, 1 inch, 9,126 ft, $21.

Lot 31—White pine, uppers, 2 inch, 4,671 ft ; picks, 2 inch, 176 ft. $43 50.

Lot 32—Walnut, 1 inch, firsts, 373 ft ; seconds, 967 t ; culls, 1,313 ft, $41.

Lot 33—Red oak, 2 inch, firsts, 463 ft ; seconds, 2,-367 ft ; culls, 5,305 ft, $10.

Lot 34—Sap pine, moulding strips, 1 inch, 2,451 ft, $15.

Lot 35—Sap pine, moulding strips, 1 inch, 4,643 ft, $15 50.

Lot 36—Sap pine, moulding strips, 1 inch, 5,359 ft, $15 50.

Lot 37—Cherry, 1 inch, seconds, 301 ft ; culls, 3,167 ft, $23.

Lot 38—White pine uppers, 1¼ inch, 4,580 ft, $41 50

Lot 39—White pine uppers, 1½ inch, 3,654 ft, $41 50

Lot 40—W. pine box, 1 inch, 14,706 ft, $14.

Lot 41—W. pine box, 1 inch, 20,025 ft, $14.

Lot 42—Whitewood, 1 inch, seconds, 2,976 ft ; culls, 9,896 ft, $19.

Lot 43—Whitewood, ⅝ inch, firsts, 9,316 ft ; seconds 5,048 ft ; culls, 179 ft, $21.

Lot 44—W pine picks and box, 1 inch, 4,274 ft, $15.

Lot 46—Sap pine, moulding strips, 1 inch, $16 50.

Lot 47—Brown ash, 1 inch, firsts, 914 ft, seconds, 2,484 ft ; culls, 2,479 ft, $10.

Lot 48—Whitewood, 1½, 2 and 2½ inch, firsts, 6,514 ft ; seconds, 3,829 ft ; culls, 93 ft, $28 50.

Lot 49—Pine common stocks, 1x12 inch, 10,715 ft, $13 75.

Lot 50—Whitewood, 1 inch, firsts, 9,141 ft ; seconds, 4,583 ft ; culls, 231 ft, $27 50.

Lot 51—Whitewood, 1 inch, firsts, 1,437 ft ; seconds, 1,502 ft ; culls, 314 ft, $25 50

Lot 52—Brown ash, 2½ inch, firsts, 3,654 ft ; seconds 4,186 ft ; culls, 1,012 ft, $21 50.

Lot 54—Whitewood, 1 inch, firsts, 1,269 ft ; seconds, 2,289 ft ; culls, 103 ft, $28.

Lot 55—Whitewood, 1 inch, firsts, 2,342 ft seconds, 3,531 ft ; culls, 259 ft, $24 50.

Lot 56—Brown ash, 3 inch, firsts, 3,583 ft ; seconds, 3,131 ft ; culls, 968 ft, $16.

Lot 57—Brown ash, 3 inch, firsts, 4,380 ft ; seconds, 3,337 ft ; culls, 1,576 ft, $15.

Lot 58—Cherry, 1 inch, seconds, 655 ft ; culls, 4,174 ft, $18.

Lot 59—W pine shelving, common, ⅞ inch, planed two sides, 16,297 ft, $12.

Lot 60—Sap pine moulding strips, 1 inch, 12,507 ft, $16.

Lot 60½—Brown ash, 4 inch, firsts,968 ft ; seconds, 1,217 ft ; culls, 167 ft, $20.

Lot 61—Brown ash, 2 inch, firsts, 1,405 ft ; seconds, 2,997 ft ; culls, 775 ft, $17 50.

Lot 62—Whitewood, 1 inch, firsts, 4,245 ft ; seconds, 5,900 ft ; seconds, 1,331 ft, $24.

Lot 63—Cherry, 1 inch, firsts, 489 ft ; seconds, 1,922 ft ; culls, 166 ft, $50.

Lot 65—Whitewood, 1 inch, culls, 2,191 ft, $15.

Lot 66—Walnut, 1 inch, culls, 2,894 ft, $36 50.

Lot 67—Walnut, 1 inch, firsts, 162 ft ; seconds, 5,192 ft, $60.

Lot 68—Pine roofing boards, 1x10 inch, t and g, pl 1 s, 4,226 ft, $18 50.

Lot 68½—Brown ash, 3 inch, firsts, 2,231 ft ; seconds 1,579 ft ; culls, 443 ft, $15 50.

Lot 70—Whitewood, 2 inch, firsts, 3,859 ft ; seconds, 2,336 ft ; culls, 186 ft, $28 50.

Lot 71—Whitewood, ⅝ inch, firsts, 8,877 ft ; seconds, 4,634 ft ; culls, 111 ft, $21 50.

Lot 72—Whitewood, 1 inch, culls, 3,574 ft, $15 75.

Lot 73—Basswood, 1 inch, culls, 4,046 ft, $17 50.

Lot 74—Basswood, 1 inch, firsts, 2,963 ft ; seconds, 3,710 ft, $22.

Lot 74 a—Whitewood, 1 inch, culls, 11,344 ft, $15 50.

Lot 74 b—Walnut, 2 inch, culls, 6,318 ft, $29 50.

Lot 75— Whitewood, extra wide, ⅞ inch, firsts, 10,-434 ft ; seconds, 5,188 ft ; culls, 1,096 ft, $23.

Lot 76—Walnut, 1 and 3 inch, seconds, 1,231 ft, $51.

Lot 77—Walnut, 1, 2 and 3 inch, culls, 6,887 ft, $36 50.

Lot 78—Whitewood, 2 inch, firsts, 3,909 ft ; seconds, 1,762 ft ; culls, 34 ft, $30.

Lot 79—Whitewood, 1 inch, culls, 3,485 ft, $15 50.

Lot 80—Whitewood, 1 inch, culls, 3 297 ft, $14 50.

Lot 81—Whitewood, 1 inch, culls, 3,679 ft, $14 50.

Lot 82—W pine brx, 1 inch, 12,589 ft, $14.

Lot 83—Brown ash, 3 inch, firsts, 3,635 ft ; seconds, 3,710 ft ; culls, 509 ft, $14

Lot 84—Brown ash, 3 inch, firsts, 2,391 ft ; seconds, 2,877 ft ; culls, 534 ft, $11.

Lot 85—W pine box, 1 inch, 21,291 ft, $13.

Lot 86—Whitewood, 2 inch, firsts, 460 ft ; seconds, 569 ft, $28.

Lot 87—Whitewood, s 2 s, 1 inch, firsts, 3,305 ft seconds, 5,908 ft ; culls, 112 ft, $24 50.

Lot 88—W pine, selects and picks, 1 inch, 7,009 ft, $24.

An exchange says :—Years ago two fences on a western farm were built of basswood rails. In one, the rails had been cut in summer ; in the other the rails had been cut in winter. The winter-cut rails rotted, but the summer cut became hard like iron and lasted for a very long time. It is explained that in the rails cut in winter the sap was a long time in drying, and that in consequence it fermented and spoiled the wood ; while the rails cut in summer seasoned rapidly in the hot weather and hardened.

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Perhaps the most extraordinary that success has been achieved in modern science has been attained by the Dixon treatment for Catarrh Out of 2,000 patients treated during the past six months, fully ninety per cent. have been cured of this stubborn malady. This is none the less startling when it is remembered that not five per cent. of the patients presenting themselves to the regular practitioner are benefitted, while the patent medicines and other advertised cures never record a cure at all Starting with the claim now generally believed by the most scientific men that the disease is due to the presence of living parasites in the tissues, Mr. Dixon at once adapted his cure to their extermination ; this accomplished the Catarrh is practically cured, and the permanency is unquestioned, as cures effected by him four years ago are cures still, No one else has ever attempted to cure Catarrh in this manner, and no other treatment has ever cured Catarrh. The application of the remedy is simple and can be done at home, and the present season of the year is the most favorable for a speedy and permanent cure, the majority of cases being cured at one treatment. Sufferers should correspond with Messrs. A. H. DIXON & SON, 305 King street west, Toronto, Canada, and enclose a stamp for their treatise on Catarrh.—*Montreal Star* 1y122.

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do June 8th,	*do October 5th,*
do July 13th,	*do November 2nd,*

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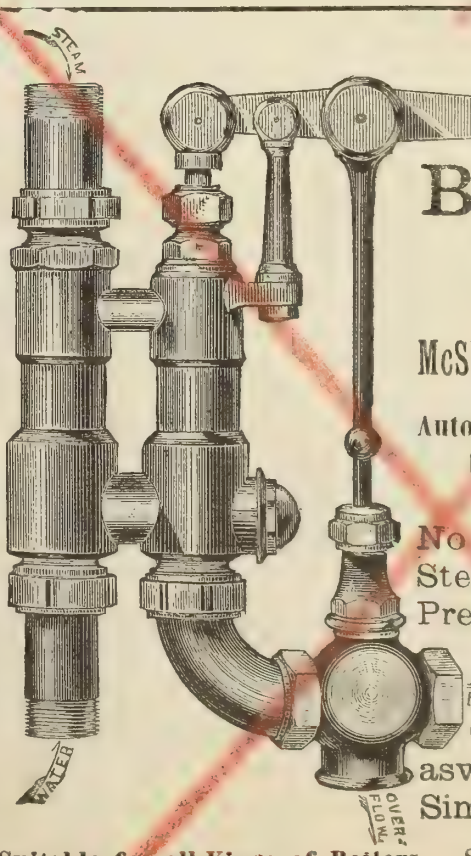

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Market Reports.

TORONTO.

From Our Own Correspondent.

JULY 24.—Our retail yards continue to do a rattling trade, although not near the amount they would do if the wholesale men would stop doing a retail trade. Want of cohesion in the trade is the sole fault and until such times as this fact is felt, and acted upon, things will go on the same as now. Let the the retail men once determine that they intend to do the retail trade, or cease to buy from the middlemen, and the whole matter is settled.

Shipping from our docks, as predicted by me in a former letter, has fallen off to a mere nothing. The Longford stock being shipped by Christie, Kerr & Co, to a Boston firm is about all that is being moved at present. The Ontario Co.'s stock bought by the same parties, is all shipped out, and the stock at present being moved is scarcely fit to handle; in fact there is no dry stuff, except the little held in stock by the retail men and some piled off by track side, and this is rapidly diminishing.

Bill stuff cut to fill orders is ruling high. Just now quite a number of the mills have not got in their tows of long logs as yet, so that comparatively few mills are able to fill bills over twenty 20 feet in length and the few that can do so demand a good figure. As the season advances present prices for long bill stuff will be pulled down being now far above their real value, One mill man demanded $50 per M on cars for 45 feet lengths. The same stuff can be bought in Liverpool, England, to-day for less money. This is the great fault of many of our mill men, when they get the chance they spread it on too thick. From the other side of Georgian Bay there is considerable lumber coming to market, but the mill men at those points take care to make all there is to be made by quoting prices delivered in Toronto, and so the advantage of the low railroad freight, which is only five cents per hundred weight. Of course few men will be ready to blame them for taking advantage of this, but coupling it with the present prices demanded for bill lumber, it makes it high to the consumer here.

Dealers in all cases possibly prefer to bring in lumber by the G. T. R. or C. P. R., thereby escaping the petty difficulties thrown in the road of the consignees by the N. & N. W. R R. Co. Dealers were promised before the managers departure for England that such annoyances would be remedied, but so far such has not been the case, and the amount of red tapism at present existing is trying to the patience of the average lumberman.

Mill cull boards and scantling	$10 00
Shipping cull boards, promiscuous widths	12 00
" stocks	13 00
Scantling and joist, up to 16 ft	13 00
" " " 18 ft	14 00
" " " 20 ft	15 00
" " " 22 ft	16 00
" " 24 ft	17 00
" " " 26 ft	18 00
" " " 28 ft	19 00
" " " 30 ft	20 00
" " " 32 ft	21 00
" " " 34 ft	22 50@22 50
" " " 36 ft	24 00
" " " 38 ft	27 00
" " 40 to 44 ft	30 00
Cutting up planks to dry	20 00@25 00
" boards "	20 00
ound dressing stocks	16 00@18 00
Picks Am. inspection	30 00
Three uppers, Am. inspection	35 00@40 00

B. M.

1½-inch flooring, dressed	25 00@30 00
1½ " " rough	14 00@15 00
1¼ " " dressed	23 00@25 00
" " undressed	14 00
" " dressed	16 00@20 00
1 " " undressed	12 00@14 00
⅞ Beaded Sheeting, dressed	18 00@20 00
Clapboarding, dressed	12 50
XXX sawn shingles, ₩ M	2 75@ 2 90
Sawn Lath	2 25
Red oak	20 00@25 00
White "	25 00@30 00
Basswood, No, 1 & 2	18 00@20 00
Cherry, No. 1 & 2	50 00@60 00
White ash 1 & 2	25 00@30 00
Black ash 1 & 2	20 00@25 00

MONTREAL.

From Our Own Correspondent.

JULY 26.—There is no essential change to note in quotations during the past week. Business still continues brisk, although the demand for large quantities has slightly fallen off, as a number of contractors have now a fair amount of stock on hand for future need. Enquiry for carloads has improved considerably since last report. It is said that mill owners have taken many orders for future delivery, and that present stocks in first hands are light. In this market there is a good supply of thin lumber, but the quantity of heavy available is light. The exports to date include 986,488 pcs. of deals, deal ends and boards, to Europe, and 2,876,781 feet to South America.

Advices from the Saguenay state that the cut of logs in that district last year was very large, upwards of 600,000 logs having been cut, and in most of the establishments on the North Shore operations were conducted entirely on Messrs. Price Bros.' account This firm has bought the deals produced by the logs cut by the English company of the Seigniory of Mille Vaches, the site of whose operations is Port Neuf en bas. Numbers of vessels are loading in the Saguenay, also for the account of Messrs. Price Bros.

The following are the quotations at the yards :—

Pine, 1st quality, ₩ M	$00 00@40 00
Pine 2nd " "	00 00@30 00
Pine, shipping culls, ₩ M	14 00@16 00
Pine 4th quality deals ₩ M	10 00@12 00
Pine, mill culls, ₩ M	8 00@10 00
Spruce, ₩M	10 00@13 00
Hemlock, ₩ M	9 00@10 00
Ash, run of log culls out, ₩ M	20 00@25 00
Bass, " " ₩ M	18 00@20 00
Oak, ₩ M	40 00@50 00
Walnut ₩ M	60 00 100 00
Cherry, ₩ M	80 00 100 00
Butternut, ₩ M	35 00@40 00
Birch, ₩ M	20 00@25 00
Hard Maple, ₩ M	25 00@30 00
Lath, ₩ M	1 50@ 0 00
Shingles, 1st, ₩ M	2 00@ 3 00
Shingles, 2nd, ₩ M	2 50@ 0 00

CORDWOOD.

Prices are steady.

The following are the quotations at the yards :—

Long Maple, per cord	$ 6 00@6 50
Long Birch "	6 00@0 00
Long Beech "	5 00@5 50
Tamarack "	5 00@0 00

CHICAGO.

The *Northwestern Lumberman* of July 24th says :—

BY THE CARGO.

Cargoes to the number of 175 have entered port during the week. The Monday fleet was a fair one, but since then the market has not been liberally supplied with offerings A large amount of lumber is being sold at the mills, or by the commission men to arrive, and does not come on the market. The demand is just moderate enough to check lavish receipts, and keep prices steady. The demand is the most urgent for piece stuff, and that is the kind of lumber that is doled out with the greater caution. There is some buying over the lake, however, and considerable dimension is going into yard that does not figure on the market.

The price of piece stuff remains at former quotations, though it is reported a little stronger than last week. Short green piece stuff, as a basis, is now quoted at $9, and firm at that. The lowest positive price for dimension we have heard of this year was $8.75 for a lot of flat 16-foot Norway, in a transaction that took place a week or 10 days ago. That seems to have been the bottom, and it is likely that prices will not go as low again this year. The tendency now is to greater strength and a slight advance. There are men about the market that even now assert that piece stuff is worth $9 25 for all white pine. One dealer has lately sold 10 cargoes of White lake piece stuff, all short, at $9 a thousand, the lumber to come forward within a few days. This lumber was shaped up a little for the convenience of the purchaser, who wanted the 2x6, 2x8 and 2x10, probably for car decking; but this shaping up is a thing that is easily done when the order goes to the mill, and is becoming a feature of late dealings. Much of the large purchasing at the mills, peculiarly characteristic of the past two seasons, has been on this basis, because the yard man can thus get what is adapted to his trade, and not run so much risk of getting an over-stock of unsaleable lumber. In these times of next to no margins, the wholesale dealer must get an advantage some way and so he goes to the woods, or the boom, or the mill to hunt for it. If he be a good judge of logs and lumber he can generally do better for himself than he can to buy on the cargo market.

The demand for long and heavy joists is good. Cargoes of 2x12 sell from $11.50 to $12.50 a thousand. Extra lots of 3x12 bring as much as $13. Timbers sell fairly well. The call for bridge stuff to go into railroad construction is reported quite urgent by the men who make that feature of business a specialty.

Inch lumber is working off moderately under a demand that cannot be called active. Prices are made within our quoted range. Buyers are not looking to the cargo market for good inch lumber as they once did. The larger portion of such lumber to stock yards is bought in a special way at the mills or to arrive.

This season the yard men are not so anxious to lay in large stocks of high grade lumber as they wore last year. The sale of such lumber this season out of yards has been slow. Naturally this checks the demand.

Standard shingles are a little firmer this week than hitherto. The mills over the lake are running with some reference to the demand; that is they are not crowding production to the utmost, as they generally do. Offers have have this week been refused on the part of the seller at $1 70 for certain brands that have been freely selling at that figure, and $1 72½ demanded It is likely that next week quotations will have to be advanced.

The following are current quotations of cargo prices :—

Dimension, short green	$ 9 00
Dimension, short dry	9 50
Boards and strips, No. 2	10 00@12 00
Boards and strips, medium	13 00 15 00
Selected	21 00 24 00
Boards and strips, No. 1	13 00 19 00
Shingles, standard	1 70 1 75
Shingles, extra	1 80 2 00
Shingles, cedar, standard	1 65 1 75
Shingles, cedar, extra	1 95 2 00
Lath, green	1 25
Lath, dry	1 40

LAKE FREIGHTS.

From Muskegon, dry	1 12½
From Muskegon, green	1 25
From Whitehall	1 25
From Ludington	1 37½
From Manistee	1 37½@1 50
From Menominee, dry	1 37½
From Menominee, green	1 50
From Cheboyan	1 50
From Bay City, dry	1 62½
From Oscoda, dry	1 50
From Alpena, dry	1 50

AT THE YARDS.

There has been a slight increase of movement within the past few days. Whether this is wholly owing to closing out of shipments on the low rate at Omaha, before the incoming of the new rate of 14 cents a hundred, is a question that the dealers are discussing. No doubt the haste to get as much lumber as possible into Nebraska on the 8 cent cut rate has lately stimulated shipments in that direction, for it has been plain to see that heavy trains have been loaded, with Nebraska points for a destination. This little spurt, however, is now over, unless contracts have been made between the freight agents and some of the heavier of the shippers to overlap the new arrangement by a continuance of a cut rate, on the quiet. Such contracts are denied on all hands, and it is claimed that the 14-cent rate is strictly adhered to.

Receipts of lumber and shingles for the week ending July 22, as reported by the Lumberman's Exchange :—

	RECEIPTS. Lumber.	Shingles.
1886	52,268,000	16,764,000
1885	60,208,000	23,033,000

FROM JAN. 1, TO JULY 14, INCLUSIVE.

	RECEIPTS. Lumber.	Shingles.
1886	697,262,000	358,345,000
1885	688,973,000	251,270,000
Increase	8,289,000	107,075,000

STOCK ON HAND JULY 1.

Lumber & timber	405,794,826
Shingles	294,112,188
Lath	40,077,975
Pickets	1,291,497
Cedar posts	266,848

BUFFALO.

We quote cargo lots :—

Uppers	$45 00@46 00
Common	17 00@18 50
Culls	12 50@13 00

TONAWANDA.

CARGO LOTS—MICHIGAN INSPECTION.

Three uppers	$42 00@44 00
Common	18 00@24 00
Culls	10 00@13 00

OSWEGO, N.Y.

From Our Own Correspondent.

We cannot change quotations, trade is unusually dull. The new cut of lumber is now coming forward quite freely, and dealers are anticipating a better demand, but can see no prospect of an advancing price.

Three uppers	$42 00@46 00
Picking	32 00@35 00
Cutting up	24 00@26 00
Fine Common	22 00@25 00
Common	14 00@18 00
Culls	11 00@14 00
Mill run lots	16 00@22 00
Sidings, selected, 1 in	30 00@35 00
" 1½ in	32 00@36 00
Mill run, 1x10, 13 to 16 ft	16 00@21 00
Selected	21 00@24 00
Shippers	14 00@16 00
Mill run, 1¼x10	17 00@20 00
Selected	21 00@30 00
Shippers	14 00@16 00
Mill run, 1 & 1½ in, strips	15 00@18 00
Selected	22 00@30 00
Culls	11 00@13 00
1x6 selected for clapboards	25 00@35 00
Shingles, XXX, 18 in. pine	3 10@ 3 50
XXX Cedar	2 75@ 3 00
Lath 1½, No 1	1 85@ 2 00
No 2	1 00@ 1 25
Ash, 1st & 2nd 1 to 4 in	16 00@20 00
Basswood, 1st & 2d, 1 & 1½ inch	8 00@26 00
" culls, " "	8 00@11 00

ALBANY.

Quotations a the yards are as follows :—

Pine, clear, ₩ M	$55 00@60 00
Pine, fourths	50 00@ 3 00
Pine, selects	42 00@47 00
Pine, good box	22 00@23 00
Pine, common box	13 00@15 00
Pine, 10-in. plank, each	00 45@00 47
Pine, 10-in. plank, culls, each	00 25@00 27
Pine boards, 10-in	00 30@00 32
Pine, 10-in. boards, culls	00 16@00 20
Pine, 10-in. boards, 16 ft., ₩ M	28 00@32 00
Pine, 12-in. boards, 16 ft	28 00@32 00
Pine, 12-in. boards, 13 ft	28 00@00 00
Pine, 1½ in. siding, select	40 00@43 00
Pine, 1¼-in. siding, common	15 00@18 00
Pine, 1-in. siding, select	40 00@42 00
Pine, inch siding, common	13 00@15 00
Spruce, boards, each	00 00@00 16
Spruce, plank, 1½-in., each	00 00@00 20
Spruce, plank, 2-in., each	00 00@00 30
Spruce, wall stripe, each	00 12@00 12
Hemlock, boards, each	00 00@00 14
Hemlock, joist, 4x6, each	00 00@00 32
Hemlock, joist, 2½x4, each	00 00@00 14
Hemlock, wall strips, 2x4, each	00 00@00 11
Black walnut, gook, ₩ M	100 @120 00
Black waluut, ¾ inch	80 00@90 00
Black walnut, ¾ inch	00 00@85 00
Scaymore, 1-inch	28 00@30 00
Scaymore, ¾-inch	21 00@23 00
White wood, 1-inch and thicker	38 00@40 00
White wood, ¾-inch	28 00@30 00
Ash, good, ₩ M	40 00@43 00
Ash, second quality, ₩ M	25 00@30 00
Cherry, good, ₩ M	60 00@85 00
Cherry, common, ₩ M	25 00@30 00
Oak, good, ₩ M	40 00@43 00
Oak, second quality, ₩ M	20 00@25 00
Basswood, ₩ M	25 00@30 00
Hickory, ₩ M	40 00@40 00
Maple, Canada, ₩ M	28 00@30 00
Maple, American, per M	26 00@28 00
Chestnut, ₩ M	38 00@40 00
Shingles, shaved, pine, ₩ M	0 00@ 6 50
" 2nd quality	0 00@ 5 00
" extra, sawed, pine	4 30@ 4 50
" clear, "	0 00@ 3 00
" cedar, mixed	0 00@ 3 30
" cedar, XXX	0 00@ 0 00
" hemlock	2 25@ 2 31
Lath, hemlock, ₩ M	0 00@ 2 13
Lath, spruce, "	0 00@ 2 25

LONDON.

The *Timber Trades Journal* of July 17th says :—It is too early to hazard any predictions as to the course that trade will take during the remainder of the current year, more especially as the country has scarcely recovered from the disorganization occasioned to business by the recent elections. The feeling in many quarters is hopeful, and confident predictions of a good autumn trade are expressed by many to whom, probably, the wish is father to thought. At the same time it must be admitted that the import so far contrasts favorably with other years, and the arrivals at the Surrey Commercial Docks continue on a moderate scale. As a set-off, however we have the fact that the deliveries from the same docks are, in the aggregate, less than in preceding years, while the majority of buyers continue to maintain that the present stocks in London are sufficient to supply the requirements of the trade for some time to come. Certain it is that little disposition is shown by importers here to add to their stocks, and the business that is being transacted is extremely limited.

We are always being told that things cannot go on for ever in the present ruinous state and a turn must be close at hand; yet still the market keeps on declining, and trade lanquishes as if hopelessly incurable. Even with reference to freights, when we asked the opinion of a leading merchant, who charters a large amount of tonnage throughout the year, as to whether

he thought the present combination of shipowners would effect the rates, his reply was that he had recently chartered from one of the gulf ports to London at a lower rate than had ever previously been done. Notwithstanding this we think we can observe a lifting of the clouds which have so long lowered over the freight market, and the gleam of light on the horizon is the present tendency of owners to lay their vessels up. Still there are too many steamers even now afloat, but the example already set, we are glad to observe, is taking root. In the north, steamers are to be seen lying up in dozens and the Humber is said to be chokefull of vessels out of employment.

Messrs. Churchill & Sim, if they had very little to submit on Wednesday last, at any rate succeeded in bring a fair muster of the trade together. Of course a good many of the regular frequenters were absent, this being the season of the year when the seaside exercises its attractions; but, taking one thing with another, the attendance was rather better than the limited quantity of unreserved goods would have led one to expect.

The first open water pine fleet are coming forward now pretty freely, and we have no less than ten arrivals from Quebec to record this week.

We were rather surprised to see these better kinds going so cheap as they were put up in such small lots; and, judging by the present tone of the market, any improvement this year seems out of the question, for there is the contemplation of the heavy stocks eating their heads off with expenses, which may at any moment come on the market to check any bouyancy that might otherwise exert itself.

The little lots of 3rd bright Quebec pine deals per Clara at £8 15s. read cheap, but there was no particular anxiety to secure them amongst those present, the lengths, 9 and 10 ft., not being those most inquired for. Adding on rent and charges gives another complexion to values, and it makes all the difference how long they have been on hand to the seller at the present wretched auction prices.

Amongst this week's pine arrivals from Quebec are the Sabino, Carmona, Kalos, our old friend the Drammenseren, the Lake Leman, Rhine and Alfield, the latter for Messrs. R. R. Dobell & Co Of these the Sabino brings a cargo of 1st, 3rd and 4th pine for Messrs. Browning & Co., of which the prime quality is being landed and the third we noticed going into lighters; these struck us as being a capital lot of Maclaren's shipment, and in good. dry condition. The Carmona brought for the same firm principally Hamilton's 4th pine, which are being stacked in D yard, and are about as good a parcel of lower quality pine as we have seen. We could point to one or two stacks in their neighborhood of 3rds of another shipment with which they would favorably compare. The Kalos and the Lake Leman have gone into the Surrey Commercial docks, as have also the Alku, and the Hermann, for Messrs. Arnold & Co., as well as the Edmund Kaye, with deals and deal ends, for Messrs. Price & Pierce. The bulk of these have a considerable portion of their cargoes oak, elm, and birch, but the Rhine, from Montreal, brings an entire cargo of deals and deal ends to order.

LEITH.

The *Timber Trades Journal* of July 17th says:—The importations of wood goods during the past week continue light for the season of the year, and the only item calling for particular notice is a further arrival from Quebec of a general cargo of pine, hardwoods, and pine deals per Clyde, for Messrs. Wm. Thomson & Co. There are still other three or four cargoes expected from Quebec, of the spring shipment, so that the supplies from that quarter promise to be heavier than usual.

CARDIFF.

The *Timber Trades Journal* of July 17th says:—During the past week we have had only one cargo of mining timber from Norway, one of pitch pine timber from Pensacola, and a good-sized cargo of deals from St John. One market cargo, which came forward at the same time, has been ordered to Sharpness. As far as we can learn, several charters have been signed, both from Canada and from the Baltic, 40s. from lower Canadian ports, and 50s. Quebec

The week just elapsed, in consequence of the elections, has, of course, been rather upset, but as these are now over, we expect to see deliveries a good deal brisker than they have been. The building trade continues active, and our town and suburbs, especially the latter, are growing rapidly; but, as we have before stated, these operations in themselves are not sufficient to keep the wood trade up to the mark. Mining timber remains in the same stagnant state as all through the year; very little is coming forward, and yet prices remain low. The French prop trade is in much the same condition as recorded last week, a state of things principally attributable, we think, to the import exceeding the consumption.

GLASGOW.

The *Timber Trades Journal* of July 17th says:—Arrivals here for the past week include a cargo or two of lower port spruce deals, the supply of which this year has been very light; and as would be observed from statement given in last number, the stock held at 30th of June was comparatively small. The tonnage employed in conveyance of spruce deals (lower port) to Clyde amounts this year up to date to only 3,580 tons, as against 4 934 tons same period last year. Of the cargoes of spruce noted under the Glasgow imports this past week the bulk goes into the hands of consumers direct.

There has been one small import of Quebec deals per steamer, and the total landed at Glasgow since the season commenced is now 78,000 pieces, as against 108,000 pieces same period last year. Other arrivals here for the week have been miscellaneous parcels of oak logs and planks, staves, etc.

The Grangemouth imports, we observe, continue light, the carrying tonnage conveying wood goods there during the past three weeks being 6,672 tons, and for corresponding period 1885 16,752 tons, and 1884 11,338 tons.

The demand generally in the wood trade being very dull at present makes it advisable that imports should be on a small scale.

LIVERPOOL.

The *Timber Trades Journal* of July 17th says:—The first vessels of the Quebec spring fleet have just arrived here, and consequently the quays of the Canada and Brocklebank docks, which are allotted to the timber trade will soon wear a lively aspect, in great contrast to the apathetic appearance they have bone for such a lengthened period.

The first of these is the Loyal with a cargo of timber, chiefly waney and square board pine, the importation of Messrs. Bryant, Powis & Bryant, limited, which is now discharging in the Canada dock, and two vessels are lying in the river with cargoes of pine deals from Quebec and Three Rivers, waiting opportunity to enter the docks, the heavy western gales blowing at present rendering it a difficult and dangerous operation. In addition to these there are also six or eight vessels with spruce deals, chiefly from the lower ports, in a like position, and two with cargoes of pitch pine; so that next week will be a busy one.

Most of the spruce deal cargoes are already sold, and considerable portion of their cargoes will go direct into consumption being forwarded from the ship's side up to the country districts.

No public sales of whitewoods are announced at present, but probably some will be held within a short time from now, although they will not be either so numerous or extensive as usual, owing to the limited quantities of consignments direct from the shippers, who are not at all disposed to send their productions on the market in the face of the present low prices ruling in this port.

Ocean Freights.

The Quebec *Chronicle* of July 22nd says:—Two hundred and sixty-eight sea-going vessels have entered at the custom house since the opening of navigation. The following are the transactions we have heard of:—Quebec to Cardiff—Sleepers, 50s. Quebec to Greenock—Timber, 18s. 3d.

LIVERPOOL STOCKS

We take from the *Timber Trades Journal* the following Comparative Table showing Stock of Timber and Deals in Liverpool, Birkenhead and Garston, on June 30th 1885 and 1886, and also the consumption for the month of June 1885 and 1886

	Stock, 1885	Stock, 1886.	Consumption 1885.	Consumption. 1886
Quebec Square Pine	188,000 ft.	146,000 ft.	20,000 ft.	42,000 ft.
" Waney "	182,000 "	178,000 "	2,000 "	5,000 "
St. John Pine	58,000 "	10,000 "	24,000 "	14,000 "
Other Ports Pine	44,000 "	12,000 "	2,000 "	5,000 "
Red Pine	27,000 "	14,000 "	1,000 "	2,000 "
Pitch Pine, hewn	608,000 "	201,000 "	264,000 "	89,000 "
" Sawn	449,000 "	850,000 "	223,000 "	265,000 "
Planks	60,000 "	00,000 "	0,000 "	0,000 "
Dantzic, &c., Fir	63 000 "	38,000 "	5,000 "	6,000 "
Sweden and Norway Fir	10,000 "	32,000 "	2,000 "	9,000 "
Oak, Canadian and American	141,000 "	156,000 "	21,000 "	17,000 "
" Planks	167,000 "	199,000 "	45,000 "	62,000 "
" Baltic	11,000 "	4,000 "	0,000 "	1,000 "
Elm	11,000 "	17,000 "	0,000 "	0,000 "
Birch	80,000 "	120,000 "	71,000 "	29,000 "
Ash	23,000 "	8,000 "	2,000 "	0,000 "
East India Teak	66,000 "	215,000 "	11,000 "	4,000 "
Greenheart	58,000 "	77,000 "	2,000 "	31,000 "
N. B. & N. S. Spruce Deals	12,449 stds	12,906 stds.	5,387 stds.	4,778 stds.
" Pine	450 "	453 "		
Quebec Deals	3,508 "	3,935 "	2,716 "	1,726 "
Baltic Red Deals, &c.	1,976 "	2,640 "	701 "	581 "
Baltic Boards	68 "	190 "	00 "	17 "
Norway, &c., Flooring Boards	4,191 "	2,643 "	1,172 "	1,680 "

BOARD OF TRADE RETURNS.

The following are the returns issued by the board of Trade, for the month of June 1886; and also for the 6 months ending June 1886:

MONTH ENDED 30TH JUNE, 1886.

	Quantity. Loads.	Value £
Timber (Hewn).		
Russia	23,745	35 221
Sweden and Norway	63,116	86,527
Germany	31.292	78,567
United States	9 603	31,498
British India	5.627	68.377
British North America	9.030	35.755
Other Countries	22,458	37,412
Total	164,871	373,357
Timber (Sawn or Split, Planed or Dressed).		
Russia	104,621	216,177
Sweden and Norway	188,452	373,759
United States	41,330	110,690
British North America	58.611	146,832
Other Countries	7,876	30,726
Total	400,896	878.184
Staves, (all sizes)	12,690	37,903
Mahogany (tons)	4,442	37,729
Total of Hewn and Sawn	565,767	1,251,571

SIX MONTHS ENDED JUNE 30TH, 1886.

Timber (Hewn).		
Russia	39,170	74,880
Sweden and Norway	250,893	342,104
Germany	75,826	193,187
United States	49,052	169,378
British India	23,852	303,565
British North America	12,884	47,662
Other Countries	203,013	279,360
Total	654,690	1,410,136
Timber (Sawn or Split, Planed or Dressed).		
Russia	155,072	311,200
Sweden and Norway	466,369	977,677
United States	159,316	429,553
British North America	93,135	224,890
Other Countries	26,829	87,549
Total	900,721	2,030,869
Staves (all sizes)	46,111	202,802
Mahogany (tons)	26,029	218,115
Total Hewn and Sawn	1,555,411	3,441,005

WOOD-WORKING PATENTS.

The following list of patents relating to the wood-working interests, granted by the U. S. patent office, July 13, 1886, is specially reported by Franklin H. Hough, solicitor of American and foreign patents, 925 F street, N. W. Washington, D. C., who will furnish copies of patents for 25 cents each.

345 466—Lathe, wood turning—C. W. Wilder Fitchburg, Mass.

345,503— Planing machine, wood—E. H. Hanson, Philadelphia, Pa.

345,388— Saw gummer—S. R. Mathewson, Pleasant Valley, Cal.

345,648—Saw handle—R. E Poindexter, Indianapolis, Ind.

PATENTS ISSUED JULY 20.

345,662—Cutter head—E. G. Blaney, Swampscott, Mass.

345,890—Plane, blind nailing—W. G. Stranahan, Minneapolis, Minn.

345,791—Saw set, gage and raker guide, combined—M. Lalonde, Oscoda, Mich

345,753—Saws, automatic feed for edging—E H. Barnes, Brooklyn, N. Y.

345,928—Wood, preparation of kindling—J. L. Seymour, New York, N. Y.

RAFTS ARRIVED

The Quebec *Chronicle* gives the following list of rafts arrived:—

July 8—D. D Calvin & Co., oak, elm and pine, Michigan and Ohio, sundry coves.

July 9—Thos. Buck, elm, Michigan, Ottawa cove.

July 10—P McLaren, white and red pine, Ontario. St. Lawrence Co.'s cove.

July 16—David Moore, white and red pine, Nipissing, Cap Rouge.

July 20—Timmons & Gorman, white and red pine Nipissing, Cap Rouge.

SUPERVISOR OF CULLERS' OFFICE

Comparative statement of timber, masts, bowsprits, spars, staves, etc., measured and culled to date, at Quebec:—

	1884.	1885.	1886.
Waney White Pine	959,252	661,434	849,632
White Pine	849,277	984,587	631,354
Red Pine	50,311	43.204	147,520
Oak	449,244	399.858	419,5
Elm	449,244	474,783	233,236
Ash	312,683	148,007	83,558
Basswood	685	47	218
Butternut	893	1,726	57
Tamarac	16,937	1,126	3,118
Birch and Maple	184,071	265,203	153,715
Masts and Bowsprits	— pcs	— pcs	— pcs
Spars	32 pcs	17 pcs	— pcs
Std Staves	16.6.2.22	39.8.3.21	36 1.3.1
W. I. Staves	69 8.1.23	67.7.2.04	8.1.2.16
Brl Staves	0.6.2.13	48.5.3.07	.....

JAMES PATTON,
Supervisor of Cullers.

Quebec, 16th July, 1886.

THE TIMBER TRADE.

A despatch from Quebec to the Montreal *Witness* says:—*Le Canadien* publishes to-day the report of an interview between one of its reporters and a number of shippers and others prominently connected with the timber trade of the port, touch a despatch published in the *Witness* stating that a steamship had been obliged to go to Montreal to take in a cargo of deals there owing to the onerous regulations of the Ship Laborers' Society here. All agreed that the despatch was well founded, and that the absurd regulations of the ship laborers were driving both steam and sail vessels from Quebec, numerous instances being specified in which they have operated injurious to the trade of the port and beneficially to that of Montreal. At the same time it was admitted that the wages demanded by the ship laborers were not too high, considering the dangerous character of the work. The Canadian Pacific freight agent here, Mr. Lemieux, stated that it was true that Quebec merchants were daily receiving and paying freight at the rate of 12 cents per hundred on large quantities of goods which were carried to Montreal by inward steamships past Quebec rather than have to submit to the ships laborers' exactions here, and Mr. R. R. Dobell said that for the same reason numbers of Quebec merchants preferred to ship their deals via New York or Boston.

GILMORE & Co's drive of forty thousand sawlogs passed through the slide at Hastings on Monday.

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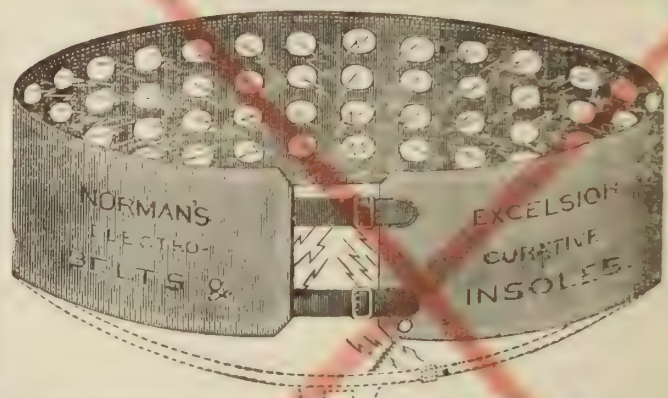

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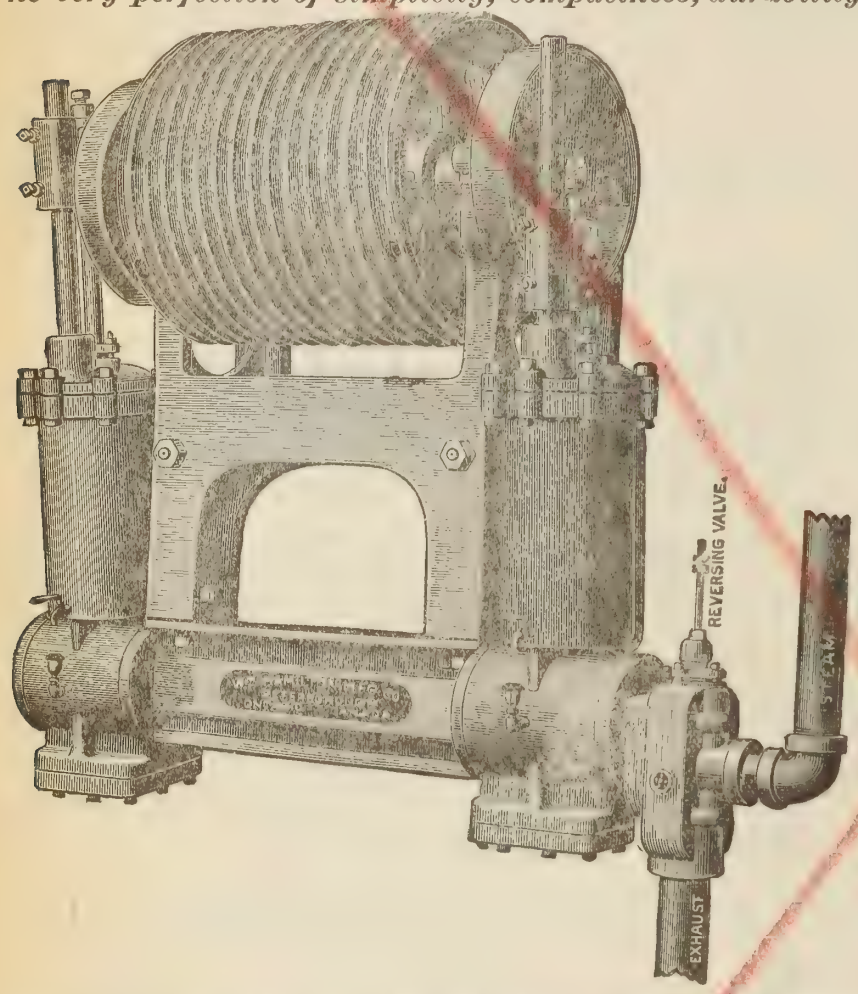
This Engine has practically but two moving parts, aside from cranks and shafts. The whole array of eccentrics valves, valve rods, connecting rods, cross heads, slides, levers, rock shafts, bell cranks, etc., is done away with, and the very perfection of simplicity, compactness, durability and cheapness attained.



The above engraving illustrates the Twin Engine, 10x16, for Rope Feed, for Saw Mill Carriages. The spool is 27 in. diameter, 30 in. face, is grooved 2 in. pitch for 1½ in. rope. The shaft is steel, 4½ in. diameter, with disk cranks. No connecting rods, eccentrics or valve rods to get loose and out of order. The ports are in the trunions, and worked by an oscilliation of the cylinders, and are held in their place in the downward motion by a steam cushion below. The sawyer's valve is a perfect balance, and by moving this valve the engine can be reversed, stopped or started almost instantaneously if necessary, as the sawyer has perfect control of it by his lever either to go fast or slow. Should the sawyer let go of his lever either by mistake or any other cause, it is balanced so that the valve will come to the centre and cut the steam off both cylinders and stop the feed. When standing, the lever is locked or fastended, so that is is impossible for it to start off itself. The engine stands upright below the carriage, and bolted to two upright beams, placed on the mill for the purpose. When a rack is preferred in place of the rope, we put on a steel wheel 30 in. in diameter, and the engine placed high enough to work into the rack on carriage bar, or if the beams come in the way, an idler wheel can be used between engine and rack segs; or, the engine can be placed at a distance and have a shaft from it to the carriage; or it can be placed in the engine room, where it is under the control of the engineer for oiling, thence by shaft and pinion to carriage rack bars. These engines are well adapted for cutting long logs, or where the logs are mixed, the advantage of this feed will be apparent to mill men. When the carriages are used in two or more sections, the couplin and uncoud ling of each section is quick and simple.

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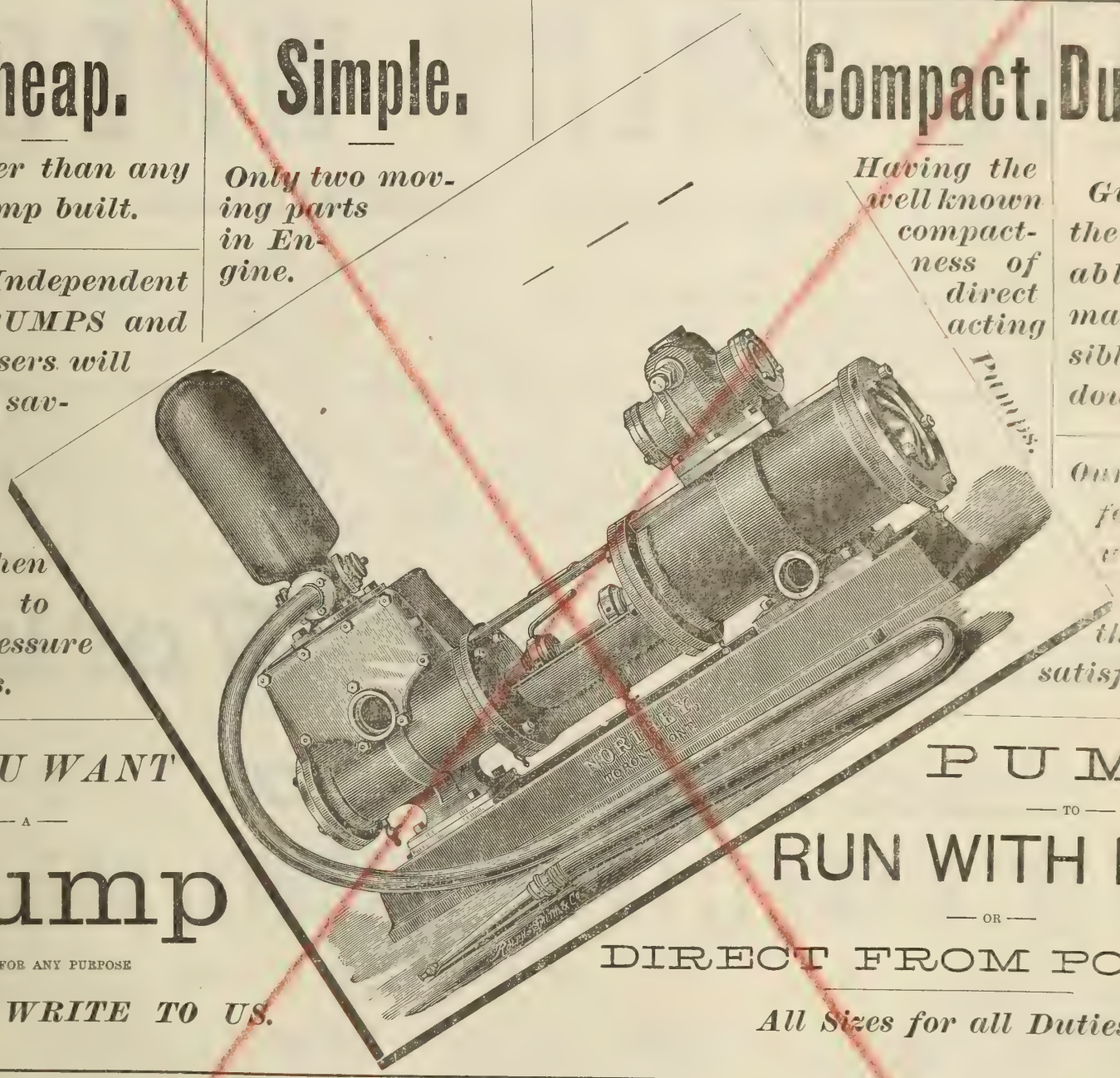

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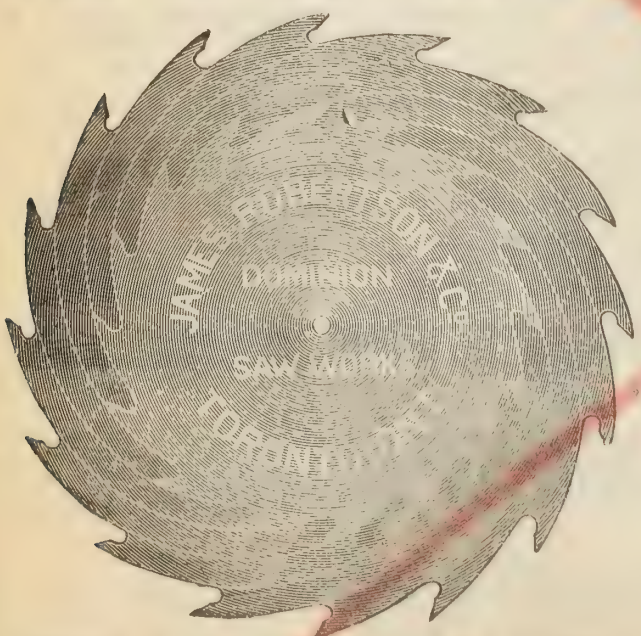

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VOL. 6. PETERBOROUGH, ONT., AUGUST 15, 1886. NO. 16

ALASKA'S TIMBER RESOURCES.

A correspondent writes to the *Western World*:—"Alaska is square-shaped, with two horns projecting from the southeast and southwest corners, the former called southeastern Alaska, the latter being the Aleutin islands. This southeastern horn is the place where is congregated nearly all the white population engaged in those indutries over which the government has thrown no special protection.

"Nearly all of Alaska south of the Arctic cicle may be covered with timber, except an immaterial portion facing Behring sea and the Aleutian islands, although, in the broadest sense, none of it is fit for more than local use, except southeastern Alaska, and most of this, rom its remoteness, can never expect to compete with the more valuable and vast timber fields of British Columbia, Oregon and Washington territory until the latter are exhausted. There is one exception to this general rule, however, in a very valuable kind of timber found near the tip of the southeastern horn, along the Pacific coast. I refer to the yellow cedar of Alaskan parlance. For a number of years it has been used upon the northwest coast as a fancy wood, from its exceeding fine texture, great durability, and odor which, though agreeable to the genus homo, is a sure preventive to moths, and other good qualities for cabinet making, special woodwork and so on.

"The yellow cedar attains enormous size compared with the dwarfed species by which it is surrounded, often reaching a height of over 100 feet and corresponding diameter at the butt, shown by the conifer family. When I was in Boca de Quadra inlet, Alaska, not from Dixon entrance, that separates this territory from British Columbia, we had to unload 65 tons of freight a salmon cannery there, and this was done in two loads by a raft made of two logs of yellow cedar not yet thoroughly seasoned. I thought they were ten feet at the butt, so grand were the logs, but probably two-thirds that would be about the truth. Even in the region that this extremely valuable tree occupies—the third of southeastern Alaska—it is not found in large districts, either in compact forests or straggling cases among other kinds, but rather in little isolated groups, or patches here and there, 10-acre and 100 acre lots, so to speak; but, once found, this patch is quite densely populated with them. This would really be greatly in its favor in securing these 'groups as timber land. Some of them, however, are quite large, and many have never been well outlined, and others, no doubt, are yet to discovered in this almost wild country. Most of it grows near the water, and this phase, in an Alpine country, cut up by numberless channels and inlets of water running in every direction and creating thousands of islands, may be readily appreciated. Near by the old Russian towns the clumps have been exterminated by them before we came in possession of Russian America, and had they held it I have but little doubt it would now be worked on a large scale, or monopolized by some Moscovite favorites. While living in Oregon and the adjacent territories I often heard these valuable fields of timber discussed by parties who desired some law to protect them in securing them, and I was more than impressed with their sayings when I afterwards visited the districts. I look on the industry based on this timber as one of the future 'bonanzas' of Alaska, and the only one in the line of timber."

TREES ON THE PACIFIC SLOPE.

George H. Hamm, the well-known correspondent, who is "doing" British Columbia in the interests of the Winnipeg *Manitoban* writes as follows:—"The timber supply of the province is apparently inexhaustible, and will doubtless prove a mine of wealth before many years. Already shipments are made to the Australian, South American and Chinese markets, but the volume of trade has not as yet reached the proportion that it is capable of. The principal tree is the Douglas fir, which ranges from four to twelve feet in diameter, and from two hundred to three hundred feet high. It is straight and tough, and capable of bearing a great strain, and is almost unequalled for bridging, framework and for shipbuilding, while its great length and straightness make it especially adapted for masts and spars. Besides the Douglas, the following trees are to be found in the province—the lists being obtained from a work issued by the local government: Western hemlock, large, found on coast and Columbia river; Englemann's spruce, eastern part of province and interior plateau; Menzie's spruce, very large, mostly on coast; great silver fir, coast tree of great size; balsam spruce, abounds in Gold and Selkirk ranges, and east of McLeod's Lake; Williamson's Alpine hemlock, too scarce and too high up to be of much use; red pine (yellow pine or pitch pine), a variety of the heavy yellow pine of California and Oregon, very handsome, four feet diameter, common in drier parts of interior; white pine (mountain pine), Columbia region— Shuswap and Adarms' Lakes—also interior of Vancouver's island; white-barked pine, small; western cedar (giant cedar or red cedar), wood pale, yellow or reddish color, very durable, often found 100 to 150 feet high, and 15 feet thick; yellow cypress (yellow cedar), mainland coast, Vancouver and Queen Charlotte islands; western larch, (tamarac), Rocky Mountains, Selkirk and Gold ranges, west to Shuswap Lake, large tree, yield a strong, coarse, durable wood; maple valuable hardwood on Vancouver and adjacent islands, Queen Charlotte island and the mainland coast, up to 55°, attains a diameter of four feet; vine maple, very strong, tough whitewood, confined to coast; yew, Vancouver and opposite mainland shores, very tough and hard, and of a beautiful rose color; crab apple, along all the coasts, wood very hard, takes good polish, and withstands great wear; alder, two feet thick, on the Lower Frasar and along coast, good furniture wood; western birch (paper or canoe birch), Columbia region, Upper Fraser, Peace River, range and value not much known; oak, on Vancouver Island 70 feet in height, and three feet in diameter; dogwood, Vancouver and coast opposite. Arbutus, close-grained, heavy, resembling box; reaches 50 feet in height, and 20 inches in diameter, found on Vancover and neighboring islands. Aspen poplar, abounds over the whole interior, reaching a thickness of two feet. Three other varieties of poplar are found, commonly included under the name cottonwood. One does not extend above Yale, and is the same wood largely used in Puget Sound to make staves for sugar barrels for San Francisco. The other two kinds occur in valleys in the interior. Mountain ash, in the interior; Juniper (red cedar or pencil cedar) east coast of Vancouver, and along the shores of Kamloops and other lakes in the interior.

There are already some very extensive saw mills in operation—and have been cutting for a quarter of a century—and yet this branch of industry is only in its infancy. Not only is there the trans-Pacific trade, gigantic as it should soon be, but with cheap freight rates the treeless plains of the Northwest could be readily supplied and profitable interchange of commodities spring up.

A THRILLING EXPERIENCE.

DETROIT, Mich., July 31.—A Chicago special says: The Canadian steamer Isaac May staggered into harbor at a late hour on Thursday night without fuel and almost destitute of provisions. Captain Muir, her master, relates a thrilling experience. The May left Chicago three weeks ago, towing three barges. After a run of five days they arrived at the Manitoulin island, on the Canadian side of Lake Huron, the largest island in the great lakes, covered with cedar trees. When the vessel arrived the inhabitants were badly frightened. For weeks not a drop of rain had fallen. The steamer and her tow began to take on cargoes of posts and ties, when the woods suddenly burst into a great blaze. No sooner had the fire started than a severe wind storm swept over the island driving the flames in every direction. The people fled in terror to the beech and sought shelter on board the vessels, which pulled out into the lake. Scores of bears, roaring with pain, ran out of the woods, with the hair singed from their hides, and plunged into the lake. The flames raged for five days, burning over acres of valuable timber and destroying a vast amount of stock piled on the beech for shipment. Then a drenching rain storm set in, and continued until the fire was put out. It was ten days from the time the vessels reached there before they were ready to leave, and their stock of provisions was almost exhausted in caring for the people who took refuge there. Still Capt. Muir thought he could make his provisions hold out until they reached Chicago, but he did not count on having head winds all the way.

The vessels left the island last Saturday morning, and as dense clouds of smoke from the burning timber had settled down over the water, the vessels had to pick their way slowly through the darkness. The steamers passed the Straits on Monday, but hardly had entered Lake Michigan when they ran into another band of smoke that shut out everything from view. So thick was the atmosphere that the first barge of the tow could not be seen from the decks of the steamer. On all sides could be heard the fog signals of passing steamers. By moving slowly and sounding whistles at frequent intervals, the steamer made her way through the smoke in safety. Her progress had been so greatly impeded, however, that when one hundred miles north of Chicago the engineer reported the coal bunkers empty, and the steward informed the captain that nothing was left to eat but salt pork. The crew were put under short rations and the deck load posts were drawn on to feed the furnaces, but the cedar was so green that the boilers could hardly be kept warm. Finally the steamer cut her consorts adrift and came to Chicago under sail without them. The experience of the steamer at the Manitoulin island during the fire was thrilling. The scene from the vessels as told by a spectator was grand beyond description. The flames shot into the air for hundreds of feet and turned night into day, while the heat was so intense that the vessels were obliged to push out into the lake. The noise was deafening, and amid all the din and confusion thousands of birds fluttered around their late homes, until, tired with constant flight, they dropped into the lake or fell into the flames. Deer and bears rushed from the woods together, and threw themselves into the cooling waters of the lake. For five days the flames held their sway before the lumbermen could return to island to finish loading the vessels. The barges were found off Racine and towed into port yesterday.

Timber Movement.

Mr. J. M. Irwin has sent forward from Lakefield to Quebec by all rail communication eight hundred and fifty pieces of square timber during the past week. This is the first time the all rail route from here has been utilized by lumbermen for the transhipment of square timber. This mode of transport has the advantages of being quicker, less risky, and the insurance on the stock is less. Mr. Irwin will send more square timber by the same route.

Chips.

A SIDE line has been built from the Messrs. Rathbun's mill at Campbellford to the Grand Junction track. Five sub lines have been laid down in the yards.

NEW piers, says the Campbellford *News* are about to be constructed by Messrs. Rathbun which will greatly improve the appearance of their premises and give stability to the made portion of their yard.

MR. JOHN WOODS' saw mill situated about 15 miles above Maniwaki, Quebec, on the river Desert, was on Aug. 3rd destroyed by fire; the loss is estimated at $1 500, no insurance. It is supposed to be the work of an incendiary.

AN employe of the Delta Lumber Company, at Thompson, upper Michigan, lost an arm in one of the company's mills. He sued for $12,000 damages, and was awarded $5,000. The case has been appealed.

ISRAEL MERRITT, a lumberman, of Bristol, N. B, has assigned. His liabilities are placed at $30,000. He gives preferences to the extent of $12 000. Among his creditors are several St. John firms. To one firm there he owes $4,000, to another $2 000.

STETSON & PAST, at Seattle, W. T., lately hired a few Chinamen to pack shingles. In the afternoon of the day when the Chinamen were first employed the mill hands struck and demanded the discharge of the Mongolians. The firm yielded, and the serenity of a Puget sound climate again brooded over the mill.

OWING to the low price of deals, as well as the limited demand for them, says the St John *Globs*, some of the mills are closing down and others are likely soon to do likewise. Messrs. Randolph & Baker's mill suspended operations last week; Messrs. S. T. King's, at Mosquito Cove, stopped work on Saturday last.

PARDEE, COOK & Co 's mill, at Gun Lake, Mich, together with the firms store, tramway, 350,000 feet of lumber, and seven cars belonging to the Flint & Pere Marquette railroad, were burned Aug. 3rd. The mill was valued at $40,000, and the total loss was placed at $80,000, against which there was but $20,000 insurance.

WHAT has come to be recognized as the best or standard speed for the main shaft of sawmills, says the *Timber Trades Journal*, is 250 revolutions per minute, and if a second or third shaft be used to give motion to lighter machines, this speed may be increased with advantage to 300 revolutions per minute, but not above as a general rule.

TRENTON, Ont., Aug. 10.—About 12-30 to-day a fire broke out in the fanning mill factory owned by Wm Fitzpatrick. The flames spread very quickly, and soon an adjoining planing factory, owned by Seeds Bros, was also in flames, and both were completely destroyed in a very short time. Cause of fire unknown. No Insurance. Loss about $5000.

French props, instead of advancing as customary at this season, remain at the low figure of something like 15s 6d. per ton, ex ship. This, we understand, is mostly owing to a rather large contract having been taken at even lower figures. Evidently there are some people with sufficient courage to speculate on even lower prices and lower rates of freight than are ruling now.

HOODLESS & SON, through their magnificent display at the Colonial Exhibition, received yesterday a tidy order for bedroom sets in elm, and walnut rockers The orders came from Gitten & Co., furniture dealers, Camden town, London, who state that their articles have been much admired and that quite a demand may be expected for them. This is news which ought to swell the heart of every Hamiltonian with pride. The order will be shipped at once.—*Hamilton Spectator.*

THE *Lumberman's Gazette*, of Bay City, Mich., says:—"The Emery Lumber Company brought over another load of logs from their Georgian Bay possession last Saturday, the the Wahnapetae barge being loaded with 600, 000 feet of pine logs. Having made all their arrangements to cut the products of their Canadian timber limits on the Saginaw river, they are not to be deterred by the additional export tax."

THE Deseronto *Tribune* says:—On Tuesday morning the tug Rescue brought in a tow of timber from Mill Island near Trenton. They were taken from the old Star mill which was erected many years ago by Messrs. Morton & Baker of Kingston, and afterwards owned by A. S, Page, Esq, of Oswego. The mill has not been run since it came into the hands of the Rathbun Company and now the timbers have been taken out to be used for other purposes. They are large and sound. The island so long known as Baker's or Mill Island is beautifully located and can be utilized for many purposes.

MR. E. WALTER RATHBUN, says the Deseronto *Tribune*, writing from Mr. M. Butler's camp in Algoma, states that they are making fair progress with their survey of the new townships. The country is rather rough in parts, and many sections having been burnt over in former years are now grown up with young poplar, hazel, &c. The weather has been variable, very hot during the day and very cold at night. Water on several nights was frozen in the pail. The expidition is not unaccompanied with hardships. Transportations are difficult. packing being the favorite method, the load being supported by a brand across the forehead. The loads vary from sixty to ninety pounds, though Indians and other natives sometimes carry from one hundred to one hundred and eight pounds weight. The hungry mosquito, ferocious black fly, and maddening sand fly, all abound and make life miserable. The party expect to be through with the survey by the first of September.

BLACK BIRCH.

A writer in the Hamilton *Spectator*, who have been visiting the Muskoka Lakes, says:—Lumbering is at present the most important industry in the whole of the Muskoka country, but the lumbermen interest themselves only in the pine. The woods are, however, filled with timber destined to be of very great economic importance to Canada The black walnut of Ontario is nearly exhausted. When it is gone back birch must take its place. This wood has already attracked the notice of cabinet makers and builders; and it value for furniture and house furnishing in very great, while its beauty is remarkable. Several members of the party secured specimens; and Mr. Hoodless, of Hamilton, who takes great interest in the matter, is making arrangements to show the capabilities of this wood in fine furniture. A fine field is before it.

RAFTS ARRIVED.

We take the following list of rafts arrived from the Quebec *Chronicle*:—

July 28—McArthur Bros. Co., (Limited) staves, U. S., New London cove.

July 29—J. B. Weller, waney white pine, Michigan, Dobell's, Sillery.

July 30—Collins' Bay R & T. Co., waney white pine, Western Canada, New London cove.

Aug. 2—D D Calvin & Co., spars and masts, Dobell's cove

Aug 4—Barnett & Mackie, white and red pine, Cap Rouge.

J. B Weller, waney white pine, Dobell's, Sillery cove

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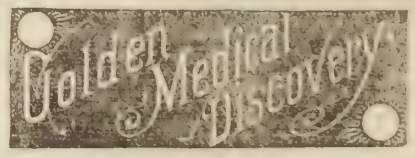

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Golden Medical Discovery cures all humors from the common pimple, blotch, or eruption to the worst Scrofula, or blood-poison. Especially has it proven its efficacy in curing Salt-rheum or Tetter, Fever-sores, Hip-joint Disease, Scrofulous Sores and Swellings, Enlarged Glands, and Eating Ulcers.

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MURRAY CANAL

Notice to Bridge-Builders.

SEALED TENDERS addressed to the undersigned and endorsed "Tenders for Bridges, Murray Canal," will be received at this office until the arrival of the eastern and western mails on FRIDAY, 20th DAY OF AUGUST, next, for the construction of swing bridges at several places on the line of the Murray Canal. Those for the highway are to be a combination of iron and wood and the one for railway purposes to be of mild steel or wrought iron.

Plans, specifications and general conditions can be seen at this office on and after FRIDAY, 6th DAY OF AUGUST, next, where forms of tender can also be obtained.

Parties tendering are expected to have a practical knowledge of the class of works required, and are requested to bear in mind that tenders will not be considered unless made strickly in accordance with the printed forms, and—in the case of firms—except there are attached the actual signatures and nature of the occupation of each member of the same. Further, a bank deposit receipt for the sum of $250, for each bridge for which the offer is made, must accompany the tender, which sum shall be forfeited if the party tendering declines to enter into contract at the rates stated in the offer submitted.

The deposit receipt thus sent in will be returned to the respective parties whose tenders are not accepted.

This Department does not, however, bind itself to accept the lowest or any tender.

By order,

A. P. BRADLEY,
Secretary.

Department of Railways and Canals,
Ottawa, 27th July, 1886. 3d26

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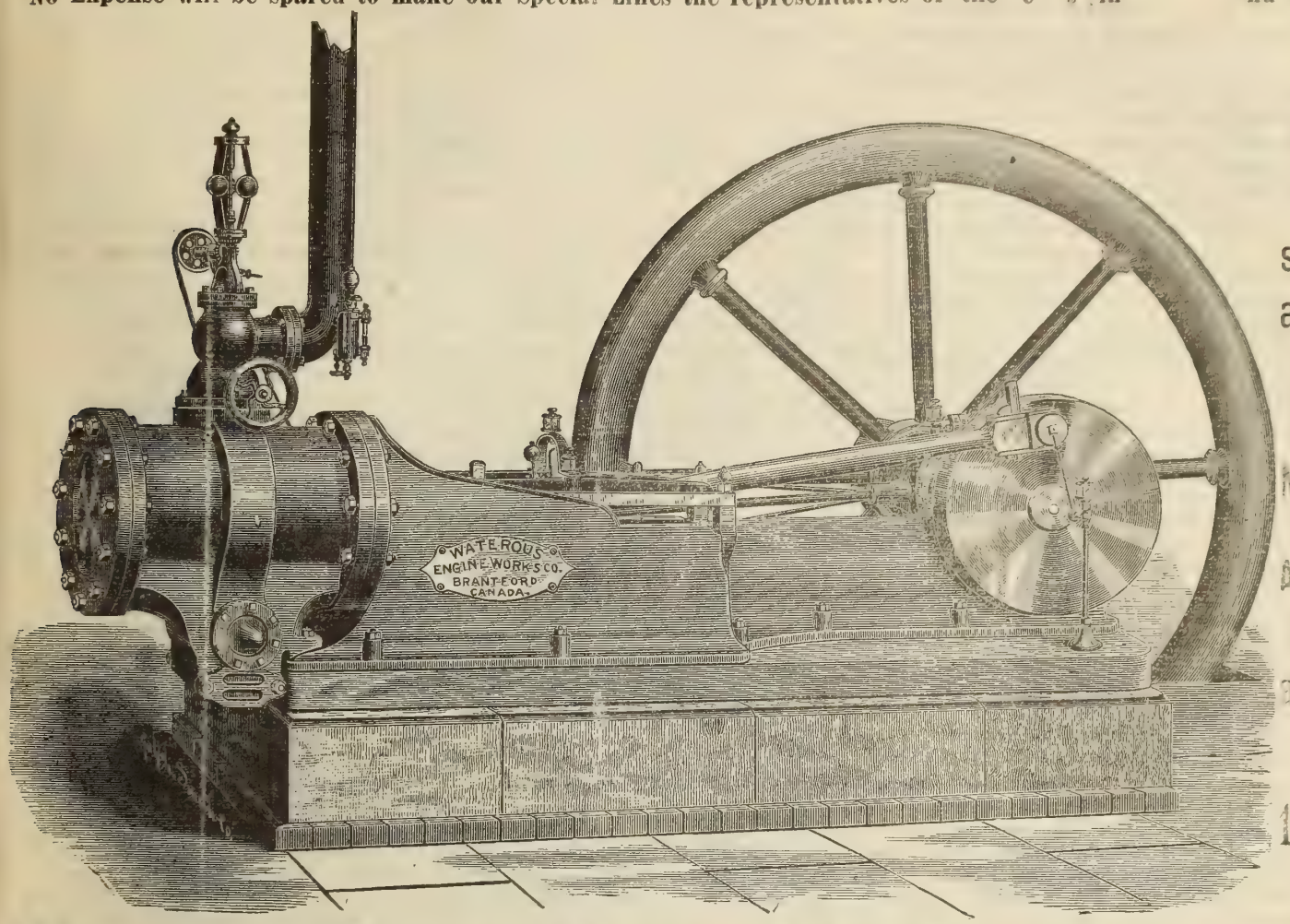

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PERSONAL.

MARY DAWSON, of Victoria, British Columbia, the Widow of the Late JOHN DAWSON, late of Saanich B. C. and formerly of the County of Peterborough, Ontario, is desirous of communicating with the relatives of her late Husband. Letters addressed to her at Victoria, B. C., in care of Messrs. Eberts & Taylor, Barristers, or in care of the undersigned, will be duly forwarded.

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Cigars,
Tobaccos,
Pipes, etc.

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HUNTER STREET WEST.

AUSTRALIAN WOODS.

A correspondent of the Montreal *Herald* writing from the Colonial Exhibition says :—

Queensland shows 427 specimens of timbers, of every size, quality and kind. There is the Bunya-Bunya (or "Monkey Pussle"), the pine cone, which produces a delicious nut, and which the natives will travel miles to procure Here too are the "biggest" logs in the entire exhibition, from the district of Moreton. One of these measures in girth 20 feet 5 inches and another 18 feet 8 inches, and each weighing five tons. Their grain is exceedingly pretty and the wood will bear the highest polish. These are named the Karri tree and some of them measure over 400 feet in height, and in some cases the stems are 300 feet high, measured from the ground to the first branch, and the circumference around the base measured 60 feet. Canada is proud of her birches, her oaks, maples and pines. But for greatness and grandeur she is excelled by this little colony in the Pacific.

The entrance gateway to the Western Australia Court is made of Jane wood, shingled with the oak or Casuarina. To the right of this porch may be seen a grove of Jarrah trees, and to the left the Karri woods. Here you stand in the presence of three giants of the forest, 300 to 400 feet in height, rivalled only by the Eucalyptus and the monsters of the grove of Mariposa. Jarrah is a very heavy wood, weighing one and a half ton to the 50 cubic feet, and is impervious to the sea worm and the white ant. Amongst the splendid specimens of this timber to be found in this court are a slab which had lain on the Bunbury beach for the last 36 years, washed by the waves, heated by the sun, and showered by the sand, and a huge block which had been absolutely under water for twenty-two years. There is a trophy, too, of massive beams, 21 feet high of Jarrah wood, surmounted by specimens of "Tuart" wood nearly as hard as iron. On this trophy there is a star with numerous rays composed of various colored woods marvellous to behold, and adorned with shields in white and red—woo-ma-gahs, dowarks boomerangs, kyleys—the latter arranged as river rays. On either side of the arch are two large blocks of yellow sandal wood, a marked contrast to the bright red of the Jarrah tree. Here, also, is a staffenden grass tree, 20 feet high, called a "Black-boy," and a lawyer's hat made of curious paper bark impervious to rain, as well as other grass trees, with the Kingees in flower, and a fine display of woods such as gum, morrel, tuart and native pear, well adapted for coach building and furniture. Conspicuous is a splendid wood case with glass widows made of a variety of native woods, and containing about three hundred beautiful specimens of the fauna of the colony and a most interesting exhibit of its birds and mammals.

MATTAWA.

Mattawa is the Indian name for the "meeting of the waters" and nestling in a vale, or glen at the junction of the Mattawa and Ottawa rivers is the pretty village of Mattawa. The Hudson's Bay Company has had a post here for upwards of sixty years and Mr. Colin Rankin, one of its most experienced servants, is now in charge. Mr. Gorman, of the firm of Messrs. Timmins & Gorman, one of the largest establishments, and Mr. A. M. Earl are, after the Hudson's Bay Company, the oldest settlers in Mattawa. The last named gentleman informs me that in 1869 there were only two white families in the village. To day I counted seven first-class stores, besides many others in smaller way, and all doing well. There is a population of perhaps 900. Mr. Earl, who seems to know the territory thoroughly, tells me that the country for hundreds of miles is practically surrounded by beautiful water systems. Twelve miles away is the Amable du port, then there is the Montreal river, and then again the Boesfrind, not yet fully explored, which is in fact a series of small lakes running for many miles north and northeast and draining a vast area of country. All these waters eventually find their way to the Ottawa. According to the same authority there is a large tract of good farming and yielding thirty bushels of fall wheat to the acre and other crops in proportion. A road is being constructed to these lands. Then the growth of timber is immense, and yields large supplies. White oak, four feet through, and cherry twenty inches diameter are common. There is timber enough in this district equal to the demands of many years to come. Silver mines have also been discovered; asbestos too, besides mica and other valuable minerals. Except in one instance, that of a silver mine, nothing has yet been done towards developing their resources.—*Monetary Times.*

THAT MONSTER RAFT.

HALIFAX, N. S., July 31.—The launch of the monster timber raft at Two Rivers, Cumberland, advertised for to-day, attracted the largest assemblage of people ever seen in that part of the country. At one o'clock all available vantage ground from which a view could be obtained, was fully occupied. The shores were quickly severed by axemen and amidst almost breathless anxiety the last one was cut away, but the raft did not show any signs of moving. The foreman gloomily shook his head and declared the first attempt a failure. Bitter disappointment was depicted on every face, and the launch declared by many an impossibility. The superintendent of the launching, Isaac Oliver, of St. John, did not lose confidence, however, and at once set to work to get things in readiness for another attempt. At midnight it is generally believed that this will be successful. The cause of the failure is variously conjectured. The most plausible reason advanced is that grease was put on the launchways too early and evaporated. This great raft has been under construction since January 1st. It is 420 feet long, 55 wide and 30 feet deep, weight 8,000 tons, and contains two and a half million superficial feet of piling and other timber. It is cigar-shaped, was designed by H. R. Robertson, and built under contract by B. B. Barnhill, of Two Rivers, for Wilson Godfrey, of New York. The timber is estimated to be worth $30,000.

IRON THAT WILL NOT RUST.

James S. C. Wells, in *Popular Science Monthly*, for July :—The liability of iron to rust is a great drawback to its use for many purposes, and the practical value of a process which will protect it, at a slight expense, is self-evident. That the process is successful in accomplishing this object seems no longer a matter of doubt, and at less cost than galvanizing or tinning. The color on cast and wrought iron is a bluish-grey, which to some may be objectionable, but, as the coating takes paint far better than untreated iron, this object is easily overcome, and with the assurance that the paint will remain, and not soon be thrown off as it is generally. For polished work the color is a lustrous blue-black, adding greatly to the beauty of the article treated. This process seems peculiarly will adapted for gas and water pipes. Any one has had occasion to use water which has passed through a new iron pipe, or one that has not been used for some time, knows how full of rust it is, and that only after months of constant use does it become clear again. With pipe coated with the magnetic oxide by the Bower-Barff process, no trouble of the kind can occur. The water runs pure from the first day, and if for any reason the pipes are emptied, and left so, there is no danger of their becoming coated with rust. Another important fact is, that the water coming through one of these rustless pipes is just as pure as when it entered, for the water can dissolve none of the coating of oxide, as it always does with lead or galvanized pipes. It is a well known fact that water running through lead pipes is very apt to contain lead in solution, and the continued use of such water causes lead-poisoning, for, although the amount of lead dissolved may be very small, still it accumulates in the system, and finally causes sickness and disease.

THE Burk's Falls *Arrow* says :—Messrs. S. & J. Armstrong have sold their mill at Burk's Falls, to Messrs. Saunders & McPherson, of Orillia, who expect to do an extensive cutting next season. They have taken possession and are cutting lumber for the Ontario Lumber Company, contracted for before the transfer of the mill. Business in the lumber trade is to be lively for the balance of the season.

SWAMP LANDS BEING RECLAIMED.

There are very many of the older residents of Bay City, who well recollect when all the land from the southern limits of Bay City to the northern limits of East Saginaw on the east side of the Saginaw river, and also all the land on the west side of the river from the northern limits of Saginaw City to the southern limits of Wenona, now West Bay City, was one continuous swamp for miles in width, and the railroads on either side of the river were built on embankments thrown up by the dredge or shovel, and the ditches were constantly filled with water on both sides of the tracks.

Very few passengers on these railroads, as they viewed the vast waste spread out before their vision, ever supposed these lands would possess any value for agricultural purposes, and in fact hundreds of acres were purchased by sportsmen to be retained as duck hunting privileges.

But mark the change! Hundreds of acres of these lands have been reclaimed, by a peculiar process, which was conceived by Judge Albert Miller, of this city, one of the oldest settlers in the valley, still living, and quite active, considering his years, and William Daglish, deceased. These parties became possessed of a lot of these lands, which was a continuous swamp, and on which the water stood the year round to a depth of from one to four or five feet. They dredged a deep and wide channel around several hundred acres of this swamp land, the channels being several feet below the lowest surface of the land. The ground dredged from the immense ditches was thrown up, and formed a heavy and high embankment on the outside of the ditches, on which several teams abreast might be driven, and which was of sufficient width to be proof against leakage; and when this was completed steam and windmill pumps, which combined threw 2,000 gallons of water per minute out of the ditch and over the embankment were set at work. In a very short time time the water was all pumped out of this immense territory which now resembles a great basin. Lateral ditches were run into the main ditch, and these drained the land constantly, and the pumps kept the ditches dry. The result is that the land has been found exceedingly productive, and enormous crops of corn and other farm products have been harvested each year.

The Holland farm on the west side of the river, containing 700 acres, has also been made after the same method, and a brickyard established thereon, which is now furnishing the brick for the new opera house here, and other mammoth brick blocks which are being erected.

T. H. McGraw & Co. have also a fine farm from the same land, and W. A. Beebe & Co. are progressing at present in good shape with the two and one-half miles of dredging on the east side of the Flint & Pere Marquette track for T. H. McGraw. The work when completed will reclaim over 1,000 of prairie land in Bay county. Mr. McGraw will put in a separate pump, and in less than three years will have a fine farm on land that has been considered almost worthless. The work this season on the and will cost over $6,000. About 300 acres of land on the west side of the Flint & Pere Marquette railroad, also belonging to T. H. Mc Graw, along the river, will be dredged around and put in shape for cultivation as soon as Beebe & Co. get through with the job they are at now. Mr. Azure, who has charge of Mr. McGraw's big farm, has clearly demonstrated that there is no better land in the United States, when properly drained and cultivated, than what was formerly a frog pond along the river.—*Bay City, Mich., Gazette.*

THE Maritime Chemical Pulp Company is the name of an industry shortly to be established in Chatham, N. B. Hamilton will be the headquarters for the company, which is to have a capital stock of $150,000 in 1,500 shares of $100 each. The applicants for incorporation are : John A. Fisher, Dundas; John Stewart and Alexander Bruce, Hamilton; and Arthur Lee, John Leys and Richard Brown, of Toronto. Messrs. Fisher, Stuart and Lee are to be the first directors, with A. A. Anderson as secretary.

ASH FOR CARRIAGE WORK.

An authority on carriage building says, in seasoning ash, we must take into consideration the large quantities used in carriage building, also the bulky nature of the timber whilst in its unconverted state, which compels us to use the simpliest and readiest means in seasoning without sacrificing the qualities of the timber. The best way to do this is to convert the bulk into plank as soon as possible, and, whilst seasoning to assist nature in every way without forcing, and when nearly seasoned to cut into sizes for use. For instance, brougham pillars, brackets, beds for under carriages, and especially the heavier seizes. Before stacking ash, it is well to see the character of the timber, for if it is of a twisted nature it must be stacked one plank over the other, if not it may be placed on edge or on end, which will season it better and quicker. Besides being used in framing and such parts, it is largely used for bent work, such as steamed rims for wheels, futchels for carriages, top-sall's in white chapef's segment pieces in brougham fronts. But the action of steam in disolving the gummy matters within it deprives it of its native toughness.—*Timber Trades Journal.*

WOOD WOOL.

For some time past attention has been directed to a very interesting product consisting of extremely thin and slender shavings of wood that are comparable to paper cut for packing. It is known by name of "wood wool." This product was first introdueed into France as a packing material. It weighs about 40 or 50 per cent less than the materials generally used for such a purpose. Its beautiful appearance, its fineness and its extreme cleaness at once brought it into favor with shippers. It was afterward found that the material was well adapted for the manufacture of mattresses, for bedding for cattle, for the filteration of liquids and for stuffing horse collars, &c., the most suitable species of wood being selected for each of these purposes. Its elasticity causes it to be considered as the best material for bedding after horsehair, and it is even preferable to any other substance when it is derived from resinous wood, since it does not absorb moisture. In workshops wood wool is tending to replace cotton-waste for cleaning machines, and it has likewise found an application on the rolling stock of railways for lubricating car axels While it has the same property that cotton-waste has of absorbing oil it costs ten times less than that material. Its use is said to be rapidly growing in Austria and Germany and also in France.

A BIG POPLAR.

The Cornersville (Tenn.) correspondent of the Marshall *Gazette*, writing to that paper says:—"The big poplar tree in Dogget's cove has been a noted landmark for nearly 70 years, and is more talked of, perhaps, than any tree in the State. Its size has from time to time been given all the way from 29 to 33 feet in circumference. Passing that way recently I went to the tree, viewed it and measured it carefully. The bark, which was three or four inches thick, had most of it fallen off, and I found it to be 26 feet and, perhaps, two inches in circumference, clear of any spurs. It has the appearance of being slightly hollow, and is in dying condition. The trunk is fully 50 feet to the first limb. It is a monster tree and there is a vast amount of good timber in it, but it will soon be ruined. Thie section has always been noted for its large trees. A beech tree standing on the old country line, about five miles north west from this place, and which was blown down some six or eight years ago, had a perfectly straight trunk of nearly 60 feet, clear of limbs, and was 5 feet 5 inches in diometer, and in consequence, difficult and hard to handle."

A TRACT of pine, comprising 24,000,000 feet, situated on the west fork of Chippewa river, Wis., has been sold to the Mississippi Logging Company for $74,000. Another purchase of H. C. Putman was made by Fred. Weyerhauser, for the Mississippi Logging Company, for $70 000. The same company is reported as buying heavily on the west fork of the Chippewa.

Chips.

ANDREW CLANAHAN'S planing mill, at Glencoe, Ont., was burned July 23rd.

THE Langford & Hall Lumber Company, Fulton, Ill., quotes sawdust on its price-list. The price is $10 for a common car load.

THE Messrs. Rathbun are raising their wharf at Picton, and will erect a freight house 100 by 28 feet and make other improvements.

THE export lumber freight transactions at Quebec, for the week ending Aug. 5th, were as follows: Quebec to Southampton, 800 loads; timber, 205; remainder deals, 47s. 6d.

THE oldest and largest tree in the world is said to stand near the foot of Mount Ætna. It is 212 feet in circumference, and is a chestnut of course.

THE H. Witbeck Company has had 10,000,000 feet of standing pine on Sturgeon river, Menominee district, scorched by recent forest fires, and it will be cut as soon as possible—probably the coming winter.

A FEW weeks ago, we learned that a leading Australian brewer had placed a large order in London for casks. We now learn that the same man wishes to buy or contract for quantities of white oak staves.

IT is estimated that 40,000,000 feet of lumber will be used at Duluth in building operations, including the Manitoba elevator, the Lehigh coal dock at West Superior, the Omaha, Northern Pacific, St. Paul and Duluth and private docks.

W. J. BAXTER, of Saginaw, Mich., has completed the inspection and shipping of 250,000 feet of white pine sawed timber 7x14, and 26 feet long for Flatt, Bradley & Co., and goes by rail to Quebec, and thence to Liverpool, England, which point it is expected to reach September 1st next.

THE freight agent of the Canadian Pacific railway, Mr. G. M. Bosworth, states that within the past two months the lumber merchants in the districts around Georgian bay and Lake Nipissing have forwarded to Montreal no less than 3,500 car loads of square timber, representing two million square feet.

THE *Boot and Shoe Recorder* says:—Hardly had it been discovered that paper could successfully take the place of leather as a substitute in many cases, before the hatters were notified that, by a new process of manipulation with wood pulp (which is the base of certain kinds of paper), hats can be produced. Thus extremes meet with wooden hats and wooden shoes, especially if there is a blockhead uniting them.

CANOES of wood pulp are now being constructed in Sweden, by a patented method, very nice-looking and handsomely shaped, and costing about 50 to 60 kronor each. The pulp is waterproof, and is put layer by layer on to a wooden model, where it dries; the model is then withdrawn, and deck, keel and rudder are added. It is furnished with water-tight bulkheads, and in the middle of the deck there is an opening in which the canoer sits and paddles.

Drowned at Ranney Falls.

CAMPBELLFORD, Ont., July 31.—A riverman named Joel Redden, working for Gilmour & Co., was drowned at Ranney Falls, half a mile below Campbellford, this morning. After the gang had finished "tailing" the logs through, it seems that he and a companion attempted to shoot the rapids, but the boat filled, the men were precipitated into the water and Redden, being unable to swim, was drowned. His companion got ashore. The body has not yet been recovered.

LET CANADIANS TAKE HEED.

An International Exhibition, to be held in June, 1887, is announced for Adelaide, the capital of South Australia.

This will furnish an opportunity for American manufacturers to make headway with their wares in Australia which should not be neglected. At the Melbourne exhibition in 1880 there were three hundred and sixty-six American exhibitors, and the proportion of medals and diplomas awarded to them was very large. At the Sydney exhibition in 1879 the Americans also secured a large share of the symbols of merit.

We already compete with Great Britain in the markets of her colonies for many important articles, particularly in hardware, prints and woodenware. These exhibitions should be utilized to the fullest extent for the purpose of fostering and extending our trade. If Congress can do anything to help this along it would be a good idea.

Of the Adelaide exhibition it is said the Prince of Wales will be president, Sir Samuel Davenport executive commissioner, and Mr. George Collins Levey (who represented Victoria, Australia, at the Centennial), secretary. The whole matter of exhibitions has now become so systematized that nearly all large manufacturers are able at slight expense and with little trouble to place a full line of samples en route for any city on the face of the earth. It is well-known that exhibiting anywhere pays, and Adelaide will be no exception to the rule.—*N. Y. Herald.*

The Forestry Report.

Mr. R. W. Phipps writes as follows to the *Globe*:—"I should like, through your columns to state to the numerous correspondents who writing for this years forestry report, ask that the two former reports be sent them, that those editions have been distributed and that copies are now hardly obtainable. Some of the present edition are still on hand, and I should be glad if those farmers who desire them would send their addresses within the next two or three weeks when copies will be sent them free. Those who obtain this number would do well to have it bound, as an account of the list of trees and other new forestry matter, it will be very valuable for reference."

THE Monetary *Times* says:—The demand for all the product of our forests is dull at present, but there is good reason to suppose that the United States, before the season closes, will buy an increasing quantity of sawed lumber. The demand from England is dullness itself. The trade of the mother country—in the great staples at least—and including agriculture as a trade—has settled down into a position of hopelessness and serious reduction of profit. This is the case, notwithstanding the fact that the volume of England's production and trade goes steadily on, and represented by figures of prodigious dimensions.

MR. BEAUMONT has sold the point adjoining the Rathbun property on the Gananoque river front; price $1,600. This gives the Rathbun company the whole river frontage.

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THE CANADA

LUMBERMAN

DEVOTED TO THE LUMBER AND TIMBER INTERESTS OF THE DOMINION.

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Advertisements intended for insertion in any particular issue should reach the office of publication at least four clear days before the day of publication, to insure insertion.

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PETERBOROUGH, Ont., AUGUST 16, 1886.

THE TRADE.

REPORTS from the English markets continue to be of a very leaden hue, and the silver lining is not perceptibly larger than it has been for sometime. Commenting on the London market, a writer conversant with the business descants on the "utter stagnation of trade." That phrase looks strong and may be hyperbolic to a certain extent. Yet the evidences of sluggishness are plain. There certainly appears to be no sufficient grounds for hope, according to reports viewed, for an immediate revival of the trade in England.

When we turn to this side of the Atlantic things look somewhat brighter. Generally, business prospects are brightening up, and the general press uses the better prospects for a theme for its articles. A general revival of profitable business activity would be shared by the lumber trade and the signs of that revival will be welcome. Across the border the condition of business is much the same as in Canada. No doubt the labor troubles injured, what promised, at the outset, to be a profitable season, but a better feeling seems to exist. As yet, however, there is a disposition to wait to see which way the feline will leap before going to any lengths. That able Chicago trade paper, the *Northwestern Lumberman*, is hopeful, and in its issue of August 7th gives its views as follows:—

"From one standpoint the prospect that higher prices may soon be obtained for lumber was never brighter. Throughout the country the stocks in retail yards are very light. A few years ago the retail dealer made it a point to stock up at stated intervals very much as dealers in merchandise think that at certain seasons they must lay in a stock of goods. The retail lumber dealer, however, has changed his method of buying. He purchases from hand to mouth. For the average retailer a car load of lumber is a good purchase. He has learned to take advantage of railway facilities. If within easy reach of a distributing point an order writen to-day will start a car load of lumber on the way to-morrow. For this reason the amount of lumber carried in the retail yards is comparatively small, and it is doubtful if the retail dealer will ever again fall back on the custom of buying heavy bills.

"If the wholesale markets are investigated it will be found that there is no surplus stock in that direction. Of course there is lumber and lumber, but it is stated by buyers that it is by no means an easy task to find good dry stock in desirable quantities. If the hunt were for coarse stock it would be different, but a majority of the dealers in the markets west of Chicago have their eyes on eastern trade,—a trade that demands well-manufactured stock from a good quality of timber. Several Chicago dealers are also reaching east with their long arms. The wonder is, not that every man who can sell lumber in the eastern states does so, but that the consumption of good lumber in those states is so large. The demand for good lumber to go east is leaving a residue in many a yard that is neither desirable or readily salable.

"As if to help the lumber dealer out the the clouds withhold their rain. Should the drouth continue for the next three weeks a large number of mills will shut down for want of logs. It must be remembered that never in the history of the lumber business in the northwest were the logging streams driven so clean as they were last year. Not only did all the logs come down but it was often the case that the mill booms were cleaned out before the sawing season ended. As a result mills were obliged to do little or no sawing until new logs came to hand. Were heavy rains to set in now there are plenty of logs on the head waters which would not reach the saw the present season, even though it were miraculously prolonged. The most lively imagination cannot figure out how there can be any but an ordinary-sized stock of lumber on hand when the mills shut down for the season. There will probably be no scarcity of lumber, but any time from now until new lumber is plentifully piled on the docks next season there can be no surplus to warrant dealers climbing over one another's heads in order to see who can sell cheapest.

"Owing to the conditions briefly stated above, certain grades of lumber in certain markets have slightly advanced. Whether the movement will extend generally is past prophesying. By special pleading the conclusion might usually be reached that the general law of trade has no control over the lumber trade There are dealers in Toronto who sell lumber though the heavens fall; there are Mississippi river dealers who will meet Chicago men, and there are rail-mill men whose highest ambition on earth is apparently to understell everybody. With these combinations in the field the future of the lumber trade is difficult to anticipate. The manufacturers always stand ready for higher prices, it is said, but believe the east shore dealers will be fairly satisfied if the $9 basis for dimension is sustained on the Chicago market; and without much doubt it will be. The purely jobber wants higher prices, and he wants them badly. He may meet competition and cut the insides out of his own pocket book, still, all the same, he longs for prices that will afford him more profit than he is making now. And he knows that in order to get that profit prices must go up. He has abandoned the hope even of jumping on to the necks of the manufacturers with any effect. He has learned within the last two years that typical lumber manufacturer has become like the adamantine rock so far as his idea of prices goes.

"As the diagnosis has shown, there are conflicting elements. The manufacturer is doing but little complaining just now. The jobber would whoop up prices in prices in a York minute were it in his power. The retailer wants no higher prices at distributing points, claiming that from his customers he would be unable to obtain a corresponding advance. The way the cat will jump will be seen later on."

THE REAL AGAINST THE FALSE.

The manufacturers and shippers of cherry have for a time complained that the demand throughout the east for their product was decreasing, and prices were not as firm as formerly. It is also conceded that the demand for cherry has increased throughout the west, while buyers in this section are said to be willing to pay asking prices at the mills for good stocks. An inquiry into the situation in the east reveals a few features which are presented for consideration. It is a trait of human nature to imitate in order to gain a desired effect at a reduced price. A few years ago it was the custom to use cherry in the natural color, or strained just enough to give the wood an even color, slightly darker than the original wood. This process of filling and finishing did not rob the wood of its natural beauty, and a glance revealed, even to a casual observer, the true nature of a most beautiful species of timber. It was about this time that mahogany began to assume an important place in the estimation of manufacturers, especially in the furniture line, and as that wood was expensive there was an immediate and decisive disposition to imitate it. It was found that cherry, by being deeply stained, could be made to so closely resemble mahogany as to require an expert to tell the difference. The process is known as mahogonizing, and it has been adapted in a general way for the finishing of house decorations and even for store work.

The next step was to imitate cherry, and for this purpose popular is used mostly when intended for house finish, and red birch furniture. The habit of staining real cherry to a blood red, or in other words totally obliterating the natural shade of the wood, has paved the way to palming off other woods, deeply stained, upon many unsuspecting purchasers. It has also resulted in a marked diminution in the demand for cherry; and while the manufacturer may be able to increase his profits by a bare pretension, the handlers of the genuine article are forced to complete with a cheap adversary.

This condition of affairs is the direct result of a demand for a grade of cherry superior to the work of nature—a quality of lumber absolutely free from defects in the nature of gum streaks, the very presence of which bears witness to the genuineness of the article. To offset these alleged defects the finisher has stained cherry to a shade so dark that other and cheaper woods could be used to equal advantage, and there are many users of household furniture who take great pride in what they suppose to be cherry sets, who are in reality idolizing a concoction of birch lumber and cherry stain, for which they paid a price nearly, if not fully, sufficient to have purchased a much handsomer article of cherry.

Cherry in its natural color, when dressed, is a pale pink, and if finished without stain, or with just sufficient to give the entire surface an even shade, can never be successfully imitated by any of the cheap woods, and it need never be feared but that it will stand on its own merits.—*Northwestern Lumberman.*

THE OUTCOME ON AN INVENTION.

Readers of the *Lumberman* may remember that a few years there in its colums a machine for compressing sawdust, and from occasional inquiries it is evident that the invention is still of interest to people who are of the opinion that sawdust ought to be utilized.

The inventor of the machine was Mr. W. H. Smith, a gentleman of both general and special ability, and who during the war, was a government engineer of high repute. For years following the close of the war he studied on the machine of which we write. Level headed ordinarily, yet an inventor's enthusiasm took possession of him, and he could see millions in the child of his brain. There was no doubt, in his mind, but the invention would revolotionize trade. He would make sawdust into blocks of fuel, into pulleys, into fence posts, and even into railway ties. Sawdust fuel would become an article of commerce. Samples of it were burned in the *Lumberman* office with the best of results, and the engineers in the city who were furnished with a few hundred pounds to test against the same weight of coal reccommended the new fuel in high terms. The use of the machine would not stop on sawdust, however. Oats, salt, bran, hay, cotton—in fact any commodity that in its natural state was to bulky for profitable transportation—could be compressed. Special emphasis was laid on bran. A car load or so was put through the machine and shipped to the English market as a test, and while the success of the process was proved, word came back that the bran was worthless; that the miller had taken too much of the food element out of it, and had left nothing but a dry shell that could only stimulate the animals which ate it by scratching their insides. This advice spoke well for the Minneapolis miller from whose mill the bran was taken, but it was a crusher on the would be bran exporter.

Mr. Smith made preparations to build a machine at a foundry on the west side of the city, and for months worked hard. During this period he associated with him Mr. James L. Houghtalling, a gentleman who had both money and leisure and who at that time was treasurer of the Mackinaw Lumber Company. The machine on trial exhibitions worked fairly satisfactorily, but less of a mechanic than its inventor was could see that its construction was faulty. Tremendous power was required, and parts of the machinery were too delicate to withstand constant use. But improvements were made until it was thought that the machine could be put on the market, and one was built for the big saw-mill concern, the Rathburn Company, Deseronto, Ont. This company ran a line of steamers, and it was its intension to use sawdust fuel in the steamer furnaces. Whether there was any temporary success in the scheme we have never learned. At present however, the compressor stands idle, for the eason, it is safe to say, that it is unable to stand the heavy work required of it.

Two compressors were built. One, as stated above, is idle in Canada; the original machine is standing under a shed on the west side; Mr. Smith, the inventor, is dead; and Mr. Houghtaling is now engaged in a business that gives him no time to fool with sawdust compressors. The machine, practically, has been a dead failure. It was conceived in a bright brain, but it consumed the years, and we know not but the life of the inventor. To say the least, he died a dissappointed man. He saw the work of years of mature manhood come to nought. The sawdust compressor was not only an ambition destroyer but a money eater. Mr. Houghtalling sank $15,000 in the enterprise, and how much it pulled from the pockets of others we have no means of knowing.

Notwithstanding the dismal record presented above the LUMBERMAN is of the opinion that there would be big money in the invention were it perfected. The trouble is with the machine, and not with the process. The principle is all right; and the next man who attempts to carry it out we trust will have a less thorney road than those who have gone before him.—*Northwestern Lumberman.*

FOREST FIRES IN MICHIGAN.

BAY CITY, Mich., Aug. 11.—Despatches to this city announce that terrible forest fires are raging along the entire line of the Michigan central railroad, from Mackinac city to Pinconing, in Montmorency and Otsego counties. standing timber has been destroyed and the fires are prevailing continually. Villages are threatened unless rain comes soon. The conductors report the scene at night both fearful and interesting.

ISHPEMING, Mich., Aug. 11.—The forest fires have done great damage in various parts of the upper peninsula. At Barraga, Choicolay and other points along the Chicago and Northwestern railway, there have been terrible fires Nearly a million feet of standing pine have been destroyed. Unless rain comes soon there will be no more greater devastation.

Two large fly wheels in the Port Arthur Lumbering Company's mill, at Port Arthur, Ont., recently burst and flew in all directions. The wheels are six feet in diameter, and revolving about 90 times to the minute. Though several men were working a few feet away no one was injured.

RICHARD COX, an Englishman, who works on the steambarge Walker Lilly, was loading ties at the Rockland mills, Ottawa, when a pile of lumber, beneath which he was standing, gave way, and the whole weight of the lumber fell upon him, killing him instantly. Cox had only been in the country a short time.

LOSS OF LIFE BY FOREST FIRES.

MILWAUKEE, Aug. 11.—Though the forests in the northern tier of counties in this state are still ablaze, and are likely to remain on fire until rains quench the flames, the danger to the villages and towns is over unless heavy gales should sweep down upon them. While not over a dozen cases of human cremation are reported, it is believed that many backwoods' men and families remote from settlement cannot possibly have escaped. The fatality to live stock has been terrible Hundreds of charred bodies of cattle lie on the blackened track of the devasting cyclone of fire. It is estimated that in Calumet, Clark, Marathon and a few adjacent counties 500 families are rendered homeless and and will suffer unless immediate relief is sent them. Many of these people had narrow escapes from death, having hidden in wells o submerged themselves up to their necks in streams with wet blankets covering their heads until the fire passed. In some places the fire swooped down so suddenly upon the people that they barely had time to take this method of safety. In other places the roar of the flames was heard for miles, and the terror-stricken people fleed madly before the flames to neighboring villages and towns. The loss can not even be estimated. Hundreds of homes, dozens of saw mills, lumber camps and mil ions of feet of lumber are in ashes. Acres upon ac es of ripening grain were laid waste.

To-night's advices are that the fires are abating considerably by running into clearings and be cause the wind has died out. However, fears are entertained of a repetition should high winds prevail again before rain appears Along the valley division of the Chicago, Milwaukee & St Paul railway, heavy rain to-day extinguished all the flames, saving the largest cranberry marshes in that section. To-day the suffocating clouds of smoke from the burning forests were borne by north winds as far south as Milwaukee. On the lakes near Green Bay, Sturgeon Bay, and even further south, the smoke clouds are so dense that the sun is ob scured, and vessels experience extreme difficulty in navigating it being impossible to see 400 feet ahead at midday.

CIRCULATION IN A STEAM BOILER.

The great influence which the circulation of the water in a steam boiler, when it is in operation, exercises upon its efficiency, its tendency to foul up, and its liability to various annoying defects, does not seem to be fully unders ood o appreciated by many to whom it is of the greatest importance. Were it not for the fact that heat applied to the under side of a body of water is communicated to it, thereby expanding it and causing it to rise through the colder water above and producing a circulation, it would be prac tically impossible to generate steam in the ordinary manner. The efficiency of any given area of heating surface depends almost wholly upon the perfection of the circulation of the water in contact with it. This will probably be better appreciated when it is stated that the experiment has been perf rmed of immersing a cubical metalic box in water and heating it from the inside. The horizontal upper surface of the box generated more than twice as much steam per square foot of surface as the perpendicular sides while the bottom or lower side generated none at all. This was due to the fact that the steam bubbles or vesicles formed in contact with the upper surface, had nothing to interfere with their prompt liberation from that surface, the heated water was equally free to rise its place being immediately filled with a fresh supply of colder water thus forming a rapid circulation; the operation went on with greater difficulty in contact with the vertical surfaces, while with the lower horizontal surface, the steam as formed would have a tendency to hug the surface, and prevent the contact of water with it, thus effectually preventing any circulation. When these facts are appreciated it will be readily seen how essential it is to the proper performance of a boiler that the water spaces should be large and as free from obstruction as possible, in order that the wa er may have opportunity to circulate rapidly, and the steam when formed be disengaged as freely and quietly as possible.

Comparatively few years ago, it was the universal practice to crowd as many tubes into a horizontal boiler as could be otten into it They were set in zig zag rows, to enable the greatest number to be put into a given space, on the theory that the more heating surface the more steam the boiler would make, and the natural consequence was the spaces between tubes and shells soon became filled up with scale and sediment, the result being overheated plates, and leaky seams and tubes, while the steaming capac ty of the b iler was greatly reduced. Of late years, however, the fact is beginning to be appreciated that tube surface is not heating surface unless it has plenty of room to act as such, and consequently the number put into boilers of any given size is less; they are arranged in a more rational manner and as a natural result the boiler steams better, and is more easily kept clean, less repairs are necessary, and the life of the boiler is greatly prolonged.—*Locomotive.*

THE LUMBER TR DE.

A *Free Press* representative visited the different mills on the Chaudiere this forenoon to see how the lumber trade was progressing. After conversing with the diffe ent lumbermen and managers it was ascertained that the business was more active this year than last season, and prices were on the whole better. For the past few days there was a lull in the trade and sales were few. Little or nothing has been done in square timber, but a few sales of lumber were effected. An effort is being made to raise the export duty from $2, which it is at present, to $3 per thousand feet. It will be remembered that last session the duty was raised $1 which made it $2, and therefore equal to the duty imp sed by the United States on sawn lumber entering there. Canadian lumbermen have discovered that $2 on logs is not sufficient to meet the $2 imposed by the United States on lumbe. It is for this reason, a few thousand feet are never missed in logs, while the lumber can be exactly measured. In this way the correct number of feet is taken as regards lumber while it is the very reverse respecting sawn lumber. Our lumbermen therefore think that it will tak $3 export duty per thousand feet on logs to meet the imposition of $2 per thousand feet import duty by the Americans on sawn lumber. On the Georgian Bay there are quite a number of American lumbermen operating there. They take their logs across to the States by paying the export duty of $2, and in this way take the work of sawing it away from Canada. The $2 American import duty on sawn lumber cannot check tnis. The Canadian lumbermen think that the $3 export duty on logs will meet the whole trouble. At all events representations to the Government will be made to this effect.

All the mills are working full time. Messrs. Bronson & Co. have opened up a new limit on the Desmoine, and operations will commence there this winter. Their yard was entirely cleared out this summer, and now they have nothing to dispose of save this summer's cut Taking it all in all the lumbermen are particularly happy over the result of trade so far.—*Ottawa Free Press.*

ONE OF THE MOST INTERESTING.

The *Builder*, a London, Eng., journal, thus refers to one of the machines in the exhibit of the Wm. Hamilton Manufacturing Company at the Colonial Exhibition:—"The Hamilton Manufacturing Company, of Peterborough, Ont., have in motion one of Covel's Patent Automatic Saw-sharpening machines for circulars and mill webs. The sharpening is done by an emery wheel in the usual way but when the saw is once fixed it requires no further attention till completed. An additional advantage in this machine is that the depth of gullet and sharpening of each tooth is absolutely the same—a result quite unattainable in machines guided by hand. Any desired depth of gullet or rake on tooth can be obtained at will. This machine can be used for sharpening large band-saw blades and taken altogether, it must be pronounced one of the most interesting machines in the exhibition."

SEVERAL gangs of men have arrived at Maniwaki, Quebec, en route to the upper depots of Messrs. Hamilton Bros., and Messrs. Gilmour & Co.

CROPS IN MANITOBA

WINNIPEG, Aug. 9.—Hon. S. C. Wood and party have returned after travelling five or six hundred miles in the Province. They report that they found the crops in Springfield and north-east of Winnipeg pretty light in the straw and well-headed, and an average as far as the yield is concerned. In Birtle and Shoal Lake districts and around Minnedosa they found the grain well headed, good length of straw and more than an average yield. In Portage la Prairie district they found a very large average under wheat and the crop very good. It was a little shorter in the straw than usual, but will undoubtedly yield well. The same remarks would apply to the Carberry district. In the neighborhood of Brandon, north and south of the track for about four miles, the wheat crop is very poor, the straw being very short. Passing on to Plum Creek settlement the crops are very good, the wheat crop especially. From Plum Creek to Delaware they found an average crop, the grain being well headed, and the yield will doubtless be large. The crops around Boissevain and vicinity are good, and also at Nelson and vicinity, where they will be better than an average. Around Morden and on the Mennonite reserve they are light, the straw being very short, but the head is good and the yield will be fair. They noticed wherever they went that where wheat was sown on backset land or summer fallow the crop was good and little damage had occurred from the dry season, the only injury being the shortness of the straw. Wherever wheat was sown on stubble land the straw was very short. In districts where they saw the best crops they also found a very large acreage of summer fallow being prepared for next year. They unanimously reached the conclusion that this year's crop will be the most profitable one that this Province has had for many years. They found the farmers wherever they went hopeful and cheerful.—*Mail.*

ATTEMPTED MURDER.

BRANTFORD, Aug. 7.—Yesterday afternoon, between five and six o'clock, a man called at the residence of Mr. Geo. Massecar, Wellington street, rang the bell, which was answered by Mrs. Massecar, and enquired if Mr. Massecar was home. Mrs. Massecar replied no, but she expected him shortly, and requested the stranger to wait till he came. He said he would call again, and asked for a glass of water. Mrs. Massecar turned to get the water, but no sooner had she turned than the stranger shot her. She fell to the floor unconscious. On regaining consciousness she found the door closed and the man gone. She managed to alarm one of the neighbours, who came to her assistance and a doctor was immediately summoned. The ball struck the thick part of the left arm between the shoulder and the elbow. No serious result is anticipated. The stranger was about 35 years of age, dressed in black clothing. None of the neighbours nor children playing around the house saw the man nor heard the shot fired.

MISCELLANEOUS NOTES.

BOSTON, Mass., Aug. 10.—P. F. Williams, Russel, Sheen, & Co., lumber dealers have failed, and the following firms have failed in consequence: Allen & Noble, hard-ware dealers; Gerrish & O'Brien, furniture dealers; Thos. F. Brown & Co., furniture; L. E. Pierce, furniture, all of Boston; and the Lewiston steam mills, of Lewiston, Maine. The combined liabilities are $500,000.

WASHINGTON, D.C., Aug. 10.—The spring wheat returns of the Department of Agriculture for Aug. 1st show an improvement in condition in Iowa, a small decline in Wisconsin and Nebraska and a heavy production in Dakota. The causes of deterioration are drought and clinch bug. The heat has been excessive in many districts that have produced a fair yield.

COBOURG, Ont., Aug. 10.—A party of young men left here yesterday for a week's camping in Rice Lake, and to-day one of them, named Joseph McCulloch, of this town, took his boat out into the lake with the intention of having a swim, and after jumping into the water was unable to reach the boat, and was drowned before help could reach him. His body was brought in by train to-night. This is the fifth drowning accident in this vicinity this season.

PALMERSTON, Ont., Aug. 10.—License Inspector Fisher paid an official visit to town to-night. While putting his horse up at one of the hotels a stranger came up and asked him if he was the License Inspector. Being answered in the affirmative, he dealt him several blows with a club, cutting him on the head and shoulders. His injuries are not serious. The stranger, whose name is at present unknown, escaped.

MONTREAL Aug. 9.—Cure Marecaal, of the parish church of Notre Dame de Graces, at the morning service yesterday advised his flock earnestly at the approaching elections to vote for the best candidate, and expressed a sincere hope that no other considerations would weigh with them than a solemn desire to do their duty to the Almighty. He took occasion to revert to the fact which he extremely regretted, that some of the parishioners had a picture of Louis Riel with a rope around his neck in juxtaposition to sacred pictures. He also stated that Louis Riel could not be a martyr, as he had persecuted both the priests and the Church.

Wanted.

THREE HUNDRED THOUSAND feet of dry inch basswood culls.

BELDEN & McDOWELL,
Syracuse, N. Y.
3L14

TIMBER LIMITS.

ENDERS for timber limits on Georgian Bay, Muskoka, Black and Trent Rivers, Canada; nearly 270 square miles, containing about 260,000,000 feet pine; also for four saw mills on Black and Trent Rivers, will be received up to the 8th september, 1886. For details and terms apply to J. D. SMITH, Ferlon Falls, Ont., or the BANK OF TORONTO, Toronto or Port Hope, Canada. 3L15—6w32

For Sale at a Sacrifice.

A SAW MILL

SITUATED in excellent locality with an attachment of 200 acres of well timbered land through which flows the Nottawasaga river. Best water privilege in Simcoe. Capacity of mill eight thousand feet daily. Enough custom work to pay running expenses. Satisfactory reasons for selling, Box 60, Alliston, Ont. 2L13

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Car Lots sold on Commission, railway switch in to yard and plenty of room for storage. Yard corner of Stachan and Wellington Ave. Office, 9 Victoria St., Toronto. Telephone Connection. L

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EVERGREEN WINDBREAKS.

The following is from the Ontario forestry report by Mr. R. W. Phipps :—

We know from long experience that the summer storms, the early frosts, and the fierce unrelenting winter blizzards do pass by fields surrounded by growing trees, uninjured and unscathed.—*Judge C. E. Whiting.*

Throughout a large extent of Ontario, considering how much is already cleared of the original forest, with the exception here and there, of some small portions, and the decaying condition of many of these, where cattle have been allowed to destroy all chance of forest perpetuation, it is plain, that unless trees be planted, the surface of the country must soon largely resemble a wind-swept plain. The resultant evils, agricultural and other, of this state of affairs cannot be too frequently impressed on our minds.

In our latitude, one of the principal of these, is necessarily, the additional cold experienced in winter. Every Canadian has observed, that in the absence of wind a low thermometer is comparatively little noticed. In the deep forest where wind was not, and four feet of snow overlaid the ground, I have passed days, time and again, working without gloves, at twenty degrees below zero. "In the Arctic regions," says Dr. Kane, "I can stand a journey at forty degrees below zero, but remember, no wind."

An evil to agriculture, perhaps even greater in a treeless country, is found in the injurious dryness occasioned in the soil by an uninterrupted wind-course. When the reviving showers of summer fall on the thirsty ground, the beneficial result to vegetation is easily seen —it is well-known and undeniable, and the farmer is apt to calculate how great would be the benefit if, for a week or two, his wheat and clover would thrive as they appear to have done within the past twenty-four hours. The fact is they would continue so to thrive, had we not interfered with those operations of nature, which, in this our climate of extreme heat and cold, are needed for the growing plant. When the protection afforded by forests is altogether destroyed, in a country like Ontario, the course of the wind over the surface of the land withdraws the moisture too rapidly from the soil. The moisture given by a summer shower in conditions favorable to agriculture should remain near the surface for a length of time, until dissipated by slow descent to the water courses below, or gradual uprising to the air above. During this process of slow movement of moisture through the warm summer soil, growth proceeds with its utmost vigor, and one the chief objects of partial shelter is to keep the ground in this favorable condition during the growing period.

When the earth is deprived of the natural shelter given by portions of forest, and the natural moisture too quickly absorbed in the following way: The soil parts with a portion of its moisture to the stratum of air passing immediately above, which passing on, is immediately succeeded by another body of air equally dry, which absorbs another portion, and this in its turn is succeeded by another. As long in fact, as the wind blows briskly across the soil, so long the process of evaporation continues, occasioning necessarily great loss of fertility, compared with that obtainable in better sheltered grounds. This cause has much to do with the often observed fact, that growth is by no means so strong, vigorous, or lucrative to-day, even on new land, in the same locality, as it used to be on similar soil, when the country had been recently settled, and sheltering forests existed in all directions.

We cannot at once expect to see a general commencement to replace those portions of woods, which, long since cut down, experience teaches us had better been allowed to stand. The work of replanting many thousands of acres would be vast. But there is a method whereby, without expense beyond a sum quite within the means of most agriculturists, much of the benefits formerly obtained by the forest shelter might be again secured, and yet the husbandman retain his acres for plough or pasture almost in undiminished extent. This method is simply the use of evergreen windbreaks.

Whoever chooses to take a little time now for this purpose can, in a few years have his fram protected on the north, west, or whichever are its most exposed sides, by beautiful walls of verdure, giving the property an additional value twenty times in amount that which the necessary time and labor will cost him, and giving a shelter from wind, a warmth in winter, and an increase in the return of many of his crops, far beyond what is generally imagined.

It is now that this pains should be taken, for our trees are not increasing. Many small forests, now giving shelter, are yearly being cut down, some because want of care has rendered them impossible now to preserve, some through a mistaken idea of getting more land for farming operations. Be it as it may, we have been finding year by year, the country become more and more destitute of shelter, and he who begins to protect his farm now, will certainly, in a few years, find such work the best investment he ever made, whether in view of the better crops to be obtained, the greater comfort in a farm so sheltered,or the additional price to be had if he choose to sell.

It is not as if this was a new, an untried, or a but lately tried method. Letters have been received from nearly three hundred well informed residents in different parts of Ontario, stating that such protection is always, in their experience, beneficial, and often in the case of winter crops, increasing the yield one-half over those obtained close by, but in unsheltered parts of the same or other farms.

The planting of evergreens has not been so general as that of other trees in Ontario, as they have been considered more difficult of growth. This has arisen mainly from one fact connected with their planting, that is, the roots must not be allowed any chance of drying. These trees have a resinous sap, which, once dried, kills the life of the tree. It requires but little exposure to do this. If you bring an evergreen, in apparently good condition, to the place where you want to plant it, and leave it exposed to sun and wind while you dig the hole, even that amount of drying will sometimes destroy its chance of strong life, or of any life. These roots are often hair-like in their size, and wind or sun chokes the tubes at once with solid resin, which no watering will soften or vitalize. Yet they can be, and are, often carried with perfect safety long distances, even round the world, well packed in damp moss. If you so receive them, plant them the instant you take them out of the moss. If you dig them, cover instantly with some cloth or rug, choosing, if possible, a cloudy still day, and keep them closely covered till the time of planting. It is well to dip them in thin mud, as elsewhere advised. With this care there is absolutely no difficulty in planting eve greens. It is being done every day —is done in the States. I am glad to say, by the hundred thousand plants, and failure is rare.

As for the time to plant them, the first week in June is an exellent time—so is the first week in August. Yet they have been and are planted at all seasons, when the ground is workable, and with success. But reason must be observed in planting. For instance, if you go to a deep poor sand for your plants. There they send in their long hair-like roots far down—perhaps three feet—for nourishment. It is hard to transplant this lengthy mass so as not too greatly shock its habit of growth. The moral is, if you go there, take the plants thence very young, before they can have sent out deep roots, transplant them into your garden, and in a couple of years you will have fine stocky plants fit for any purpose. But do not let this discourage you from taking them from any forest. In many localities you will find them —take those near the outskirts always—with excellent roots. I know many beautiful groves of pine in Ontario—many long stretches of wind break now fifty feet in height—the pride of the farms they beautify—which were taken when two or three feet high from the forest without one per cent. of failure. I knew one instance where nearly eight hundred young pines were moved in early spring, one morning after a sharp frost, which had re-frozen the ground, previously thawed, an inch or so deep. These then cut round, brought up circular masses of earth three or four inches thick and eighteen inches wide, containing within plenty of root fibres. This was on loam, not sand, so there was much surface root. Of the 800 scarce half a dozen failed.

A very important matter is the preparation of the ground, and when our plantation is of such narrow proportions as a windbreak this is easily done. A few furrows of the plough in fall and spring, or in spring alone, harrow it properly, and the work is done. This statement is applicable to most farm soils in ordinarily good condition, but where the soil is rather intractable other means may be necessary. We must consider, that it is only one long narrow row of plants we are preparing for. If the soil be a hard, apparently poor red or white clay, it is undoubtedly difficult even with two ploughings to bring about exactly the condition of mellowness which we should desire for the reception of tender roots of young evergreens. They can be planted there, and they will grow and succeed there, but it will take time. There is a quicker method, and when we can, it is well to employ one, for life is short. This hard clay soil is not poor, it is too close and dense. If you have within reasonable distance some sand, whether it be sharp and white, apparently only fit for mortar, or whether it be red and mixed with humus, so that it be but sand. A few waggon loads of this dra n along the proposed line of windbreak, and scattered two inches thick before you plough, would change your hard clay to soil soft enough for tree roots. Two waggon loads will do a hundred yards, or if the land be poor sand, and clay be near white, red, or blue, though it be the hardest and poorest, applied in the same quantities, (break the lumps) it will do as much for the sandy soil, as the sand does for the clay one. But most soils will grow trees without.

There are different methods of rapidly planting these windbreaks. In the case of young plants, one is to run a furrow, two men then pass along, one with a bundle of plants under his arm, the other with a spade. He first places the plant in position, presses and spreads its roots against the upright side of the furrow and holds it there, while the second throws earth against it and presses it firmly and evenly with his foot. Another, still in the case of small plants, is to run no furrow, but set a line, along which, at proper intervals, one throws out a spadeful, the other sets the tree therein and holds it, while the first throws earth against it and presses it firmly. The third is in the case of larger plants. Here, three men are better employed, one in advance digs larger holes along the line, the second places a tree, spreads its roots more horizontally than in the former methods, while the third fills it up and treads it down.

It must be remarked that the time occupied depends on the side of the roots and the state of preparation of the soil. Farmers must judge whether the roots need more or less time to place them at the level they stood in their nursery or forest, and with their roots properly in contact with the soil. Some soils would need much more careful handling than others. But do the work well; it will pay.

The distance at which such evergreen trees should be planted is a matter for consideration. If you take the pines, planting even twenty feet apart would undoubtedly give, after a number of years, an efficient windbreak, for, say in twenty years, their branches would interlace. But by planting closer we may have a windbreak in a much shorter period. If we plant, say three feet apart, we can well, in a few years, take out and plant elsewhere every second tree, and this is preferable to planting them six feet apart at first, for each closely neighboring young tree helps the growth of the other. Where plants are small, it would be better to plant them yet closer, and depend on the future for proper thinning. Then you can indefinitely extend your lines of trees, as you will have a number of well grown plants five or six years old with fine large masses of fibrous roots, which, properly dug and planted, will then give you, in a very short time, as many beautiful rows of sheltering evergreens as your farm shall need, or, if you have more than you will then consider requisite, you can sell them for good prices to such of your neighbors as have been less provident. And there is too good reason to believe that by that time, considering the present process of tree denudation, the value of shelter will have so impressed pressed itself upon the minds of the surrounding farmers that you will have a remunerative market for all you can spare.

With regard to the after treatment of these windbreaks, an evergreen never should be trimmed up, that is to say, it should always be allowed to throw out its branches close to the ground at will. Its lowest branches are naturally the longest when grown in the open, and its tendency there is ever to shade by its lower branches and to much the earth below them by the covering of its fallen needles.

As has been said, the planting of even a very long row of evergreen windbreak is a matter of but slight expense. The young trees can, in many instances, be procured from our forests, or the seed can be sown, the young plants the second year planted out in nursery beds and the fourth in the windbreak, or the seedling can be procured for a few dollars per thousand from nurserymen.

In planting windbreaks of cedar, the best specimens I have seen were planted much more closely than the pines or spruces, being left at two feet or even a less distance apart.

Following this will be found a list of pines, cedars and spruces best calculated for this purpose, their distinctive methods growth, their favorite soil, and their means of propagation and culture. Where these are not fully stated in any instance, all particulars will be found in the list of trees at the end of the book:—

Pinus Resinosa (Red pine).— This tree delights in a dry, sandy, or gravelly soil, or in one formed from the debris of rock. It will, however, and does frequently in our forests, grow in others. I have seen large trees on clay loam. —B.

Pinus Austriaca (Black Austrian pine).—We have not found this tree at all particular in regard to soil, if it is not stiff and wet. The best specimens we have seen of it grew upon a sloping bank, where the soil was a light loam, and deep and porous. We have, however, seen thriving plantations of it on most kinds of land, but there were always made dry by drainage, if not so naturally. It is a tree well adapted to produce a great degree of shelter, as its massy foliage forms a great protection from winds, and its rapid growth insures this within a very short time after planting. This tree is readily known from all other pines introduced into this country by its very strong and robust habit of growth, by the stiffness and strength of the leaves, by their prickly points, and by the very decided dark appearance of the foliage over the whole tree.—B.

Pinus Sylvestris (Scotia pine).— Leaves in pairs, rigid. Cones conico-ovate, acute, as long as the leaves, generally in pairs. We have seen the Scots pine growing on almost every variety of land; but we are of opinion that a light, sandy, or gravelly loam, is, above all others, when perfectly dry, the most appropriate for the tree. As to situation, suffice it to say, that if the land on which the Scots pine is planted be dry, it will prosper in any site not too elevated and exposed for trees to succeed in this country.—B.

Pinus Strobus (White pine).—The white pine will grow rapidly on light, poor, sandy soils, and there are millions of acres of such lands that could not be put to a better purpose than planting it with white pines.—F. The branches are in regular whorls; and in young trees, and where openly exposed, they form a beautiful pyramid; the foliage is pliant, leaves slender, from three to four inches long, of a light bluish green.—W.

Pinus Ponderosa (Heavy wooded pin).—e This tree has leaves from nine inches to a foot long. Branches are regularly whorled, horizontal, and inclined to droop. This tree has a noble appearance, even when young. It is from the northwest coast of America. Hard, and grows rapidly.—W. The soil of this species, as for most others of the pine tribe, should not be of a rich nature, as under such circumstances the pines generally grow too luxuriantly, and consequently do not ripen the points of their shoots sufficiently to resist the frosts of our winter.—B.

Pinus Pinaster, (Cluster pine).—Leaves twin, roughly at edge. Cones oblong, conical,

shorter than leaf, narrow at base; scales echinate.—B. It thrives in deep, sandy land, and is said to perish in calcareous soils. Immense tracts of barren, drifting sand have been covered with this tree in France, which now yield abundant crops of inferior lumber, fuel, and pitch.—W. Propagstion from seed; sow at the end of April; transplant in one and two years.

Pinus Benthamiana (Bentham's Pine).—Leaves three in a sheath, thickly set on the branches, dark green; generally from eight to eleven inches, stout, somewhat flat, with a slightly elevated rib running along their inner side. One of the hardiest, and most ornamental pines. Propagation same as the Scotch pine. Deep, free soil.

Pinus Laricio (Corsican pine).—Leaves two in a sheath, lax, from five to seven inches long, dark green, often twisted, sheaths short. A beautiful tree of a pyramidal and open-branched form. Will grow on most soils. Hardy, but unsuited to high winds. A very rapid grower, making two or three feet a year. Propagation from seed.

Abies excelsa (Norway spruce fir).—Leaves scattered, quadrangular. Cones cylindrical, terminal, pendant, scales naked, truncate at the summit, flat. It flowers in May; its cones are ripened in the spring of the following year, soon after which they commence shedding their seeds One of the best trees for shelter belts, on account of its tendency to spread out its lower branches, assuming naturally the pyramidal form; and it is also found that this plant bears clipping very well. Nothing can be more beautiful or more effective as a shelter than the Norway spruce. The seed is propagated in the same manner as that of the P. Sylvestris, the seeding plants remain two years in the seed bed, but they they generally require three years in the nursery rows before they are fit to be put in their final situations. They grow best in a moist, and moderately rich, but not wet soil.

Abies Canadensis (Hemlock spruce fir)—Grows well, and makes a fine spreading shelter tree on tolerably good soil, but will not succeed as well in the open, on poor hard clay, as it did in the original forest.

Abies Nigra (Black spruce fir)—Will form a rather tall, slender tree, with branches spreading horizontally, and frequently drooping at the ends, in the case of old trees. The stem is generally smooth, with a blackish bark, very straight, and diminishing regularly from the bottom to the top. The whole tree has an open and airy appearance, from light being admitted between the whorls of branches, which are never of a massy or heavy character, like those of the common spruce fir, but light and pointed each tier showing the outline distinctly.—B. Both this tree and the one preceding stand the shears well; but so far as I have seen, they must not be cut down to small hedges of six or eight feet high. They are trees for shelter belts and the effort to treat them as hedge-plants I have known to kill them.

Abies Alba (White spruce fir).—This species is easily distinguished from all the other species of the family by the lighter color of its leaves, which are of a somewhat hoary-grey color; form a beautiful small tree. The proprietor who wishes to produce a rich coloring of foliage in any particular part of his grounds, has only to plant some dark-leaved pine in the background, the sugar-maple in the front of it, and the white spruce in front of the maple; and when these trees have attained some size he will find the autumn colorings admirable — the yellow, red, and crimson of the maple, the very dark green of the pine, and the hoary grey of the white spruce blending so as to produce an effect indiscribable, and beyond the art of the painter.—B.

Thuja Occidentalis, (White cedar).—The trunk tapers gradually from the ground, and the branches are so arranged as to form a pyramidal tree with a broad base; the twigs are drooping, and all the branches have a flattened character. This is justly considered one of the best American evergreens for general planting, on account of its adaptability to general situations. Since its native habitats are peaty swamps, and rocky cliffs, it will thrive in almost any situation; and its conical figure and rather free growth make a good effect. One of the characters that recommend this tree is, that it bears clipping, and hence it is well suited for ornamental hedges, and wind-screens, for which purpose it is generally used.—W.

Juniperus Virginiana (Red cedar).—Red cedar is one of our own most valuable evergreen trees; nothing can exceed its value for purpose of shelter. As an ornamental tree or large shrub it is of great value for grouping. This plant is highly esteemed in Europe, but quite too much neglected in our own country; perhaps because it is so common; its growth is rapid, and it is very hardy. The shelter and food which this cedar affords to the feathered friends of man, are a great recommendation to it, and should induce every planter to plant the tree.—W.

The initials mark quotations from Messrs. Brown, Warder, and Fuller.

A NEW LUMBER MARKET.

The brigantine Georgia, now anchored in the Delaware river, has been chartered to load a cargo of hardware and lumber for Port Madryn, Patagonia, a place heretofore unknown to American custom officials. It is believed that the Georgia will be the first vessel to sail from this country to Port Madryn, as the existence of the place is practically unknown in maritime circles. Capt. Morris, of the Georgia, says that his vessel will sail to-morrow for her destination via Wilmington, N. C., where the greater part of her cargo will be loaded, after which he expects to be not more than seventy-five days in reaching his destination. The offer to carry the cargo was made to several ship owners, who refused even to consider the charter, not being willing to risk their lives and property in an unknown country.

The settlement of Port Madryn has been comparatively recent. Several years ago a colony of farmers from the vicinity of Cardiff, Wales, decided to leave their native land for the river Platte, expecting to settle along that river, but, finding the Spanish language an insurmountable obstacle to them, the people left for Patagonia. This little colony now numbers over seven hundred souls, and their farms stretch inland for a distance of over 23 miles. The settlers are in constant intercourse with the Indians, with whom they barter tobacco and flour for ostrich feathers and guanaco skins. No American vessel of any kind has ever visited there, and but very few ships from other nationalities have made the port. Lieut. C. B. Brent, of the English war ship Volca, which visited the place in 1876, describes the country as healthy, without fog, and very little rain, water being carried from the interior, a distance of twenty miles, on mules. If the settlement continues to flourish, and its existence becomes generally known, it will be a convenient port of call for vessels bound around the Horn.—*Philadelphia Record.*

WHY SUFFER from that annoying cough when it can be perfectly cured with West's Cough Syrup. Do not hesitate, as it is exceedingly dangerous, as it may prove the forerunner of a severe lung complaint. It will cure asthma, bronchitis and all throat and lung complaints. Price 25c., 50c. and $1.00 per bottle. Sold by J. D. TULLY, druggist.

Perhaps the most extraordinary that success has been achieved in modern science has been attained by the Dixon treatment for Catarrh Out of 2,000 patients treated during the past six months, fully ninety per cent. have been cured of this stubborn malady. This is none the less startling when it is remembered that not five per cent. of the patients presenting themselves to the regular practitioner are benefitted, while the patent medicines and other advertised cures never record a cure at all Starting with the claim now generally believed by the most scientific men that the disease is due to the presence of living parasites in the tissues, Mr. Dixon at once adapted his cure to their extermination; this accomplished the Catarrh is practically cured, and the permanency is unquestioned, as cures effected by him four years ago are cures still. No one else has ever attempted to cure Catarrh in this manner, and no other treatment has ever cured Catarrh. The application of the remedy is simple and can be done at home, and the present season of the year is the most favorable for a speedy and permanent cure, the majority of cases being cured at one treatment. Sufferers should correspond with Messrs. A. H. DIXON & SON, 305 King street west, Toronto, Canada, and enclose a stamp for their treatise on Catarrh.—*Montreal Star* 1y122.

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do	*May 11th,*	*do*	*September 7th,*
do	*June 8th,*	*do*	*October 5th,*
do	*July 13th,*	*do*	*November 2nd,*

and Tuesday, December 7th.

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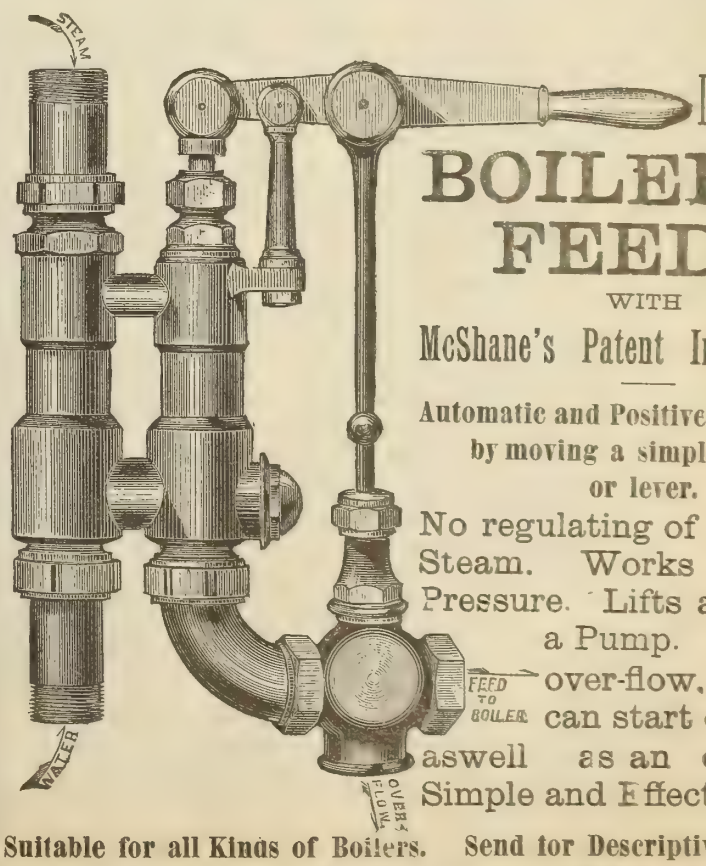

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Market Reports.

TORONTO.

From Our Own Correspondent.

AUG. 9.—The new cut of lumber is now coming in by rail freely, so much so indeed that the railroad companies are taxed to their utmost to supply cars to meet the demand, box cars are therefore loaded as freely as flats. The north shore of Georgian Bay is supplying a large portion of that now arriving here. This has not been the case hitherto, most of that cut having found its way to Chicago and other American ports. The Pacific Junction branch railway is also contributing its quota now that the entire line is opened for traffic. The lumber most difficult to procure at present is long bill stuff cut to order, and work on hand is frequently brought to a full stop pending the arrival of long joisting. The new tariff of freights is now in full swing, and although lumber brought in under that tariff costs more to the middlemen than under the old rates prices cannot be said to have advanced as yet, but it is quite clear it must do so or some one will come out behind.

The yards are doing a thriving trade so far as the quantity sold is concerned; prices are sadly cut, however, and fault rests entirely with themselves. The same men pay their butcher and baker a uniform price for all they purchase from them, simply because said butchers and bakers have determined among themselves that such shall be the case, but the retail lumbermen are cutting each others throats, metaphorically speaking, year after year, thereby only making the same profits on 2 000 feet of lumber that should be made on 1,000 feet—I can only add, serves them right.

Shipping from our docks moves slowly, the only firm doing anything worth mentioning over the docks is Christie Kerr & Co., who control much the larger portion of the lumber north of this city.

I anticipated being able to give you a change for the better on yard quotations, but after diligent inquiries I fail to find as yet any material change although all are free to admit that prices should go up in view of the figures asked by the wholesale men. I am sanguine that by the time my next letter is due yard men will have seen their way clear to making a general advance in prices all along the line.

Mill cull boards and scantling	$10 00
Shipping cull boards, promiscuous widths	12 00
" stocks	13 00
Scantling and joist, up to 16 ft	13 00
" " " 18 ft	14 00
" " " 20 ft	15 00
" " " 22 ft	16 00
" " 24 ft	17 00
" " " 26 ft	18 00
" " " 28 ft	19 00
" " " 30 ft	20 00
" " " 32 ft	21 00
" " " 34 ft	22 50@22 50
" " " 36 ft	24 00
" " " 38 ft	27 00
" " 40 to 44 ft	30 00
Cutting up planks to dry	20 00@25 00
" boards "	20 00
ound dressing stocks	16 00@18 00
Picks Am. inspection	30 00
Three uppers, Am. inspection	35 00@40 00

B. M.

1½-inch flooring, dressed	25 00@30 00
1½ " " rough	14 00@15 00
1½ " " dressed	23 00@25 00
" " undressed	14 00
" " dressed	16 00@20 00
1 " " undressed	12 00@14 00
¾ Beaded Sheeting, dressed	18 00@20 00
Clapboarding, dressed	12 50
XXX sawn shingles, ₩ M	2 75@ 2 90
Sawn Lath	2 25
Red oak	20 00@25 00
White "	25 00@30 00
Basswood, No, 1 & 2	18 00@20 00
Cherry, No. 1 & 2	50 00@60 00
White ash 1 & 2	25 00@30 00
Black ash 1 & 2	20 00@25 00

MONTREAL.

From Our Own Correspondent.

AUG. 10.—Since our last report the lumber trade in Montreal has continued in a very satisfactory condition. Favorable weather, and an increased activity in building operations in the city has given a still further impetus to trade. The retail demand at the yard has been very good, and country orders, which have been coming in freely, have resulted in an increased distribution from the yards. Everything points to a continuance of the present activity for some time, as the outlook in the building line is still bright. A large increase can be noted in the July sales, over those of June, and also over those of the corresponding month of last year. A fair amount of stock of all kinds is held at present. Freight rates on lumber are quoted as follows:—To the United Kingdom 47s. 6d. to 50s. per standard, and to South America $11 00 to $12 per M. The export trade is brisk, and to date includes 1.294,896 pieces of deals, ends, boards and battens, and 276,087 feet of other lumber to Europe, and 293,793 pieces, containing 4,964,321 feet to South America.

Prices remain steady.

The following are the quotations at the yards:—

Pine, 1st quality, ₩ M	$00 00@40 00
Pine 2nd " "	00 00@30 00
Pine, shipping culls, ₩ M	14 00@16 00
Pine 4th quality deals ₩ M	10 00@12 00
Pine, mill culls, ₩ M	8 00@10 00
Spruce, ₩M	10 00@13 00
Hemlock, ₩ M	9 00@10 00
Ash, run of log culls out, ₩ M	20 00@25 00
Bass, " " ₩ M	18 00@20 00
Oak, ₩ M	40 00@50 00
Walnut ₩ M	60 00 100 00
Cherry, ₩ M	80 00 100 00
Butternut, ₩ M	35 00@40 00
Birch, ₩ M	20 00@25 00
Hard Maple, ₩ M	25 00@30 00
Lath, ₩ M	1 50@ 0 00
Shingles, 1st, ₩ M	2 00@ 3 00
Shingles, 2nd, ₩ M	2 50@ 0 00

CORDWOOD.

Prices are steady.

The following are the quotations at the yards:—

Long Maple, per cord	$ 6 00@6 50
Long Birch "	6 00@0 00
Long Beech "	5 00@5 50
Tamarack "	5 00@0 00

CHICAGO.

The *Northwestern Lumberman* of Aug. 7th says:—

BY THE CARGO.

Of the more than 200 cargoes that have entered port, but a few have stopped at the market docks. The meagerness of offerings has caused cargoes as were for sale to be sold without delay. Buyers have hung about the market to obtain cargoes that did not put in an appearance. Perhaps the commission men are withholding bait until the fish get hungry. The trouble seems to be, however, that most of the lumber now going into yard stocks has been bought at the mills. It is coming forward in large volume, as the port list daily shows, and no thanks to the cargo market. It is a common remark about the foot of Franklyn street that "this market is about played out." But the *Lumberman* regards this judgment as premature One reason why lumber is not coming to market as in former season's is because the yard men have been forced to go to the mills in order to pick up bargains. They say that in this way only can they lay in stocks that will secure them a margin in selling. The cargo market is not sufficiently well supplied with the different classes of lumber. This may change in future seasons. Conditions may be reversed. Over-production or a falling off in the eastern demand may cause a pressure of lumber on the western trade. Then the commission men will again be in clover. But this season they are having plenty of time to reflect on the past and prognosticate about the future.

There has hardly been sufficient movement this week to make a clearly defined market. Prices are held firmly because there is no pressure of lumber for sale. It is claimed that short piece stuff can be sold readily at $9.25, but it cannot be learned that more than one cargo has this week been disposed of at this figure, though the cargo referred to was all Norway. It is claimed that more of the same sort would sell at the same figure. The range at $9 to $9.25 for short green piece stuff need not be modified.

The market for inch lumber is unchanged. There is little being offered. Medium boards and strips have been sold within a few days at $13 and $13.50. No. 2 stock goes on prices within our quoted range.

Shingles are still to be had in excess of yard requirements, though the standard brands are said to be doing a little better than earlier in the season, and firm at the slight advance recently recorded.

The following are current quotations of cargo prices:—

Dimension, short green	$ 9 00@ 9 25
Boards and strips, No. 2	10 00@12 00
Boards and strips, medium	12 50 15 00
Selected	21 00 24 00
Boards and strips, No. 1	16 00 19 00
Shingles, standard	1 75 1 90
Shingles, extra	1 80 2 00
Shingles, cedar, standard	1 65 1 75
Shingles, cedar, extra	1 95 2 00
Lath, green	1 25
Lath, dry	1 40

LAKE FREIGHTS.

From Muskegon, dry	1 12½
From Muskegon, green	1 25
From Whitehall	1 25
From Ludington	1 37½
From Manistee	1 37½@1 50
From Menominee, dry	1 37½
From Menominee, green	1 50
From Cheboyan	1 50
From Bay City, dry	1 62½
From Oscoda, dry	1 50
From Alpena, dry	1 50

AT THE YARDS.

There has been a plainly noticeable increase of activity during the week. More lumber than formerly is going into cars. The waggon trade is greater than it was a week ago. Inquiries from the country are more frequent than they were a short time ago. This last-named feature has become pronounced, and marks the initiation of August trade. Inquiry from outside yard dealers comes every year about August 1st, as regularly as the seasons pass. In every instance in which a lively demand succeds a dull period, the actual revival of trade is preceded by general inquiry as to stocks and prices. This season the inquiry will be more urgent than it sometimes is, on account of the late rise of price for piece stuff on the cargo market, and low stage of the log driving streams,—circumstances that go to show that there may be a sharp advance in the price of yard stocks in the near future.

EASTERN FREIGHT RATES.

FROM CHICAGO AND COMMON POINTS ON CAR LOAD LOTS OF HARD AND SOFT LUMBER.

To New York	25c.
Boston	30c.
Philadelphia	23c.
Baltimore	22c.
Washington	22c.
Albany	24c.
Troy	24c.
Buffalo and Pittsburgh	15c.
Shenectady	24c.
Wheeling	15c.
Suspension Bridge	15c.
Salamanca	15c.
Black Rock	15c.
Dunkirk	15c.
Erie	15c.
Toronto	15c

ALBANY.

Quotations a the yards are as follows:—

Pine, clear, ₩ M	$55 00@60 00
Pine, fourths	50 00@ 3 00
Pine, selects	42 00@47 00
Pine, good box	22 00@53 00
Pine, common box	13 00@15 00
Pine, 10-in. plank, each	00 45@00 47
Pine, 10-in. plank, culls, each	00 25@00 27
Pine boards, 10-in	00 30@00 32
Pine, 10-in. boards, culls	00 16@00 20
Pine, 10-in. boards, 16 ft., ₩ M	28 00@32 00
Pine, 12-in. boards, 16 ft	28 00@32 00
Pine, 12-in. boards, 13 ft	28 00@00 00
Pine, 1¼ in. siding, select	40 00@43 00
Pine, 1¼-in. siding, common	15 00@18 00
Pine, 1-in. siding, select	40 00@42 00
Pine, inch siding, common	13 00@15 00
Spruce, boards, each	00 00@00 16
Spruce, plank, 1¼-in., each	00 00@00 20
Spruce, plank, 2-in., each	00 00@00 30
Spruce, wall strips, each	00 12@00 12
Hemlock, boards, each	00 00@00 14
Hemlock, joist, 4x6, each	00 00@00 32
Hemlock, joist, 2½x4, each	00 00@00 14
Hemlock, wall strips, 2x4, each	00 00@00 11
Black walnut, gook, ₩ M	100 @120 00
Black waluut, ¾ inch	80 00@90 00
Black walnut, ¾ inch	00 00@85 00
Scaymore, 1-inch	28 00@30 00
Scaymore, ¾-inch	21 00@23 00
White wood, 1-inch and thicker	38 00@40 00
White wood, ¾-inch	28 00@30 00
Ash, good, ₩ M	40 00@43 00
Ash, second quality, ₩ M	25 00@30 00
Cherry, good, ₩ M	60 00@85 00
Cherry, common, ₩ M	25 00@30 00
Oak, good, ₩ M	40 00@43 00
Oak, second quality, ₩ M	20 00@25 00
Basswood, ₩ M	25 00@30 00
Hickory, ₩ M	40 00@40 00
Maple, Canada, ₩ M	28 00@30 00
Maple, American, per M	26 00@28 00
Chestnut, ₩ M	38 00@40 00
Shingles, shaved, pine, ₩ M	0 00@ 6 50
" 2nd quality	0 00@ 5 00
" extra, sawed, pine	4 30@ 4 50
" clear, "	0 00@ 3 00
" cedar, mixed	0 00@ 3 30
" cedar, XXX	0 00@ 0 00
" hemlock	2 25@ 2 31
Lath, hemlock, ₩ M	0 00@ 2 13
Lath, spruce, "	0 00@ 2 25

BUFFALO.

We quote cargo lots:—

Uppers	$45 00@46 00
Common	17 00@18 50
Culls	12 50@13 00

OSWEGO, N.Y.

From Our Own Correspondent.

No change in quotations:—

Three uppers	$42 00@46 00
Picking	32 00@35 00
Cutting up	24 00@26 00
Fine Common	22 00@25 00
Common	14 00@18 00
Culls	11 00@14 00
Mill run lots	16 00@22 00
Sidings, selected, 1 in	30 00@35 00
" 1½ in	32 00@36 00
Mill run, 1x10, 13 to 16 ft	16 00@21 00
Selected	21 00@24 00
Shippers	14 00@16 00
Mill run, 1¼x10	17 00@20 00
Selected	21 00@30 00
Shippers	14 00@16 00
Mill run, 1 & 1½ in. strips	15 00@18 00
Selected	22 00@30 00
Culls	11 00@13 00
1x6 selected for clapboards	25 00@35 00
Shingles, XXX, 18 in. pine	3 10@ 3 50
XXX Cedar	2 75@ 3 00
Lath 1½, No 1	1 85@ 2 00
No 2	1 00@ 1 25
Ash, 1st & 2nd 1 to 4 in	16 00@20 00
Basswood, 1st & 2nd, 1 & 1½ inch	18 00@20 00
" culls, " "	8 00@11 00

TONAWANDA.

CARGO LOTS—MICHIGAN INSPECTION.

Three uppers	$42 00@44 00
Common	18 00@24 00
Culls	10 00@13 00

TYNE.

The *Timber Trades Jonrnal* of July 31st says:—There is a fairly good list of arrivals to report this week; large lines of them are pit-props and mining timber a few cargoes of staves and headings, one cargo of prepared boards from Drammen one cargo of pitch pine timber and deals from Pensacola, and remainder are made up principally from the Baltic ports. The weather has been finer and more suitable for outdoor operations; but in spite of all the favorable circumstances business does not improve. The demand is as feeble as ever, and no prospect of it improving in the immediate future. Saw mills are only partially employed; in the building trade it is only in the suburbs of Newcastle that any building is going forforward and that to a very small extent Of contracting there never was less being done than at the present moment, no large jobs being in progress. Freights still remain low but the bulk of the ships wanted appear now to be fixed.

GLASGOW

The *Timber Trades Journal* of July 31st says:—Business here has been quite during the past week On Monday the shipyards, &c., opened for the first time after the holidays, but it was not till the middle of the week that the yard resumed its ordinary working condition, and meantime transaction in the wood trade have been small.

No auction sales of timber or deals have been held at Clyde ports since last writing. There is one to take place at Greenock this week, the result of which will be given next issue.

The arrivals at Greenock for the past week include four cargoes of Quebec timber and a cargo of pitch pine; and the principal imports at Glasgow to note are a cargo of mahogany, parcels of Quebec deals per steam liners, and a cargo of Bathurst, N. B., pine deals now discharging at Yorkhill Wharf, and which is going into consumers' hands direct.

The Canadian deals landed at Glasgow ex steamer since the season began amount now to 90,000 pieces, as against 111,000 for the corresponding period last year; but taking into account the Quebec deals landed at Greenock ex sailing vessels, they make altogether about the same total imported this year as last up to date say 143,000 pieces this year, as against 135,000 pieces in 1885, same period. The sailing ships from Quebec to Greenock commenced to arrive earlier this year, the date of the first being 23rd June, or fully a fortnight sooner than last year and since the arrivals began the carrying tonnage amounts to 12,500 tons; last year at this date the total was 6,600 tons. The timber in log imported from Quebec to Clyde since season began amounts to 1,571 logs oak, 112 logs elm, 88 logs ash. 10,300 logs pine timber.

The stock of red pine timber is unusually low, but there is little demand; except first-class of large average, which is in fair request.

CARDIFF.

The *Timber Trades Jonrnal* of July 31st says:—During the week we have had in one cargo of boards from Drammen, two of timber

from Quebec, one of deals from Miramichi, a small steamer cargo of wood pulp from Drammen, and a cargo of deals from Archangel.

As regards the state of the market, we may quote a remark made by one of our leading merchants, that "it's better to do nothing than work for nothing," implying that whatever is done is without remuneration, and the question now is, whether it is best to continue the business for the sake of the connections or to stand off until things improve.

We have heard figures mentioned for Midland delivery for spruce deals which we fear to quote, as they are so low that it is a mystery how any one can do them and make both ends meet. Importers are all holding off in expectation of consignment cargoes being thrown on the market later on, which would be sure to go below the present prices.

With regard to mining timber, there is not by a long way the usual quantity of offering in the market, still there is no prospect of improvement.

LIVERPOOL.

The *Timber Trades Journal* of July 31st says:—The first vessels with cargoes of timber from Quebec are now getting well on with their discharge; but we regret to see very little of either waney board pine or oak going into consumption. This is widely different from what was the usual case in former years, when considerable lines of both these descriptions of wood were generally forwarded up the country to the large railway companies, machinists, or waggon-builders. At present, however, none of this class of consumers appear to be in the market; the great machinists probably from want of work in their department, owing to the depressed condition of the cotton industry, and the great railway companies because they are desirous to limit their expenditure upon rolling stock as far as is prudent.

The financial collapse of the Manchester Ship Canal project will, no doubt, have a depressing effect on business in this district, as a great number of people were looking forward to the commencement of the works with considerable interest, and the grievous disappointment which has so rapidly followed the bright hopes which were held out by the promoters of the cheme, whereby the resuscitation of trade in he neighborhood was to be effected, will cast a damp on all those immediately concerned, as well as upon others indirectly interested.

Our market is still in the same depressed condition as ever, nor do we see any immediate prospect of improvement, prices, if there be any change, are still in favor of the buyer in nearly every instance, and the general feeling here is that those who are doing the least business are perhaps to best off in the end.

No public sales of whitewoods are announced nor can we learn of any in contemplation, the unsatisfactory results of the last auctions having driven the brokers to dispose of their consignment cargoes by private treaty in preference to selling them in public.

This will not matter much to the cansumer in the long run, for he will be well looked after by the merchants' travellers, and the competition is so keen that an order will not refused if there is anything in it, however small it may be, so that he will probably do as well without leaving home as he would do here by attending personally, and will save travelling expenses at any rate.

LONDON.

The *Timber Trades Journal* of July 31st says:—At present, from what we gather, £10 to £10 5s. is the current quotation for 3rd Quebec regulars ex ship, and that the price has not been an obstacle to sales seems evident by their being so few deals remaining in first hands. A leading Quebec house recently told us that they had fewer pine deals of any kind in the docks at the present time than at any time previously.

We had some slight expectations that the improvement noticeable in last week's reported London dock deliveries over those of 1885 would have been maintained for the remaining portion of the season, but it appears that the depressed condition of things then apparent is to reappear in an aggravated form the present year. We are already short of the consumption of last year some 12,000 standards on deals and battens, and 2,000 standards on flooring. The cause of this was principally laid at the door of the stimulus imparted a twelvemonth ago by what was known as the Russian war scare, but this has been insupporable by subsequent records, and we must set down the lessened consumption to the true cause, viz., an utter stagnation in trade, and though last year was essentially a bad one the present is a great deal worse. That free-on-board prices have kept their tone is probably due to the discretion of those who had the controlling power avoiding sending cargoes on the market.

The arrivals recorded this week to the Thames are 56, against 63 that had come forward in the corresponding interval twelvemonths ago. Last year the week's list to the Surrey Docks did not include a single pine cargo, this time they are credited with a pine and a spruce cargo, both for Messrs. Price & Pierce. The Millwall docks have 14 cargoes this week, against seven at a corresponding date 1885. Of these two are pine, viz., the Victory, from Quebec, with 320 standards of 3rd and 4th pine, for Messrs. Browning & Co., and the Fernholme, from Montreal, with about 700 standards, for Messrs. Bryant, Powis & Bryant, Limited. We notice that the Regent's Canal dock is the recipient of of a cargo of pine deals per the Oscar.

Freights continue depressed, and we note Quebec and London has just been done at 42s. 6d., the lowest charters we have heard of from this port for a sailing ship; but we understand it cannot be repeated. Tonnage is offering on this side to go out with the hope of finding charterers. In respect to the lower ports we learn that tonnage from New Brunswick and Nova Scotia is only placeable with difficulty, most of the charters being filled up. We understand some of the Pensacola charters are holding off, and are not tempted to fix even at 87s. 6d. and 85s. for sawn stuff. Tonnage, generally, is declining with very little prospect of improvement, and the action of shipowners in withdrawing their vessels has not had the result we hoped it would, and though ships continue to be taken out of the market there are, unfortunately for owners plenty of other to take their place. We furthermore learn that one of the large Pensacola shippers contemplates opening his mills much earlier than usual prices being so unprofitable; this certainly won't help freights.

There was a capital muster of the trade at Messrs Churchill & Sims sale on Wednesday, the back benches being well occupied.

There was some spirit in the bidding for the whitewood. The St. John spruce planks ex Avoca, however, went remarkably cheap, at an almost uniform price of £6 5s, buyers making no distinction between the 11 and 9 in., though a few of the lots of the latter fell at £6 The 3rds Quebec, per the Craigallion, also planks, went at similar values; here again the 9 inch were valued as the planks. The Riga crown white 3x11 seemed stationary at £6 15s., and it was almost a feature of this sale how prices held such uniformity, which may be accepted as pretty plain evidence of the close competition maintained by merchants when re selling. The parcel per Mathilde Joost, with no exception, went at precisely similar prices to the other Riga goods. The exception we refer to was lot 282, which was carried by the competition another 10s., the buyer, a leading merchant, getting this solitary lot for £7 5s., against the £6 15s. at which his neighbors secured their portions. This was the only lot of crown having 22 fts., and that may be the solution of the mystery.

The ash planks and boards per the Durham City seemed to be at a discount. A leading pine buyer came to the rescue, and appropriated them at 1s. 2d. a foot cube, otherwise it is doubtful what would have been their fate.

There was only a few odd parcels of Quebec pine offered, and prices would not be a sufficient index to the market if we particularized them.

SHERIFF MCQUARRIE, of Rat Portage, reports that things are looking up in that district; the Rainy River Lumber Co.'s mill has started and the saw mill is being got ready for work.

LATH MANUFACTURE.

We learn from a Saginaw paper that there are about forty saw mills on the Saginaw river, Michigan, in which lath mills are operated the production running from 300,000 to 4,000,000 lath each, and that the manufacture of lath is almost as unsatisfactory as that of shingles, as regards prices. "It is true there has been a fair demand, and shipments exceed those of last year up to this time, but there are not going to be any fortunes made this year at $1 15, and sales have been made at that figure, though the quotations run all the way up to $1.40, though $1.25 is about the average asking price. The lath product of the Saginaw river mill during a series of years shows:—

	Product.
1876	72,702,660 pcs.
1877	72,514,999 "
1878	53,236,075 "
1879	65,969,000 "
1880	65,663,883 "
1881	65,983,750 "
1882	94,703,800 "
1883	106,132,490 "
1884	127,346,000 "
1885	80,931,400 "

The aggregate capacity of the mills has been reduced about 10,000,000 pieces by the destruction of mills. So that the out-turn for the year 1885 is scarcely over the average of the past ten years. The largest output of any one concern was that of a Bay City firm, Birdsall & Barker, who manufactured four millions and a quarter of pieces.

WOOD-WORKING PATENTS.

The following list of patents relating to the wood-working interests, granted by the U. S. patent office, July 27, 1886, is specially reported by Franklin H. Hough, solicitor of American and foreign patents, 925 F street, N. W. Washington, D. C., who will furnish copies of patents for 25 cents each.

346,133— Chuck, lathe—C. A. Singer, New York N. Y.

346,164—Lathe—J. Judson, Rochester, N. Y.

346,324—Lathes, steady rest for—J. Seibert, St. Louis, Mo.

346 179—Saw, drag—A. S. Topping, Metamora, Ohio.

346,383—Saw mill—L. O Orton, Philadelphia Pa.

346 241—Saw table—H.J. Thompson, Ogema Wis.

346 097 — Sawing machine — W. H. Finn Oswego, N. Y.

346,369— Shingle sawing machine —I. M. House, Gravenhurst Canada.

PATENTS ISSUED AUG. 3.

346,656—Saw, band—D. Simonds, Fitchburg Mass

346 541—Saw filing machine—J. W Gibson and C. C. Harris, Denver, Col

346,844—Saw-swaging machine—E Dunning, Bluffton, assignor of one-half to S. Davies, Muskegon, Mich.

SUPERVISOR OF CULLERS' OFFICE

Comparative statement of timber, masts, bowsprits, spars, staves, etc., measured and culled to date, at Quebec:—

	1884.	1885.	1886.
Waney White Pine	1,104,142	1,093,921	1,144,224
White Pine	1,113,623	1,004,803	744,801
Red Pine	189,931	43,313	157,564
Oak	480,478	998,529	450,015
Elm	599,341	636,157	332,441
Ash	355,370	178,838	92,414
Basswood	4,415	47	218
Butternut	1,088	3,018	192
Tamarac	17,683	1,983	3,285
Birch and Maple	185,111	305,502	154,129
Masts and Bowsprits	— pcs	— pcs	— pcs
Spars	32 pcs	17 pcs	— pcs
Std Staves	16.6.2.22	39.8.3.21	36 1.3.1
W. I. Staves	69.8.1.23	67.7.2.04	8.1.2.16
Brl Staves	0.6.2.13	48.5.3.07	.....

JAMES PATTON,
Supervisor of Cullers.

Quebec, 16th July, 1886.

THE forest fires in Marathon and Clar counties, Wisconsin, communicated to the towns of Spencer and Colby, laying the former in ashes and considerably destroying the latter.

MECHANICAL EXPANSION.

Every way has been studied out, and carefully tested, to make an arbor or a mandrel a little larger in diameter, and the screw tap and expansion reamer have been very successful in this respect, and if the same features could be applied to the driving pulley of a machine it would make one of the best means for making a variation in speed. It has been applied to the cross-head pin made to expand by internal wedge-key work, that will take up for wear at this end of the connecting rod, but the cross head pin only needs a small portion of an arc on opposite sides to be provided for. Something of this kind may yet be applied to the crank pin, as it is said that this portion of an over-hang crank is likely to get out of round and pinch in the boxes if keyed up to take out all the thump and pound. When a plug tap and a fluted reamer is made so as to be expanded, they must be handled with care, as the most of them, when in one solid piece, are none too strong for the average workman, yet they are handy tools, and the reamer needs grinding on centres to keep it anywhere near accuracy. If the expanding mandrel was not subject to such a heavy duty it would be just the thing around a repair shop to handle the different gear wheels that must be provided for; then a wheel blank could be bored out at once just the exact size and held on centres without turning down an arbor for the occasion. A slight degree of enlargement is all that is required to meet the demand of a number of sizes that are used. One trouble has been to make one size do all the work, making a very compact device for a small bore, and a very inaccurate machine for heavy work. It is much better in providing for the enlargement of every appliance to expand a little, and do it well, than to be spreading all out of semblance with no dependence to be placed on anything. If an expansion shaft pulley were to receive some such attention it would be received with welcome, as as it would put an end to soft-wood lagging, and the demand for old belting to test some of the recipes for cementing leather to cast-iron pulleys, or the paper mache arrangement for winding on a lagging in a moment.—*Boston Journal of Commerce.*

FOREST FIRES.

Science has recondite theories to account for very common things. Some of these theories seem to the unscientific to be absurd, but others cannot be disregarded. Here is something from a druggist in Maine, with regard to forest fires: "It is reasonable to assume that many fires originating in the woods are not caused intentionly by boys, gunners, &c, but by natural cases and the sun. It is a fact that most of our forest fires occur when the resin or gum is exuding in the warm season and in forests composed chiefly of soft woods of resinous trees—the pine spruce, hacmatack and hemlock. It is often observed that these species of tree exude a resin that in losing its volatile element, hardens and for a short time before becoming opaque makes a very good magnifying lens, and powerful enough to set fire to very dry punky materials. Admitting these conditions, then to start a forest fire in the dry season among resinous woods, we require the sun shining on one of those natural sun glasses, and back of it in the focus some suitable material, as dead bark, wood, or best of all, that dead, dry, mealy condition of soft woods caused by insects." One can hardly deny Dr. Roche's statement of these conditions; the resinous forest, the dead bark, the "punky" and susceptible wood. But the lens made of resin is something new to the non-scientific woodman and indeed to the non-scientific reader. However, when one reads in the *Chronicle* the doctor's account of the fire set in his window by the rays of the sun passing through a show bottle filled with colored alcohol, he is impressed with the notion that there are a good many agencies contributing to the annual fire-waste. There is this to be said, however, that if this theory of the origin of forest fires be correct, "what we are going to do about it" is not easily seen. It seems as if the forces of nature with her myriads of burning glasses in the depth of the forest, were too much for any efforts of man.—*Monetary Times.*

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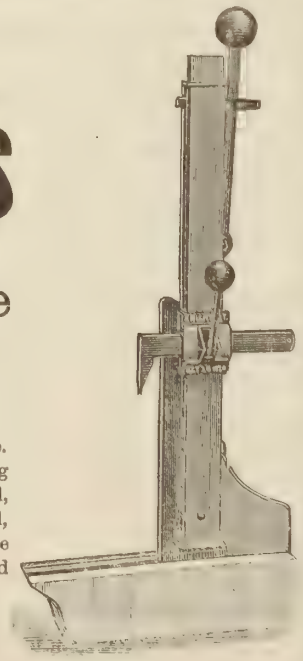

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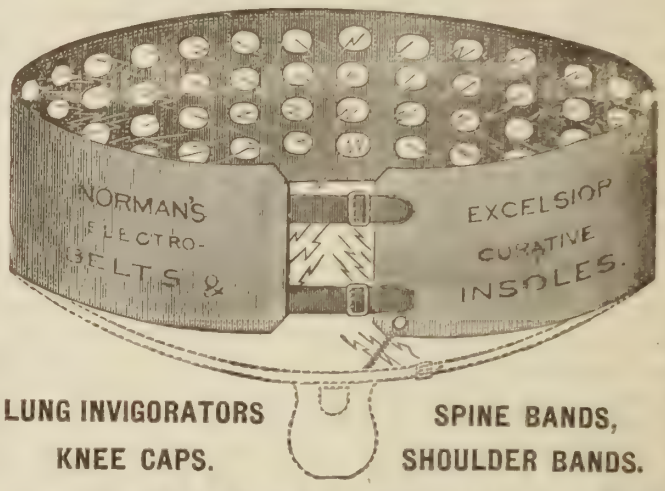

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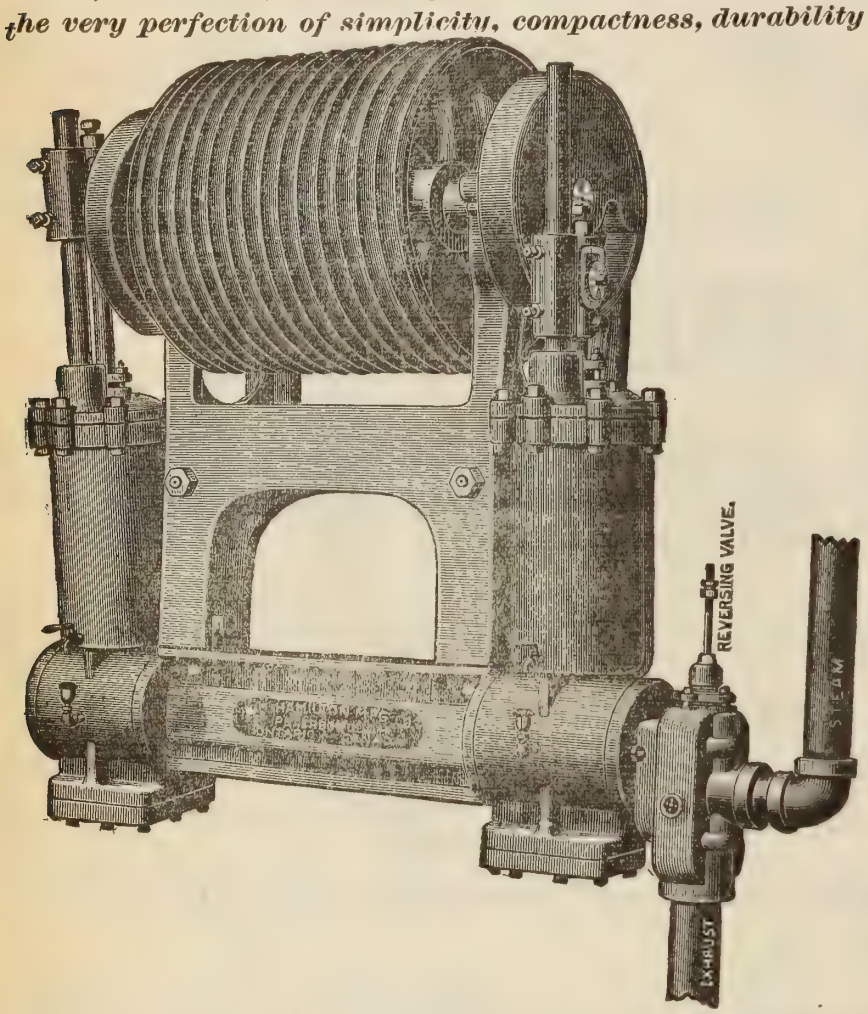

The above engraving illustrates the Twin Engine, 10x16, for Rope Feed, for Saw Mill Carriages. The spool is 27 in. diameter, 30 in. face, is grooved 2 in. pitch for 1½ in. rope. The shaft is steel, 4½ in. diameter, with disk cranks. No connecting rods, eccentrics or valve rods to get loose and out of order. The ports are in the trunions, and worked by an oscilliation of the cylinders, and are held in their place in the downward motion by a steam cushion below. The sawyer's valve is a perfect balance, and by moving this valve the engine can be reversed, stopped or started almost instantaneously if necessary, as the sawyer has perfect control of it by his lever either to go fast or slow. Should the sawyer let go of his lever either by mistake or any other cause, it is balanced so that the valve will come to the centre and cut the steam off both cylinders and stop the feed. When standing, the lever is locked or fastended, so that is is impossible for it to start off itself. The engine stands upright below the carriage, and bolted to two upright beams, placed on the mill for the purpose. When a rack is preferred in place of the rope, we put on a steel wheel 30 in. in diameter, and the engine placed high enough to work into the rack on carriage bar, or if the beams come in the way, an idler wheel can be used between engine and rack segs; or, the engine can be placed at a distance and have a shaft from it to the carriage; or it can be placed in the engine room, where it is under the control of the engineer for oiling, thence by shaft and pinion to carriage rack bars. These engines are well adapted for cutting long logs, or where the logs are mixed, the advantage of this feed will be apparent to mill men. When the carriages are used in two or more sections, the couplin and uncoud ling of each section is quick and simple.

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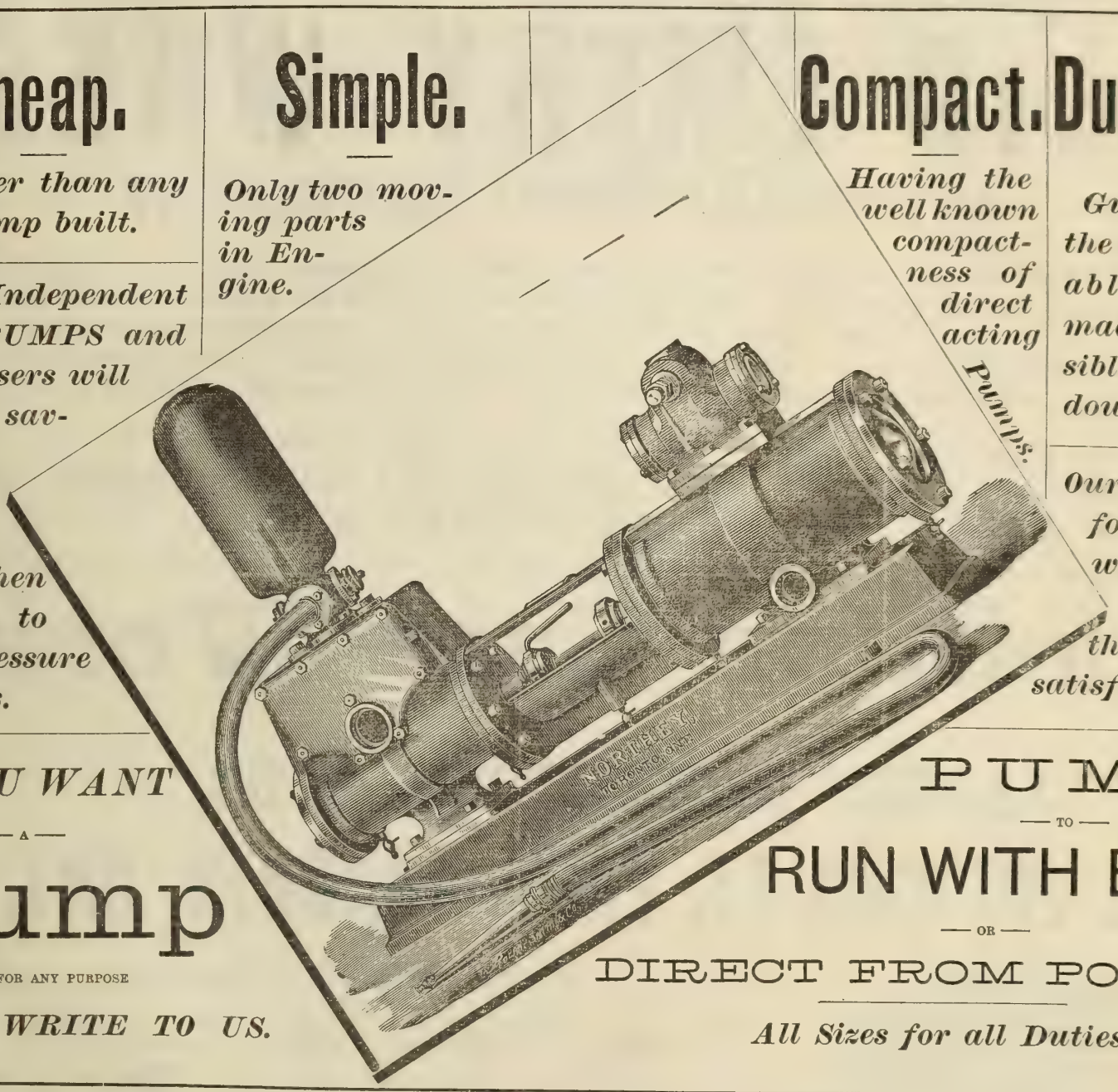

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PUBLISHED SEMI-MONTHLY. | PETERBOROUGH, ONT., SEPTEMBER 15, 1886. | SUBSCRIPTION $2.00 PER ANNUM.

ANNOUNCEMENT.

We have to announce to our subscribers that we have transferred our interest in the Canada Lumberman to Mr. A. G. Mortimer, who will assume control of it after this number, which will be our last.

We can confidently recommend our successor, Mr. Mortimer, to the friends of the Canada Lumberman, and to all interested in the timber trades and allied industries of the Dominion. His connection for several years with the *Mechanical and Milling News* guarantees his fitness to conduct this journal and especially qualifies him for so doing. We can, therefore, ask for him a continuance of that support and patronage, for which, in speaking these words of farewell, we beg to tender our sincere thanks.

The Peterborough Review Printing and Publishing Co. (Limited.)

In connection with the above announcement concerning the change of proprietorship of the Canada Lumberman, we simply desire for the time being to acknowledge with thanks the kindly introduction given us by our predecessors. The first issue under the new management will contain our salutatory, from which the many readers of this paper will be able to form an idea at least of the various new features we intend to introduce. In this connection, however, it becomes necessary to state that the Lumberman will hereafter be issued on the first day of every month, and the subscription price, which in the past has been two dollars per annum, has now been reduced to one-half that amount. We shall be pleased to send sample copies of any issue on application.

Respectfully, &c.,

A. G. Mortmer.

TORONTO.

From Our Own Correspondent.

Our local market is fully supplied with most kinds of lumber, in fact some lines are in excess of the demands, although it is safe to say that in no other city on this continent, no matter what its size may be, can boast of a brisker building trade than our fair city can at the present time. New buildings in the course of erection may be counted, not by the dozen merely, but by the hundred, and it is in just such busy times as the present that bad debts are likely to be made, and much care is needed on the part of dealers. The larger the flock, the more black sheep there are likely to be there. Some speculative builders have already cleared out between the two lights this season, leaving numerous creditors to morn over their ill placed confidence. If care is only exercised by dealers there is no reason to fear but that the season's trade will be good one throughout. Competition is keen however. The large amount of lumber being disposed of in our market has stimulated the growth of lumbermen like mushrooms, so that our city is industriously drummed from one end to the other by young men really having no knowledge of the business, but anxious to turn an honest dollar. The legitimate dealers with capital employed in the business, with teams and men to keep, taxes and other expenses to meet, find it hard to cope with this class of men, and so their profits are kept down to a small margin.

Business is also badly disorganized by the tariff of freights now in force. It was claimed by the men who inaugurated this scheme that lumbermen would know exactly how much ther lumber would cost them laid down here Instead of this being the case they are further at sea than ever. Previously they could make some approximate calculations as to cost, now they are never sure There is a jumbled up mixture of several tariffs applied by the railway companies, depending entirely upon the weight the loadof carried, and the capacity of the car on which the load is placed. The scheme was a failure from the beginning, and bound as it is with so much red tape, it is fast developing into a farce, and a costly one to the lumbermen at that. It is questionable if any two agents on any part of the railroad lines can be found who take the same meaning from the circulars issued by the freight agents for their guidance. and if they could be got into that delightful condition it would then require a justice of the peace at every shipping point, with bible in hand, to swear the man making the declaration as to quantity, and then it would not be done, as nine-tenths of those who do the loading and shipping of cars know little and care less as to the quantity loaded, and in numerous cases the car is well under way towards its destination before the exact quantity on the car is determined. There is one consolation however, like all such crude schemes it will die a natural death ; the sooner the better.

There is considerable lumber going over the docks, but not up to that of former years. Our local trade will show a large increase by the close of the year and our shipments a decided falling off.

Prices at the yards have not advanced as yet. Middlemen are keeping figures down below what it should be in view of the increased freight rates. Bill stuff cannot be sold at a profit for less than $12 per M for 16 feet and under ; yet it can be bought at $11.50 f.o.b. cars here.

Mill cull boards and scantling	$10 00
Shipping cull boards, promiscuous widths	12 00
" stocks	13 00
Scantling and joist, up to 16 ft	13 00
" " " 18 ft	14 00
" " " 20 ft	15 00
" " " 22 ft	16 00
" " 24 ft	17 00
" " " 26 ft	18 00
" " " 28 ft	19 00
" " " 30 ft	20 00
" " " 32 ft	21 00
" " " 34 ft	22 50@22 50
" " " 36 ft	24 00
" " " 38 ft	27 00
" " " 40 to 44 ft	30 00
Cutting up planks to dry	20 00@25 00
" boards "	20 00
ound dressing stocks	16 00@18 00
Picks Am. inspection	30 00
Three uppers, Am. inspection	35 00@40 00

B. M.

1½-inch flooring, dressed	25 00@30 00
1½ " " rough	14 00@15 00
1¼ " " dressed	23 00@25 00
" " undressed	14 00
" " dressed	16 00@20 00
" " undressed	12 00@14 00
⅞ Beaded Sheeting, dressed	18 00@20 00
Clapboarding, dressed	12 50
XXX sawn shingles, ₱ M	2 75@ 2 90
Sawn Lath	2 25
Red oak	20 00@25 00
White "	25 00@30 00
Basswood, No. 1 & 2	18 00@20 00
Cherry, No. 1 & 2	50 00@60 00
White ash 1 & 2	25 00@30 00
Black ash 1 & 2	20 00@25 00

MONTREAL.

From Our Own Correspongent.

Aug. 26 —Trade generally in Montreal continues brisk. the lumber business proving no exception. Many of our lumber merchants say that the volume of business done to date this year is in excess of the corresponding period of last year by from 20 to 30 per cent. The large shipments to date is also a noticeable feature, embracing as they do upwards of 1,500,000 pcs. deals, deal ends, boards and battens, and over 22,000 pcs. of other lumber to Europe, and about 500,000 pcs. lumber to South America. An active demand for the time of year is noticed at the yards, and a large business is being done in car loads, and in retail lots, and some large lines have changed hands.

Advices from the country indicate that a large amount of building is being carried on in the rural districts as well as in the city.

Prices remain steady and are well maintained. Freights on lumber are quoted as follows : To the United Kingdom, 47s. 6d. to 50s. per standard, and to South America, $11.00 to $12 per M.

The following are the quotations at the yards :—

Pine, 1st quality, ₱ M	$00 00@40 00
Pine 2nd " "	00 00@30 00
Pine, shipping culls, ₱ M	14 00@16 00
Pine 4th quality deals ₱ M	10 00@12 00
Pine, mill culls, ₱ M	8 00@10 00
Spruce, ₱M	10 00@13 00
Hemlock, ₱ M	9 00@10 00
Ash, run of log culls out, ₱ M	20 00@25 00
Bass, " " ₱ M	18 00@20 00
Oak, ₱ M	40 00@50 00
Walnut ₱ M	60 00 100 00
Cherry, ₱ M	80 00 100 00
Butternut, ₱ M	35 00@40 00
Birch, ₱ M	20 00@25 00
Hard Maple, ₱ M	25 00@30 00
Lath, ₱ M	1 50@ 0 00
Shingles, 1st, ₱ M	2 00@ 3 00
Shingles, 2nd, ₱ M	2 50@ 0 00

CORDWOOD.

Long Maple, per cord	$ 6 00@6 50
Long Birch "	6 00@0 00
Long Beech "	5 00@5 50
Tamarack "	5 00@0 00

ALBANY.

Pine, clear, ₱ M	$55 00@60 00
Pine, fourths	50 00@55 00
Pine, selects	42 00@47 00
Pine, good box	22 00@33 00
Pine, common box	13 00@15 00
Pine, 10-in. plank, each	00 45@00 47
Pine, 10-in. plank, culls, each	00 25@00 27
Pine boards, 10-in	00 30@00 32
Pine, 10-in. boards, culls	00 16@00 20
Pine, 10-in. boards, 16 ft., ₱ M	28 00@32 00
Pine, 12-in. boards, 16 ft	28 00@32 00
Pine, 12-in. boards, 13 ft	28 00@00 00
Pine, 1¼ in. siding, select	40 00@43 00
Pine, 1¼-in. siding, common	15 00@18 00
Pine, 1-in. siding, select	40 00@42 00
Pine, inch siding, common	13 00@15 00
Spruce, boards, each	00 00@00 16
Spruce, plank, 1½-in., each	00 00@00 20
Spruce, plank, 2-in., each	00 00@00 30
Spruce, wall strips, each	00 12@00 12
Hemlock, boards, each	00 00@00 14
Hemlock, joist, 4x6, each	00 00@00 32
Hemlock, joist, 2½x4, each	00 00@00 14
Hemlock, wall strips, 2x4, each	00 00@00 11
Black walnut, gook, ₱ M	100 @120 00
Black waluut, ⅞ inch	80 00@90 00
Black walnut, ¾ inch	90 00@85 00
Scaymore, 1-inch	28 00@30 00
Scaymore, ⅝-inch	21 00@20 00
White wood, 1-inch and thicker	35 00@40 00
White wood, ⅝-inch	28 00@30 00
Ash, good, ₱ M	40 00@43 00
Ash, second quality, ₱ M	25 00@30 00
Cherry, good, ₱ M	60 00@85 00
Cherry, common, ₱ M	25 00@30 00
Oak, good, ₱ M	40 00@43 00
Oak, second quality, ₱ M	20 00@25 00
Basswood, ₱ M	20 00@30 00
Hickory, ₱ M	40 00@40 00
Maple, Canada, ₱ M	28 00@30 00
Maple, American, per M	20 00@28 00
Chestnut, ₱ M	38 00@40 00
Shingles, shaved, pine, ₱ M	0 00@ 6 50
" 2nd quality	0 00@ 5 00
" extra, sawed, pine	4 30@ 4 50
" clear, "	0 00@ 3 00
" cedar, mixed	0 00@ 3 00
" cedar, XXX	0 00@ 0 00
" hemlock	2 25@ 2 31
Lath, hemlock, ₱ M	0 00@ 2 13
Lath, spruce, "	0 00@ 2 25

OSWEGO, N.Y.

From Our Own Correspondent.

Three uppers	$42 00@46 00
Picking	32 00@35 00
Cutting up	24 00@26 00
Fine Common	22 00@25 00
Common	14 00@18 00
Culls	11 00@14 00
Mill run lots	16 00@22 00
Sidings, selected, 1 in	30 00@35 00
" 1¼ in	32 00@36 00
Mill run, 1x10, 13 to 16 ft	16 00@21 00
Selected	21 00@24 00
Shippers	14 00@16 00
Mill run, 1¼x10	17 00@20 00
Selected	21 00@30 00
Shippers	14 00@16 00
Mill run, 1 & 1¼ in, strips	15 00@18 00
Selected	22 00@30 00
Culls	11 00@13 00
1x6 selected for clapboards	25 00@35 00
Shingles, XXX, 18 in. pine	3 10@ 3 50
XXX Cedar	2 75@ 3 00
Lath 1¼, No 1	1 85@ 2 00
No 2	1 00@ 1 25
Ash, 1st & 2nd 1 to 4 in	16 00@20 00
Basswood, 1st & 2nd, 1 & 1¼ inch	18 00@20 00
" culls, " "	8 00@11 00

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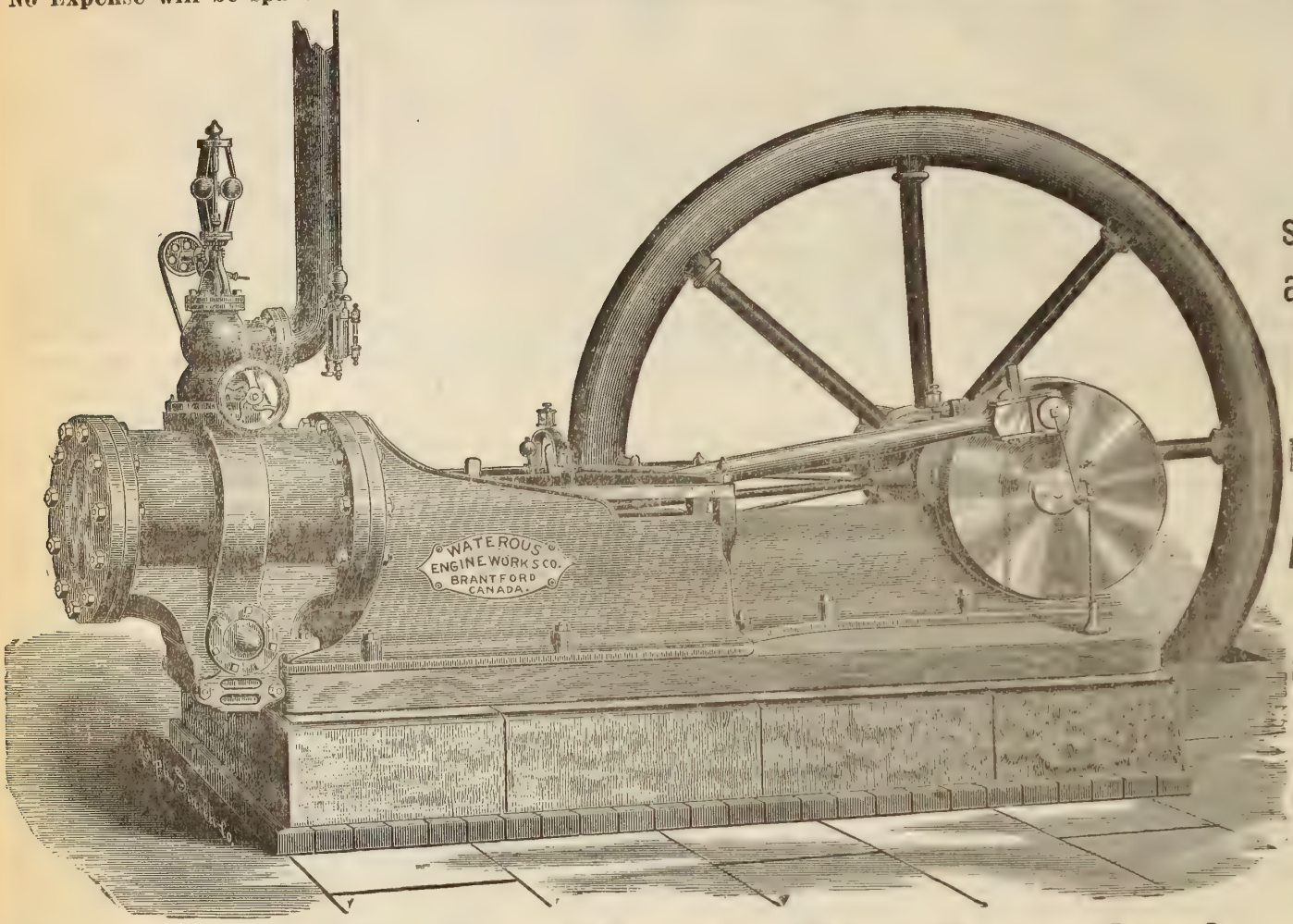

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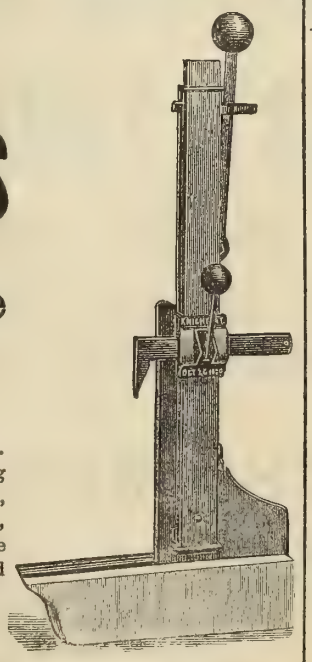

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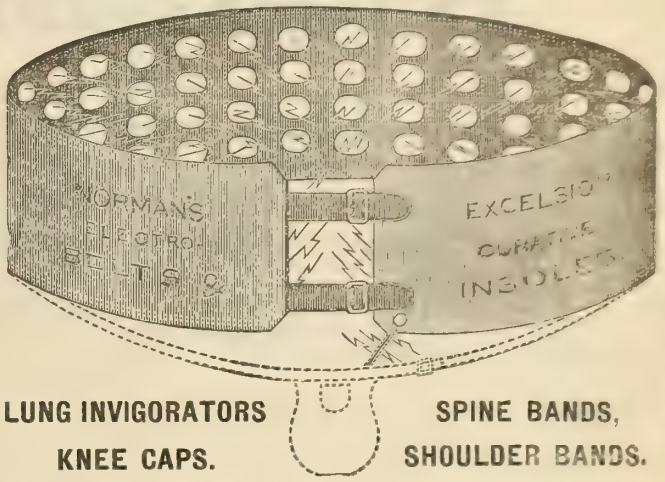

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VOL. 6. PETERBOROUGH, ONT., OCTOBER, 1886. NO. 19.

LUMBERING ON THE MIRAMICHI.

A description of the operations in progress or in contemplation at the lumber mills of the Miramichi is given by a travelling correspondent of the Saint John *Sun*, writing from Newcastle, N. B. It is therein stated that a considerable quantity of lumber is being held at Miramichi ports for higher prices. And the quantity shipped to Europe this season will not, it is believed, exceed seventy million feet. That this is a limited export compared with recent seasons will be seen when we give the quantities shipped to Europe in the previous four years:—

1882 shipments.	117,000,000	feet.
1883 do	149 000 000	"
1884 do	108,000,000	"
1885 do	87.000 000	"
1886 (probable) shipments.....	70,000,000	"

A corresponding decrease is shown in the number of feet rafted at the South West boom during those years, vix.: 77,740,000 feet in 1882; 71,194,000 feet in 1883; 37,049,000 feet in 1884; 37,282,000 feet in 1885, and 30,806,000 feet in 1886.

Charters have ranged from 40 to 45 shillings per standard this year. No steamers have been engaged this season. Snowball's deals have been shipped up to date in four sailing vessels. Most of the deals forwarded have been to ports in France and on the Mediterranean. Nearly all those cut by Richards & Hickson at Newcastle, are piled up on their wharf, and Burchill, of Nelson, has only shipped two cargoes this summer, your correspondent was informed. Scarcely any move has been made by operators as to next winter's work, and those spoken to seemed to be greatly discouraged over the continued depression in the European market, and the prospect of no decrease in the government stumpage tax. No doubt Northumberland operators, for reasons which have been pretty fully ventilated in the press, are more seriously affected by high stumpage than their confreres in the south and west. A few cargoes of laths have been shipped to New England this season by the N. B., Trading Co.

Information obtained as to what is being done, or is likely to be done, at individual mills on the river is thus given. We condense the report: J. B. Snowball's two gang steam mill at Chatham, the capacity of which is 175,000 feet per day, is expected to cut twenty million feet this season, which is equal to about 114 days running at full speed. His water mill at Redbank will cut two millions. The double-gang mill at Black Brook, of the New Brunswick Trading Co., on the other hand, expects to cut only eight million feet, which represents but sixty-four days' exertion of its capacity of 125,000 feet daily. D. & J. Richey's mill at Newcastle, equal to over 100,000 feet per day, is expected to cut ten to twelve millions. E. Hutchinson's single gang mill at Douglastown, daily capacity about 50,000, will saw from five to six million. George McLeod's single gang mill at Rosebank, capacity from 35,000 to 40,000, will turn out between five and six million. About six million will be disposed of by the Richards & Hickson single gang mill at Newcastle. Charles Sargeant, at Nelson, has a single gang mill and will take care of about six million feet. This mill is sawing for George McLeod. George Burchill & Son's single gang mill has about eight million feet to saw. John Flitt's mill, not running heretofore, started this week and will cut two or three millions for Wm. Richards. Double gang mill, capacity 80,000. At Blackville is the water mill (single gang), owned by Scott Fairley, will cut about three million this season. Sinclair's steam rotary mill at the Northwest bridge will cut about two million feet.

Now as to the mills which are shut down. The Loggie mill at Chatham, (rotary), now owned by the N. B. Trading Company; Alex. Morrison's double gang mill at Chatham, and the Park mill at Nelson, owned by D. J. Richey, have been idle all summer. And R. P. Whitney's single gang water mill on the North-west is not running this season.

According to these figures the total output of the Miramichi mills this year will be about 80 million feet.

THE LUMBER TRADE OF THE CANADIAN NORTHWEST.

A Bay City, Mich., correspondent asks for information respecting the lumber supply tributary to Winnipeg, Man., and concerning Port Arthur, Ont , as a manufacturing and shipping point. The home forest supply of Manitoba is mainly found on the shores of Lake Winnipeg. Spruce is the principal lumber producing timber. There is a fine growth of spruce on Fisher river, and other streams that run into the eastern shore of Lake Winnipeg. In fact the principal forests of spruce are on the east shore of that lake. The growth is described as rather small, but smooth, straight, and free from coarse knots. Little pine abounds on Lake Winnipeg, but there is plenty of tamarack and poplar. Much of the country along the lake shores, especially on the west side, are low and marshy, a region which is the special habitat of tamarack and poplar. The mill business of the Lake Winnipeg district is centralized at Selkirk, a town at the southern end of the lake, at the mouth of the Red river of the north. It is the lake port of the city of Winnipeg. The Northwest Lumber Company has a mill of large capacity at that point, and handles the greater portion of the logs and lumber that come from the shores of Lake Winnipeg. Distribution of sawed product is, of course, throughout Manitoba and the other northwestern districts. Selkirk has rail communication with the city of Winnipeg, and hence with the railway systems of Manitoba and the northwest territories. It is admirably situated for a large lumber trade, and can command all that Lake Winnipeg can afford. The body of water is remarkably quiet, and log rafting is much less dangerous than on the great lakes of the border But the forest supply being limited mostly to spruce, it is not likely that the Winnipeg lumber business will ever assume vast proportions. Still, knowledge of the forest resources of the district is yet astonishingly limited, even among Canadians, and hereafter there may be developments that shall cause a lumber point to grow up at the southern end of the lake that will rank with the larger centers in the great lake region or the lower provinces. The growth of Manitoba lumber production will be gauged by the growth of population in the tributary country. Without question the Canadian northwest is destined to be a field that will one day require a vast yearly distribution of lumber. When Canadian progress reaches the stage indicated, the timber resources of Lake Winnipeg will be powerfully drawn upon.

If our Bay City correspondent contemplates lumber operations on the north shore of Lake Superior, as his letter indicates, he must expect to meet not only competition from Lake Winnipeg lumberman, but from the Lake of the Woods region, and, to some extent, from the American side. There will also be competition from the Bow river district, in Alberta, near the Rocky mountains, and eventually from Saskatchewan river. But the resources of these last named localities are limited, and will undoubtedly be no more than sufficient for the immediate territory. If our correspondent has a quantity of pine on the north shore of Lake Superior there can be little or no risk in manufacturing and distributing it westward from Port Arthur. Logs can be rafted from shore points to Port Arthur, and the sawed product shipped thence over the Canadian Pacific to Manitoba and beyond. Such a scheme looks perfectly feasible. Mr. Geo. A Priest, and Mr. Alonzo W. Spoor, both of Port Arthur, are gentlemen well informed in regard to Port Arthur lumber interests, and would, no doubt, answer any inquiries that might be addressed to them. The *Lumberman* would also be pleased to have their views on the matters here but hinted at.—*Northwestern Lumberman.*

THE "Lumber Exchange" agitation in New York is becoming a lively question among lumbermen and the lumber press. The opinion is expressed on one hand that such an institution is not required, while some of the largest dealers think it would prove of immense advantage to the trade in general. What the outcome will be time will have to prove.

CANADIAN TIMBER.

It has been estimated by Mr. Ward, an accredited authority on the subject, that Ontario furnishes 4 474 000 pieces equal to 3,600,000 standard pine logs of 200 feet each, producing 520,000,000 feet of lumber; 6,790,090 cubic feet of white and red pine, or 81.000.000 feet b. m.; dimension timber, 23.000,000 feet b. m.; hardwood, cedar &c., equal to 5,000,000 feet—making in the aggregate 635 500 000 feet b. m.; playing to the provincial government for timber dues $501 000, and ground rents $46,000. with 28,000 sqr. miles under license. The province of Quebec has under license 48,500 square miles, producing 2 400 000 square pine logs, equal to 386,000,000 feet b m , and 1,308,000 spruce logs, producing 106,000,000 feet b. m.; white and red pine timber, 3.110,000 cubic feet,equal to 37,320,000 feet b m.; hardwood 51,000 cubic feet, or 611,000 feet b. m ; railroad ties 143,000 pieces 32 feet each, making 4.576,000 feet b. m ; tamarac, 175,000 feet b. m.; hemlock 34,000 feet; cordwood equal to 5,000,000 feet making in all 549,976,000 feet giving a gross revenue of $668,596. Nova Scotia has very prolific forests, but the axe and fire have proved singularly destructive. The rough products of the forest at nearly 200,000. The province of New Brunswick has large "limits" spreading over portions of the counties of Restigouche, Gloucester, Madawaka, Northumberland, Victoria, Carleton, York, Sunbury, Kent, Westmoreland and Queen's. It is stated on the authority of Mr. Ward, that the "cut on government lands in New Brunswick is equal to 160,000,000 feet of all classes, principally spruce; the pine in this province, once so famed, is almost exhausted. There being a large extent of private lands in this province it is safe to estimate that there is not less than 500,000,000 feet of lumber and timber produced, considerably more than three-foruths of which is exported, balance being for home use. The extent of territory is 17,500,000 acres, 10,000,000 of which is granted and located, leaving seven and one-half millions still vacant, and giving to the province $152,000 for timber dues, ground rent, and so forth."

MAKE YOURSELF USEFUL.

A man who regards work as a hardship, an oppression, who look upon the time given to his employer as a species of limited slavery, can never do anything well. He must take an interest in this work if he would excel. The true rule for a young man is to make himself as useful as possible to his employer. He should never feel satisfied with himself as long as anything in his power to promote his employer's interest is left undone. In this way his labor is rendered profitable. Promotion comes unsought and before it is expected. Here lies the secret of success.—*Ex.*

TREES ON THE PACIFIC SLOPE.

George H. Hamm, the well-known correspondent, who is "doing" British Columbia in the interests of the Winnipeg *Manitoban* writes as follows :—"The timber supply of the province is apparently inexhaustible, and will doubtless prove a mine of wealth before many years. Already shipments are made to the Australian, South American and Chinese markets, but the volume of trade has not as yet reached the proportion that it is capable of. The principal tree is the Douglas fir, which ranges from four to twelve feet in diameter, and from two hundred to three hundred feet high. It is straight and tough, and capable of bearing a great strain and is almost unequalled for bridging, framework and for shipbuilding, while its great length and straightness make it especially adapted for masts and spars. Besides the Douglas, the following trees are to be found in the province—the list being obtained from a work issued by the local government. Western hemlock, large, found on coast and Columbia river; Englemann's spruce, eastern part of province and interior plateau; Menzie's spruce, very large mostly on coast; great silver fir, coast tree of great size; balsam spruce, abounds in Gold and Selkirk ranges, and east of McLeod's lake; Williamson's Alpine hemlock, too scarce and too high up to be of much use; red pine (yellow pine or pitch pine,) a variety of the heavy yellow pine of California andOregon, very handsome, four feet diameter, common in drier parts of interior; white pine (mountain pine,) Columbia region—Shuswap and Adarms' lakes — also interior of Vancouver island; white-barked pine, small; western cedar (giant cedar or red cedar,) wood pale, yellow or reddish color, very durable, often found 100 to 150 feet high, and 15 feet thick; yellow cypress (yellow cedar) mainland coast, Vancouver and Queen Charlotte island; western larch, (tamarac,) Rocky Mountains, Selkirk and Gold ranges, west to Shusway lake, large tree, yield a strong, coarse, durable wood; maple, valuable hardwood, on Vancouver and adjacent islands, Queen Charlotte island and the mainland coast, up to 55 deg., attains a diameter of four feet; vine maple, very strong, tough whitewood, confined to coast; yew, Vancouver and opposite mainland shores, very tough and hard, and of a beautiful rose color; crab apple, along all the coasts, wood very hard, takes good polish, and withstands great wear; alder, two feet thick, on the Lower Fraser and along coast, good furniture wood; western birch (paper or canoe birch,) Columbia region, Upper Fraser, Peace river, range and value not mueh known; oak, on Vancouver island 70 feet in height, and three feet in diameter; dogwood, Vancouver and coast opposite. Arbutus, close-grained, heavy, resembling box; reaches 50 feet in height and 20 inches in diameter, found on Vancouver and neighboring islands. Aspen poplar, abounds over the whole interior, reaching a thickness of two feet. Three other varieties of popular are found, commonly included under the name cottonwood. One does not extend above Yale, and is the same wood largely used in Puget Sound to make staves for sugar barrels for San Francisco. The other two kinds occur in valleys in the interior. Mountain ash, in the interior; Juniper (red cedar or pencil cedar) east coast of Vancouver, and along the shores of Kamloops and other lakes in the interior.

There are already some very extensive saw mills in operation—and have been cutting for a quarter of a century—and yet this branch of industry is only in its infancy. Not only is there the trans-Pacific trade, gigantic as it should soon be, but with cheap freight rates the treeless plains of the northwest could be readily supplied and profitable interchange of commodities spring up.

COLUMBIA'S BIG TREES.

The Montreal *Gazette*, referring to the Canadian Pacific railway exhibits at the Dominion exhibition, has the following regarding the extensive timber of British Columbia.

In entering the tent the attention of visitors is first drawn to the samples of the enormous timber which grows on the Pacific coast. The largest is a specimen of the Douglas fir, so called after Sir James Douglas, the original (Hudson's Bay Co.) governor of Vancouver island and British Columbia, which, in 1859, were two separate Crown colonies. This tree is also known commercially under the appellation of "Oregon pine." It grows to a height of some 270 feet, and the trunk is not only very valuable for ordinary lumber, but has a special usefulness for ships' masts and spars, of which cargoes are made up for all parts of the world. Among ports most constantly supplied direct from British Columbia are Marseilles, Sydney, Hong Kong, Calcutta, Singapore, besides the naval dock yards of Great Britain. The specimen at this exhibition is a section of about one foot in thickness and has a diameter of eight feet. The age of the tree is estimated by a computation of the rings which indicate the annual growth, and show it to have been 561 years old when it fell a victim to the axe of the woodman. In the immediate vicinity of where this tall tree grew were stumps, one of the largest of which measured seventeen feet six inches in diameter. Those who feel an interest in yachting may like to know that it is timber of this class obtained from Oregon, British Columbia and Washington Territory that the masts and spars of celebrated racing yachts such as the Puritan and Galatea are supplied. Owing to these trees growing so close together and to such an enormous height, frequently 150 feet without a limb, the grain is exceedingly free from knots or faults of any kind. The quantity in existence in British Columbia is very great, but owing to the lack of snow in the valleys where the largest specimens grow, special means have to be employed to transfer these giants of the forest to points where they can become merchantable products. The other specimen mentioned is of British Columbia spruce, also a very valuable timber. It measures seven feet in diameter. Between these sections of timber, on a pedestal, is displayed a block of coal from the Galt mine at Lethbridge, in Alberta. It weighs some 800 pounds and was cut out specially for this exhibition. Though not adapted for every purpose this coal makes an exceedingly valuable fuel; it burns with a hot flame and is used in Manitoba in open grates, in globe heaters and cooking ranges, and is sold at present at $6.50 per ton. The utilization of the black diamonds of the Northwest has effectually solved the difficulties of the fuel question, which previously oppressed the minds of the residents in this part of the country six or seven years ago, at a time when the somewhat meagre supply of available timber for Manitoba was being rapidly exhausted and when hard coal, imported from the United States in bags, brought $25 a ton.

HINTS ABOUT CILCULAR SAWS.

When hanging a saw the first thing to do is to see that the saw is true and straight, and that the mandril is correct in every particular. Examine the collars with a straight-edge, and see that the steady pins when driven into the collar have not raised small bunches around them by being too tight. If there are bunches they should be taken off with a file or cold chisel. The fast collar should be slightly concave on its face, but should never be convex; the loose collar may be straight faced. The mandrel and steady pins should not fit too tight into the saw, for if they do the least warmth in the journal box will expand them and cause the saw to bind or spring. When the saw is fastened between the collars it should be perfectly flat on the log side, but if found to be bulging or wavy loosen the nut to see whether the fault is in the saw or the collars. This should be carefully seen to before using it. The arbor should have some end play, and the guide should be one that can be adjusted in or out. The pins of the guide should run as close to the saw as possible without producing friction. The saw should hang so that the front edge inclines slightly toward the log, so that the back edge will not cut or scar the log. Some of these points may be considered fine-haired by some persons, but they are essential to first-class work and ease of running. When a top saw is used, it should drop down into the kerf of the lower saw about three inches. For good work the top saw should run in an opposite direction to the lower saw, and should have a spring guide which will allow to follow any irregularity in the track of the lower saw, but which will bring it back to it neutral position when out of the cut. Water should not be put on a running saw when it is hot, as it will spoil it. Water may sometimes be used on a saw running in pitchy or gummy wood to keep it clean or prevent friction. When this is done a small stream should be directed near the eye of the saw of both sides, when by the centrifugal action of the saw it will diffuse itself evenly over the whole surface.

The arbor boxes should be what is technically known as water boxes, as they are better calculated to keep the arbor cool. When an arbor becomes heated the heat is conveyed to the saw, causing it to be limber and "run bad." The speed of a saw should be from 12.000 to 15 000 feet per minute, though saws have been run as high as 20,000 feet per minute.—*Wood and Iron.*

THE BUSINESS OUTLOOK.

After months of the deepest business depression, affecting all lines of trade of the entire country, favorable indications were seen at the time for fall business approached. The marked increase in volume, and margin of transactions, that characterized the beginning of September, were augumented day by day, throughout the month, and to-day the country enjoys a genuine business boom, that has all the appearances of permanency. It has not been brought about through speculative methods, but from the honest needs of a rapidly growing and needful country. A stimulus has been given to trade that bolsters up the hopes of all merchants, that few dared dream of a few months ago. The best element of the present boom, the most cheerful aspect lies in the conservative and solid basis upon which it is made. Confidence is everywhere established, and the business world takes on a new hope, buys liberally, and prosecutes with vigor and faith, certain that energy will be repaid. The condition of the trade is healthy. The iron business, which is generally the leader in an upward or downward move, is a pretty good barometer of the business tendency. That iron has taken on the most activity ever known in this country, is a pretty clear indication of the approach of good times. All old blast furnaces, and many new, are running at full capacity, and hundreds are contemplated and in course of construction. Iron enters into about every branch of manufacture, and consequently the present enormous output is a pretty good test of the faith the iron men have in the stability of the country, and the needs of the near future. Its a good index to base operations on, if we had nothing else for a guide; but we have.

Reports gathered from almost every line of trade indicate a largely increased business over last fall. There is no doubt but that stocks of all kinds are exceedingly low in the interior towns, and merchants must buy largely to replenish their stock to meet the demands. There is a short European crop, while flattering accounts are made as to our own panning out largely in excess of midsummer estimates. More cotton will be baled in the South than was anticipated. Cereals, lumber, iron, real estate, in fact, all properties, are increasing in values steadily. The demand will be good for all of next year, at least. The only danger lies in over-production and especially is this the case with the manufacturers of lumber. The Northwestern Lumber Manufacturers' association can do much to prevent this deplorable outcome. They have shown their ability to grapple with the situation by their joint movement in the past. They can curtail the cut, so as to meet the requirements of the country and sustain fair prices, or, they can overproduce and unsettle values.

Its a difficult problem to contend with, when lumber is advancing in price. Every lumberman wants to cut as much lumber as the capacity of his mill will turn out. Owing to the short sawing season this year, it may not be deemed expedient to reduce the amount of logs to be banked the coming winter. The present is what we have to deal with, and the immediate future prosperity, and we are pleased to chronicle a very bright view.

The railroad reports show phenomenal gains in earnings. Seventy-five of the extensive lines show a gain last month of nearly $4,000,000. The main trunk lines are crowded beyond their capacity to handle shipments. The post-office, express, and bank clearances denote only too clearly the enormous amount of business transacted the past month, in comparison with the past. We are certainly on the eve of a prosperous season.—*Chicago Lumber Trade Journal.*

THE BULGARIAN CRISIS.

The People Will Not Yield to Russian Dictation.

SOFIA, Sept. 30.—General Kaulbars to-day received a deputation of prominent Bulgarians, who called upon him to endeavor to induce him to withdraw or modify his circular. The deputation was composed of 114 of the most respected and influential citizens of the principality, and was headed by Dr. Voultcheff, who acted as spokesman. He stated to General Kaulbars that the circular had surprised the Bulgarian people, and asked him to re-consider the Russian demands, particularly for the postponement of the elections for two months. The nation was anxious, Dr. Voultcheff continued, to speedly settle the choice of the prince to occupy the Bulgarian throne. In addition to that modification the doctor said the people desired Russia to withdraw her demands for the immediate raising of the state of seige, and also the demand for the instant release of the garisoners in custody for the complicity in the coup d'etat. The continuance of the state of seige was the only guaranty the Government had for the preservation of peace, which the rest of Europe desired as well as Bulgaria. The Bulgarians, believing that the Czar had no desire to prolong the crisis, begged Gen Kaulbars to telegraph to him to hasten the choice of a Prince. The constitution stipulated that the Grand Sobranje, elected to select a ruler, should meet within one month after the elections. In regard to the liberation of political prisoners Dr. Voultcheff said it would be a dangerous precedent to establish, to liberate without trial or punishment those responsible for such a momentuous an act as the deposition and kidnapping of Prince Alexander, besides being contrary to the laws which were the safeguards of the country. Besides, if the prisoners were released as demanded, the probabilities were that the people would kill them in the streets, such was the popular indignation against the implicated men. The Government thought the imprisoned officers should be tried first and subsequently offered clemency. In conclusion the deputation assured Gen. Kaulbars that Bulgaria was thankful to the Czar for his past protection, but maintained that the laws of the country must be respected. No other Ministry than that at present in power could extricate the country from its crisis. Gen. Kaulbars in reply, said the Bulgarians knew very well that the Czar had the prosperity at heart, but they must confide in the Czar, and carry out his wishes. Dr. Voultcheff interrupted Gen. Kaulbars at this point, and said, "If that is all you have to say, we will retire." The deputation then withdrew.

AWFUL POWDER EXPLOSION.

Four Men Blown to Fragments—A Building Completly Wrecked.

BARLOW, N. Y., Sept. 30.—A terrific explosion occurred at the Ditmar Powder Works, at Bay Chester, on the Harlem River branch of the N. Y. and N. H. R. R., about ten o'clock this morning, resulting in the instantaneous death of four men who were employed in the factory. The explosion occurred in the packing house. The men were putting up and packing cartridges when the explosion occurred, shattering the building to splinters, and blowing the four men to fragments. The exploding powder, of which there was a large quantity, shot up in the air as high as 50 feet, and splinters of the building were blown a great distance. The names of the men were Earnest Dralen, John Rusch, Max Shafbolt and Reinhart. The foreman of the works says the explosion was caused by two fellows shooting into the building.

THE FISHERY DISPUTE.

Views of the United States Government—Discussion Inopportune.

NEW YORK, Sept. 30.—The *Tribune's* London correspondent says:—The American Government, while desirous of coming to to some amicable understanding on the points in the fishery dispute, is understood to consider the present an unfavorable time for entering upon the discussion. When Great Britain shall have brought Canada to reasonable views, and when Canadian irritation has subsided, a good understanding between the two countries may be embodied in a suitable treaty.

AT THE INDUSTRIAL.

The C. P. R.'s Exhibit From the North-West at Toronto.

The Canadian Pacific Railway made a splendid display at the Toronto Exhibition of Northwest products and minerals. Of it the *Globe* said:—The exhibits in this building are extremely good, and ought to attract much attention. Entering from the south, several large lumps of a reddish substance, on the first table, will be noticed. According to the label attatched, this is rock salt for horses and cattle, and sceptical curiosity needs only to rub its fingers across and put them to its mouth to be convinced that the label speaks truly. The same table supports bags holding fine samples of oil cake in various conditions, broken and otherwise.

This exhibit, however, good as it is, will not long detain the visitor's attention from the most striking feature in the whole building—the exhibit which is made by the Canada Pacific Railway, and which illustrates the productive powers of the whole country along its course to the Pacific ocean. It is an admirable display, both for its extent and its impressive character as a whole, and for the variety, excellence in quality, and skill in arrangement shown in the way of details. The attention of even the slowest observer, will hardly miss the gigantic section of the British Columbia spruce tree, which stares him in the face. It bears a legend, telling its birthplace and that it is 7 ft. in diameter. At the foot of this trophy, and on either side, either lying exposed, or kept from thievish hands by glass cases, are fine specimens of the mineral wealth of the great Canadian North-West Territories. At the other end facing the north entrance, is a similar trophy, the tree section being fir, and eight feet in diameter between every two of the supporting pillars of the building a miniature arch is constructed by means of bundles of prairie grasses and different sorts of grain. On opposite sides of each pillar are affixed the splendid specimens of the fauna of the North-West. On the tables below, in almost bewildering variety, are arranged samples of the agricultural wealth of the same region

IMPERIAL POLITICS.

Lord R. Churchill on the Conservative Policy—The Unionist Combination.

LONDON, Oct. 2.—Lord Randolph Churchill speaking at Dartford to-night, said the House of Commons was the slave of the caprice of the Radicals and Parnellites. It was imperative to provide a simple and effective means of closing debates. If Ireland followed the advice of agitators such action would lead to further repressions, but Irish commerce had begun to improve and with the present good harvest the people of Ireland might anticipate brighter times.

With regard to affairs in Bulgaria, he said it was impossible to foreshadow the outcome, but he still hoped a peaceful settlement would be effected. England ought to support Aurtria in her difficulty.

Lord Churchill spoke in praise of the loyal support which the Government had received from Lord Hartington, Mr. Chamberlain and all of the Liberal-Unionists. He said that foreign affairs would be subordinated to the Union and the Unionist party. The Government recognized the sacrifices which the Unionists had made and the odium which they had incurred among their former friends; therefore, it was the duty of the Government to prove to the people of England that the Unionists were right in the course they took. The Government would give the greatest attention to legislation affecting England and Scotland, which had lately been neglected for Ireland. It would introduce measures to enable farm laborers to obtain freehold allotments, and would also deal with the questions of tithes and railway rates, measures for cheapening the cost of transfer of land, and a genuine popular form of local government would also be presented. With regard to the land question in Ireland, they would have to change from liable to single ownership in order to have peace. On all of these questions the prospects were fair, although the work would be heavy. He did not believe that there would be harsh evictions in Ireland.

The lumber season of 1886-7 has opened, and in there is considerable activity, Men are being hired by the agents of the different lumbering firms to be sent off to the various timber limits. Mr. J. M. Irwin shipped thirty men this morning per Grand Trunk Railway for Scarburton district. This gang followed another party of forty-five men who were sent last week. The gangs will operate in the townships of Dysart, Havelock, and others adjacent. Mr. Kelly, who is stoping at Cavanagh's hotel, is hiring men for the Stricklands to go to the Georgian Bay district. The wages paid vary from $15 to $20 per month.—*Peterborough Review.*

A NEW EXPLOSIVE.

General Boulanger's New Bombs and Their Destructive Properties.

PARIS, Sept. 29.—General Boulanger desiring to secure from the Government an appropriation of $25,000,000 for the most explosive bombs, recently invited the Budget committee to witness the experiments he has been carrying on in private. The experiments were made with a monster mortar, designed as a type for the destruction of fortifications. The missile, which explodes with exceedingly destructive effect, is charged with a new explosive, of whose composition General Boulanger and his associates alone possesss the secret. The compound, however, is admitted to have all the powers of gun cotton, with none of its defects, and is said, in addition, to be easily transportable and to be free from liability to spontaneous ignition. It is stated that the budget committee were not only highly satisfied with the results of the experiments, but promised to fully support General Boulanger's demand for a special appropriation.

MINDEN.

ACCIDENT.—Mr. Eastman, of Snowdon, was bringing some young cattle to the village with their heads tied down to their front feet, and got two of them into the water at the Ingoldsby Narrows, which were drowned before they could be rescued.

LUMBERING.—The different lumbering firms have a large number of men in the woods north of Minden. Nearly every day fresh arrivals take place. Considerable energy is being evinced here this season in lumbering operations.

CONFIRMATION.—One of the most interesting events that has transpired in this village for some time past was the confirmation service in St. Paul's Church, Minden, on Tuesday evening last, when Rev. J. G Dean presented no less than forty-eight candidates to His Lordship, the Bishop of Toronto to be confirmed. Thirty of the candidates were females and eighteen males. The services were of a very solemn character and the addresses of the Bishop was most affecting. His Lordship very clearly explained the nature of the ordnance and the duty of the candidates. His address was listened to with great attention and marked effect upon the very large congregation present which filled the church to overflowing, notwithstanding the late hour at which it was held, 8 p. m. Some of the candidates and their friends had long distances to travel to reach here, but all expressed themselves highly pleased with the results. A liberal collection was taken up for missionary purposes. His Lordship was the guest of Mr. and Mrs. J. H. Delamere during his short visit, and we understand he expressed his delight with the progress church work is making in this mission.—*Echo.*

AQUATIC CIRCLES EXCITED.

A Check Given by the Promoter of the Henden Regatta Dishonored.

LONDON, October 2.—Aquatic circles were much excited last night over rumors that the £300 contributed to the prize fund of the proposed Henden regatta by J. H. Craig, of New York, has turned out to be only "straw." When the oarsmen paid their entrance fees on Wednesday, Craig, the promoter of the regatta, handed to Mr. Alison, editor of the *Sportsman*, as stake holder, a check for £300, payable at Gillig's American Exchange. Mr. Alison presented the check for payment, but it was dishonored. Mr. Alison then announced that he would provide the stipulated prizes and to take charge of the gate money. Craig's name is really Rushnell, and he has resided in New York and Toronto. He has several times refused to give his address, on the grounds that reporters would hunt up his mother and frighten her to death with stories of his being in trouble in a foreign country. Mr. Alison has had several stormy interviews with Craig. Craig pleaded for delay, alleging that the number of drafts which he should have received from America had miscarried. He had plenty of money at his command, he said, and as soon as his drafts came to hand he would pay over the amount of the check. Very little credence is given to his statements, however, as on the night that the entries were made at Putney, a bootmaker vainly dunned Craig for £25 which he had bet on the result of the Gaudaur-Beach race.

The Cashier Pardoned.

TRENTON, N.J., Oct. 2.—J. A. Hedden, the cashier of the First National Bank of Newark, who wrecked that institution by embezzlements and was sentenced to five years' imprisonment, was pardoned yesterday by the President.

General News Notes.

THE planing mill of Smith & Clark, Victoria, B.C., was recently burned.

AT Calgary, Alberta, lumber from the Pacific slope is reported to be selling at the same price as that of local manufacture.

AT Collingwood preparations are going on for the coming lumbering season. According to the *Bulletin* this winter promises to be one of unusual activity.

MESSRS. RALSTON & IRWIN have just succeeded in effecting a sale to a northern Michigan lumbering firm of five pine limits on the north shore. The total amount realized for the limits was $100,000.

THE Water Mill of the Parry Sound Lumber Company was again started last Monday, the recent rains having given a sufficient head of water. The mill will be kept running as late as possible this fall.

A RAFT containing upwards of 2,000,000 feet of saw logs broke away from the wharf at the John Spry Co. saw mill, Michigan Sault during the gale of Sunday night week and made a free run down stream. The loss is a severe one.

DURING the coming winter the cut of saw logs in the Parry Sound district will be the largest ever taken out. Already many camps have been established and active preparation for a big season's work are being made,

A YOUNG man named Harvey Ford, working in Hudson & Wilson's saw mill at the locks, near Huntsville, on Tuesday of last week, had the misfortune to get his right hand too near one of the saws and had the forefinger amputated.

EVERY limit of any value in the Ottawa District that has been offered for sale of late has been readily disposed of, mill-owners realizing that a day is coming when those who do not own limits will find it difficult to obtain logs to keep their mills running.

A PARTY of Canadians have bought 50,000 acres of timbered land on the Little Tennessee river, Tenn., and want to buy 100,000 acres more. Their object is to cut off the timber, develop the mines, if any, and settle the lands with Swedes, Swiss and Scotch.

THE Ottawa *Citizen* says:—"Mr. J.R. Booth has laid up three large rafts to winter over at Malloch's boom, Arnprior, having decided not to put them on the Quebec market this year. There is said to be more timber being sent to Quebec this year than there has been for several seasons."

THERE are considerable prospects of a big output of lumber this season if the number of men going to the woods may be taken as an indication. The agents all agree that it is a number of years since they have found the demand for labor brisker. The number of men being shipped up the river is unusually great.

MESSRS. Cousland and Adams from Glasgow, Scotland, have arrived in Ottawa to look into the possibility of extending the timber trade between Canada and Scotland. They are favorably impressed and several suggestions they have been made are likely to prove of great advantage to Canadian shippers.

THE St. John (N.B.) *Globe* reports that the river tugs are practically idle at the present time, all the logs that were in the booms having been rafted and towed to their destination. The quantity of lumber brought down the river this year was much larger than that of last season, but more than 25,000,000 feet of logs are high and dry along the small streams, and cannot be brought out unless there is a heavy freshet, which is improbable this fall. The water in the river is very low at the present time.

GRADING on the Duluth & Manitoba Railroad between the Northern Pacific Junction and Red Lake Falls, Minn., is about completed, and track laying is in rapid progress. The line between Red Lake Falls and Grand Forks, on Red River of the North, is under contract. Red Lake Falls, says the Minn. *Lumberman*, promises to become an important mill point, since the Red Lake pine region is tributary by way of Red Lake and Clearwater rivers. The new road will furnish a shipping outlet for sawed product, east, south, and west,

J. & T. CONLON, says the *Expositor*, have shipped about 60,000 ties, some 17,000 pavement posts and 1,000 telegraph poles from the Manitoulin this season, and have four cargoes of ties still to ship. They have also bought the Burpee saw mill and are getting it fitted up to cut ties and lumber this winter. Besides this they have a floating saw mill at work on Lake W. Keeley which is turning out over 500 ties per day.

A DISPATCH from Duluth to one of the daily papers of this city, and printed on Tuesday, stated, with considerable flourish, that the Grand Haven Lumber Company, of Grand Haven, Mich., had lately purchased the Pillsbury pine, to the amount of 650,000,000 feet, and had begun operations for cutting a large amount the coming winter. The truth of the matter is, as stated by a representative of one of the parties in interest, of this city, that S. B Barker and H. C. Akeley, and perhaps others of the Grand Haven Lumber Company, are interested in a contract to put in and manufacture the Pillsbury pine, situated in the region of Lake Itasca, Minn. This pine is understood to comprise nearly or quite 1,000,000,000 feet. The contract will probably necessitate the erection of a mill at Minneapolis, or some other point convenient for receiving the logs and shipping the sawed product. It is intended to bank about 15,000,000 feet of logs this season. The operation will be carried on by a corporation called the Itasca Lumber Company, which was some time ago formed by the interested parties. —*N. W. Lumberman.*

MR. HARRY DONALD, well known in business circles at St. John, N. B,, was ,says the *Globe*, recently arrested on a bailable writ for $25,000 at the instance of Messrs. Guy, Bevan and Co. Mr. Donald was at one time manager of the firm's business in Mobile. It is alleged that while acting for them he entered into a secret partnership, and used the credit and endorsations of the firms without their knowledge to advance his own interests, to the neglect or disadvantage of those of his employers; that he became possessed of a large milling property there, and that the property so obtained was fradulently obtained. Donald went to England and while he was absent a party was sent from New Brunswick to examine his books, with the result alleged above. An effort was made by Mr. Bevan, while Donald was in England, to arrest him, but this failed. Since his return, Mr. Donald has been carrying on a shipping business in the United States, and desiring to visit New Brunswick, he, it is said, consulted a lawyer in New York, and was assured that he could not be held here on any charge such as it indicated above. He was arrested, however, and lodged in jail. His council, Mr. Fred Barker, Q C., M.P., made application to Mr. Justice Tuck for his discharge, and his honour gave the parties a hearing to-day, Mr. C. N. Skinner, Q.C, appearing for Messrs. Guy, Bevan and Co. Mr. Donald is a native of St. John, and is well known here. He married some time since a Southern lady of wealth and position, Judge Tuck decided to discharge Mr. Donald on the ground that the fraud charged was not clearly set out in the writ. As soon as he was discharged Mr. Donald, acting under advice of his counsel, left St. John for the United States. —*Miramichi Advance.*

Indians Becoming Bolder.

WINNIPEG, Oct. 2.—A despatch from Indian Head says: The Indians are becoming bolder each day. A man named Gaurdapie while guard property for the Medicine Hat range company, about twenty miles away, was held up by eight Blood Indians and relieved of his rifle, revolver and everything else of any value. Horse stealing has begun about there. The police outposts were ordered in.

Bridge Brilding.

Mr. W. H. Law, of the Central Iron and Bridge Works, has returned from Millford, Prince Edward County, where a new ninety-six feet span iron bridge, made at the works, was opened for public traffic. The Warden of the county and members of the County Council, the Reeve and Councillors of the township, and a number of prominent people from Picton, were present on the occasion of the opening of this, the first iron bridge put up in the county. Speeches were made by prominent men. Everything passed off with entire satisfaction.

CANADIAN TIMBER IN ENGLAND.

The *Timber Trades Journal* of London, Eng., in its issue of Sept. 15th, reports the following arrivals from Canada:—The London arrivals since our last include the *Capulet*, from Quebec, which entered the docks with Saturday's tide, and the *Crete*, from Montreal. Both these were big steamers, and had evidently met with bad weather on the way. The *Capulet*, seems to have got knocked about in the Atlantic, and when she came up the river had a very dangerous list, her cargo having shifted during the voyage. We can understand grain cargoes shifting, but, though it is by no means uncommonjto find wood laden steamers lopsided, we cannot help thinking it must be due to careless stowing. The fact that sailing ships are hardly ever noticed in that predicament would seem to bear out our view. Steamers are always in such a violent hurry to get away that they bundle the deals into the hold, and stow them anyhow, with the result that when straining at sea a plank gets out of its place. Another difficulty in the way of making good stowage is picking up part cargo at different ports; the goods are jumbled up, and liable to break away at any critical moment. Insurance companies should look to this.

The imports from the 2nd up to date to London amount to 53, of which 30 are steamers, and include five pine laden vessels from Montreal, the *Crete*, part deal laden, and the *Capulet*, with 60,000 deals. for Messrs. Bryant, Powis, & Bryant. The *Crown Prince*, from Pensacola, with sawn timber and planks, for Mr. G. M. Freebody, has gone into the Surrey to discharge, having delivered a parcel of cedar on the Middlesex side. Amongst the largest of the Baltic steamers is the *Kotka*, from Cronstadt, with deals, for Messrs. Simson & Mason. Taken altogether, the import is a full average one for the time of the year. A larger proportion of these cargoes than usual, we notice are going overside, the endeavour being to save if possible dock expenses.

We note the arrival at Liverpool, of Messrs. C. C. Bowring & Co.'s s.s. *Romeo*, from Montreal, with a full cargo of pine lumber shipped by Messrs. Robert Cox & Co., for their Liverpool house. This is, we hear, one of the largest, if not the largest, consignment of lumber ever shipped from that port, for one firm's account.

AUSTRALIAN LUMBER TRADE.

The growth of the lumber trade of the Australasian colonies has been extraordinary within the last few years. The total quantity of rough and finished lumber imported into New South Wales alone during the year 1885 was 65,822,037 feet, valued at $2,296,760, against 49,608,825 ft, valued at $1,903,990 for 1884. The imports from the United States increased nearly 10,000,000 of feet or from 13,782,746 feet in 1884 to 23,165,235 feet in 1885. The principal increase in American lumber has been in the rough descriptions.

In the supply of lumber for the colony of new South Wales, the United States takes the lead of all other countries; New Zealand comes next and British Columbia third on the list. Norway furnishes the largest share of dressed lumber, a fact probably occasioned by the low price of labor in that country. The imports from America consist principally of pine and redwood from the various states and territories on the Pacific Slope.

New markets are being opened up from the product of the saw mills in California, Oregon and Washington Territory every year, and active preparations are being made for its shipment in larger quantities than ever, not only to Australasia but to Japan and others countries. The popularity of America lumber in the Australian colonies has excited much opposition on the part of those interested in the sale of Australian timber, and efforts are being made to increase the import tax on lumber. The present duty is 48 cents per superficial feet on dressed lumber, and 24 cents per 100 feet on rough lumber.

Our readers will confer a favor on us, when writing to advertisers, if they will state that they saw the advertisement in the Canada Lumberman. This costs the correspondent nothing, but helps us materially.

DOES CHARRING TIMBER PROMOTE DURABILITY?

The general belief has long been that it does, and in accordance with this conviction the practice has been widely followed. But a contrary view of the subject is taken by *Wood and Iron*. That journal says in a recent issue:—As charcoal would endure for ages in places where timber would decay speedily, the practice of charing the surface of fence-posts and other timber has been repeatedly recommended in books and ephemeral publications, as eminently worthy of universal adoption.

The theory upon which such a recommendation is based would seem to warrant a confident expectation of satisfactory results in practice; but repeated experiments with charred timber have furnished conclusive assurance that this process will not promote its durability. Indeed, numerous experiments have shown that charring promotes premature decay. Two posts split from the same log may be set side by side in the ground, the surface of one being charred and the other not; and it will be seen that the charred post will perish before the other.

The same is true of railroad ties, and all such timber as may be exposed to the alternating influences of wet and heat. Could the entire timber be changed from its perishable condition to one solid piece of charcoal, the durability would be promoted to a surprising length of time; but the strength of the material would be destroyed. When fence posts or other sticks of timber are exposed to the rapid action of wet and heat, the surface will decay first. One might suppose, therefore, that when timber is enveloped by a layer of charcoal, the durability of the entire piece would be greatly promoted. And such would be the case were it not for the fact that the charcoal is not impervious to water; and as water reaches the timber below the charred surface, decay will commence soon after the grain of the wood has been exposed to the influences of the weather. When the change has once begun beneath the charred surface the durable covering of coal will be of no service whatever in preserving any portion of the wood. Taking this practical view of the subject, it will be perceived that if only half an inch of the outside of a post be charred, the post will not endure so long as if the same thickness of wood had been left uncharred, to waste away by slow decay.

TREE FELLING BY MACHINERY.

Machinery and steam power have been adapted to almost all the operations of lumbering but one—the process of cutting down the trees. For that purpose the axe, swung by the strong arms of experienced men, has not in America been superseded to any appreciable extent by any mechanical device. To be sure, the immense trees of the Pacific slope are cut through by saws, but the saws are worked by hand, and even cross cut saws have not displaced the axe, except where the size of the trees made it necessary. At least one tree felling machine is used abroad, made by a London firm, but it is not to be found in this country. Perhaps it was the success of the English machine that induced William E. Hill, of "steam nigger" fame, to invent a similar contrivance which he offers to the American saw-mill public. Its main part is a steam cylinder five feet long, five inches in diameter, with a bore of four inches, and having a piston stroke of thirty inches. The machine stands upon low skids, and by means of trunnions and a swinging table can be adjusted to any position desired. The front end of the cylinder has a swivel head with a stuffing box, to which the slides are fastened, thus allowing the saw to be turned to make cuts at any angle. The machine is anchored by dogs to each side of the tree to hold it steady while in operation. The success of such a device, besides mechanically correct construction, depends principally on its cheapness of operation and the quickness with which it can be moved from one tree to another. Its weight is 425 pounds, and it is driven by a 2-horse power steel boiler. The machine is evidently powerful and efficient when once in action, but the cost of operating it must be demonstrated by practicle experience.—*Boston Journal of Commerce.*

THE LUMBER TRADE.

The Fort William, Ont., *Echo* says:—The lumber trade on the Kaministiquia is one which is deserving of considerable attention at the hands of district journalists. Few residents are aware of the amount of money and labor expended in producing the material which so largely enters into the construction of their churches, dwelling houses, stores, hotels and public buildings. yet a visit to the mills down the river would open the eyes of very many to the importance of this growing industry. At the mill of Graham, Horne & Co. a busy scene presents itself to the eye of the visitor. Saws and plainers keep up a busy hum "from rosy morn till dewy eve," 30 men are constantly employed and 10 more are wanted in consequence of the rapid growth of their business, their shipments reaching nearly all points in Manitoba and distant towns in the Northwest. As an illustration of the rapid development of their trade we may mention that where last year they only had one little drying shed they are now engaged in erecting several others the total length of which will be 1,000 feet. This fact speaks for itself and needs no further comment at our hands. Messrs. G. H. & Co. are doing well, and the energy which they are displaying in extending their trade relations show that industry, perseverance and talent can do much when well applied.

Proceeding down and on the south side of the river, we come to the extensive establishment of W. H. Carpenter who owns two mills and makes quite a noise in the world. Mr Carpenter has 40 men employed, is now making arrangements for sending 300 choppers into the woods this season and will get out at least 3,000,000 feet of logs.

The Neebing Lumbering Company also propose to extend their operations, but will most probably confine themselves to the production of shingles.

Messrs. Hammond, Crawford, Corbett and others are talking of doing an extensive business in the tie and pile line, and others are likely to engage in the same business if fortunate enough to secure contracts.

We don't fatigue readers with figures, but leave the statisticians to figure up the probable amount of money that is being and is likely to be expended by the Kaministiquia lumber dealers in prosecuting their calling during the season of 1886-87 Sufficient, however, has been shown to prove that the lumber trade of Fort William is rapidly increasing in volume, and from past and present experience can be worked up to a much greater extent by the infusion of new capital and energy.

The forest fires of this season unhappily destroyed millions of feet of standing timber, but, we are informed, the mill men have entered into an agreement whereby the owners of limits are to first cut all trees that are scarred and then take those that escaped the fiery ordeal.

This is a wise step and one which we hope to see followed in order and more wealthy districts, as by so doing the lumberman will not only assist themselves but will also help Dame Nature in her efforts to present to the visitor a series of panoramic views unbroken by the disfigurements which result from forest fires.

MANUFACTURED FROM WOOD.

"Business is good with us," said a dealer in woodenware to a reporter the other day, "but prices are so low that it requires an immense number of sales to amount to much in dollars and cents. Competition has lowered prices considerably, but there is another factor at work upon the prices of woodenware, which does not affect any other articles to an equal extent."

"What's that?" asked the inquisitor.

"Machinery. Lathes have been invented to turn out almost anything in our line and other machinery has been perfected, until the wooden ware manufacture is almost entirely done without the aid of man's hands. Now take butter trayes for instance. The tree is cut down and shaped by taking off the bark. Then it is run through a machine which cuts it into veneers about the right thickness for the tray. Then these veneers are sorted and the sound ones are cut by a stamping machine into the right size, leaving lappets which fold over. These lappe are sewed together by hand and then a m chine fastens on the tin edges. It takes as lo to tell about it as it would to make dozens them The work is done so rapidly that the time one tree is split into veneers, the pr ceding tree has been made up into trays. Th are sold in bulk in New York for them $2.75 $5 per thousand, according to size The wo en picnic plates which have come into within the last half dozen years are made i similar way."

"What woods are employed in the manufa ture of these trays?"

"Mostly gum, white cedar, beech and ot similar woods."

"How much are those pails?" asked the r porter, pointing to some three-hooped wood pails that were piled up in one end of the sto

"They are quoted at $1.15 per dozen in N York," was the reply, "a price which seems credible unless you know how they are ma Wooden shooks, the size intended for the pa are fed into a machine and come out at t other end a complete pail, with three hoo fastened on even better than could have be done by hand Another machine paints t pails both inside and out, usually white on inside and an oak tint out on the outsi Washtubs are made on the same principle a are sold at the factory at the rate of $2.25 eight, representing the different sizes in ord ary use.

"In the manufacture of washboards, the t ber is often given two years to become thoro ly seasoned. Then, by machinery almost tirely, the wood is manufactured into wa boards of all grades and sizes. Although m of the washboards are manufactured in an of the way quarter of the world, they are s at 80 cents per dozen.

"It is the same with nearly every branch our trade. The genius of man has construc machinery which can cut wood into every f and shape conceivable, and the result has b the rapid decrease in prices, until a whole st full of stuff represents but a few thousand lars, and what several years ago would h netted a profit of a million would scarcely m to-day a profit of a thousand. But I guess have reached bed-rock. If prices fell much low the present figures we would be sel goods for less than the wood in the rough w bring."—*Lumberman's Gazette.*

A GREAT CHIMNEY.

The highest chimney yet built in the w has recently been completed at the Mecher lead works in Germany. The whole heigh the structure is approximately 440 feet, 11 of which is underground. The subterra portion is of block stone, 37 feet square in p all the rest is of brick. The plinth, or l part of the chimney above ground, is 34 square, so that the height of the shaft is ne thirteen times the lower diameter. For a 34 feet the chimney continues square, then comes octogonal in plan for a little distance, finally changes to a circular form, retaining shape to the top. The exterior diameter of shaft at the top is about 11½ feet. The flue i feet in diameter at the bottom and 10 feet a top. Until the completion of this chimney, of the St. Rollix chemical works, near Gla which is 434 feet high, was the tallest in world.

Amongst other things British Columb celebrated for its Douglas Pines, many of w are too large to be disposed of by an ordi saw mill. Recently four logs were sawn Vancouver. Their dimensions were as lows:—

1 log 62 ft.	long,	40 in.	diam.,	congt'g 5 5
1 log 53 ft.	long,	44 "	"	" 5.6
1 log 36 ft	long	55 "	"	" 5.6
1 log 24 ft.	long.	56 "	"	" 4 0

The Quebec *Chronicle* finds the t market to be even duller than it usually this season of the year. One raft of Ot timber, about 47 feet average changed h at 16 cents. In deals there is little doin the sales in the principal markets of Britain are being effected at prices entirel low to pay shippers. Pine are not as enquired for as they were, and spruce are of sale.

FREE LUMBER.

housands of our citizens have been led to be- that a removal of the duties on the import anadian lumber would have a tendency to erve and protect American forests. This allacy. The removal of the duties would ly advance the profits of the Canadian lum- nen to the extent of the reduction, though per- stimulating production among the saw mills he Dominion to the detriment of our home stries. Our American forests are owned by viduals who are obliged to work them for r daily sustenance. Lumbermen would not don their lands or saw mills simply by rea- of the Canadian competitor getting his lum- in free of duty. The American operator ld feel that our Government had committed eat wrong should the Canadian who pays axes here, be allowed to ship his lumber to markets without duties, while the Ameri- perator is handicapped with a duty on his his saws, his tools, his blankets, teas, r and almost everything which enters into ost of his lumber. Yet the operations of Americ n citizen whose whole capital is sted in his timber lands and in his saw mill t must continue under the fiercest and unfair competition.

justice to our lumbermen would not save forests. Sound economy does not want to such old forests as have reached their th and are commencing to decay. Such eservation is a waste of valuable raw rial. A cutting of mature trees gives the ger specimens a better chance for life and th. The Canadian Government wants rocity, or, practically, free trade with this ry. This cannot be accepted by us with- erious impairment of extensive American tries. The Canadians have put up the t duty on pine logs to $3, and on spruce o $2 per thousand feet. On shingle bolts have fixed a specific duty of $1.50 per cord. avowed object is to prevent Michigan ermen, who have purchased timber lands e north shore of Lake Huron on a large from ratting the logs to the Michigan to be sawed. But the real purpose is er lever towards building up an American in favor of free trade in lumber. Can- writers on forestry are prolific in predic- of a timber famine in the United States do not admit Canadian lumber free of This is not wholly disinterested advice. ountry should afford the same protection lumber interest that it does to other ries. Free lumber would build up Can- d damage the lumbermen of this country, t any corresponding advantage to other ries.—*Manufacturers' Gazette*

HOW AXES ARE MADE.

he manufacture of axes, the material through twelve different operations be- is ready for labelling and boxing. At is a rectangular piece of iron, about three- of an inch thick, three and one-half wide, and about six inches long. The f steel, and in some instances is inserted t made in the iron, and in others it is over the edge of the iron. There is a g demand for axes made entirely of steel. ost important part of the process of man- e is tempering. "This is really where e is made," said a manufacturer. The g and polishing is the most laborious the process. It is here that the rough, ar shaped semblance of an axe is ground lished until it is as bright as a mirror. It that the work will prove fatal within five o any man who pursues it steadily. The lled with imperceptible dust from the and many of the workmen tie small saturated with water over their .

sawdust nuisance in the Ottawa river is complained of, and it is suggested that vernment could easily do something to it at this season of the year. Not only deposit beginning to affect the lower f the Rideau canal, but the frequent ns of gas generated by the pine dust eriod of submergation are stated to be gly dangerous to those taking pleasure boats.

LOAFING.

While there are many complaints made, from time to time, says the *Mechanical News*, about the dullness of business and the hardness of the workingman's lot, we hazard the statement that about one half of the hard times and business depression is the direct or indirect result of loafing—either good, or solid, square, old-fashioned, primitive loafing, or the modern revised version, which is called, for some occult reason or other, "soldiering."

There are very few honest, safe and profitable occupations in which success can be attained by sitting down and waiting for it, or is got by luck. There is more gold got out by patient labor than was ever brought to light by stubbing the toe against nuggets. The diamond fields are the scene of patient, plodding labor, neglecting no shovel-full of dirt.

There is a marked difference between workmen who are doing for themselves, or who are piece-working, as well as among those who are "by time." One man will loaf away an hour a day. It may be listening to, or watching his neighbor; or hunting a match or helping hunt one; or wondering what to do next; or it may be distributed all through the day by deliberate and careful attention to the science of slow moving as applied to the prevention of heat or rupture; but it is there, all the same; there is an unproductive hour or a day with a tenth or an eighth less work in it than it should have

A day's workman cannot afford to loaf. He may lose his place, for a selfish reason. He is not giving an honest equivalent for what he receives, for a moral one. He is getting into the habit of working slowly, which will interfere with his profits if he gets on piece-work—selfish reason No. 2. He is setting a bad example to others to render a poor equivalent for their pay - moral reason No. 2.

We could keep on piling up reasons of each kind against loafing, but they will suggest themselves; and then the case is somewhat analogous to the one where the lawyer announced twenty-nine reasons why his client did not appear at the trial. In the first place, he was dead. The second reason was that "the first reason was reason enough."

There are many foundries and factories, mills and shops, where no smoke issues from the stack and no rumble of work is in the air, and in which more energy and less loafing, on the part of proprietors and employes, would have enabled work to continue right along, at least at a rate which would pay hands and keep the business in public mind until times were better. Ten per cent. more work out of every man would not have strained any one and would have made just the difference between a slight loss in the business, and "expenses cleared." And that ten per cent. more work would have improved every man on the place.

We just heard an anecdote of a noted stenographer who drops into profanity if a day goes by without his having anything to do; not because he loses the earnings of that day, but because he loses speed. He gets some one to read fast to him, in order to keep up his speed.

Go into an engine room and see the engineer doing nothing all day, and you will see a man who will not earn any more ten years from now than he is now getting. Instead of loafing, he might be reading, or drawing his engine out to scale, or learning something about the machinery his engine drives.

The time for loafing is after work. Then it should be free and unreserved, and will be beneficial, and rightly earned.

ANOTHER most important event in the progress of the Dominion, which is held to be only second to that of the opening of the Canadian Pacific Railway enterprise itself, was the inauguration on the 13th ult., of that company's new Canadian telegraph system, with connections also in the United States as well as to Europe, by arrangements consummated with the Postal Telegraph and Commercial Cable companies controlled by William Mackay. The Postal Telegraph system completely covers the United States, being a union of all lines secured by Mr. Mackay that were dependent of the Western Union, including the American Rapid, the Northern Mutual and the Bankers and Merchants.

BRITISH COLUMBIA LUMBER TRADE.

THE great timber limits in the Province of British Columbia are rapidly being utilized, and the fact is not looked upon with much satisfaction by those engaged in the timber trade across the border. The *Northwestern Lumberman* referring to this subject, says :—

"Pacific coast mill men and lumber exporters must look out for competition from their northern neighbors across the national boundary. An important part of the lumber trade of California, Oregon and Washington territory mill men has been their exports of lumber. This trade has not been on the average very profitable, but it has been an outlet for surplus stocks and prevented a demoralizing over supply at home. The exports to the Australasian British colonies have been especially important and have largely increased with recent years. But co-incident with this increase has been the growth of the saw mill industry of British Columbia, and that province has already shown itself no mean competitor. The completion of the Canadian Pacific railroad, and the consequent awakening of enterprise all along its line will be particularly potent at its western terminus. The magnificent timber resources of British Columbia will be opened up rapidly, and will supply not only the lumber demand of the prairie regions to the east, but will be available for export. Other things being equal, it is to be expected that Australia will give the preference in making purchases to the products of a country to which it is politically allied. Moreover, the movement in Australia to bar out American lumber, in favour of that from New Zealand, by an almost prohibitory tariff, will not be brought to bear against the timber of British Columbia. Pacific coast operators should be awake to the situation. They may not be able to prevent the substitution of the northern product for their own, but there is yet time for them to largely occupy British Columbia if the field should seem a desirable one.

A SUCCESSFUL MACHINE.

The following flattering testimonial has been received by the Waterous Engine Works Co., of Brantford, reg arding the working of their 25 h. p. Portable Champion Mill.

RODGER'S PASS, B. C., August 26th, 1886.

The mill is and has been working all right as the amount she has cut since I started will show for itself. I have run steady ever since I started, never had to stop an hour, or cost them a dollar, so there is nothing in the way for them to settle. The mill was cutting in 28 days after it left Brantford—that is I started up on the 21st of June to cut, and up to date I have cut more than one million one hundred thousand (1,100,000) and we have to do the edging with the large saw. When the mill got here they said that it was too small, and that it was to be 35 or 40 horse-power mill, direct action, 60 in. saw and large carriage. A mill of that class would not have been any too heavy for the work I have to do. The logs are hard to cut, and at first they were too large, (4 feet diameter) for this small carriage and small saw, that is the reason the pulley and extra size saw were ordered. To cut the amount I am cutting, I have to work the mill and run the engine fully more than I should do, but I am as careful as possible to see that everything is kept right, and so far all has went well. Let me know if there was any stated capacity in contract. *Our average cut per day will be fully* 20,000 *and do the edging on the large saw*, and that keeps us so there is not much time to be lost. It is 1 in. boards and 3 and 4 in. plank, but it is all to be cut 14, 12, 10 and 8 inches wide. We do not saw any bridge or other timber. The most of the logs that we cut are spruce and cedar. The cedar is bad to saw, it is hard to make a saw to run right in it. Yours etc., JOHN LYLE.

The Loss of Power.

Start at your engine, and follow up your line of shafting, and figure up how many tons of excessive weight you have been carrying thereon, which to keep in motion, has been at a cost of from one to five horse-power per ton weight, according to alignment of same; then follow back and cipher your loss by slipping belts, and you will be surprised to find the sum total to be more than one half the amount of power you are using.—*John P. Morely, in Power and Transmission.*

A dispatch from St. John N. B., says: The Bangor lumbermen all agree in saying that the cut of logs the coming season will be much larger than for several years past. It is said that one third more concerns will operate than usual, and all will go in for a big winter's work. As yet no estimates have been made of the probable amount of the cut. A great many concerns are taking up the West Branch, but no permits have thus far been made there. More work will be done on Cumberland Lake than for some time past.

BAND SAWS.

Band saws are probably the coming machines for making lumber, where great economy of raw material is the thing to be most carefully considered. The experiments made, and the practical use of these implements during the last two or three years, demonstrate this much beyond any question. But because this is true, it does not follow that circular saws are to become obsolete. They have made too good a record to be disposed so summarily. There is no good reason for believing that circular saws will not be in great demand for many years to come, if they do not occupy a prominent place in the list of lumber cutting tools as long as there is lumber to be cut. Both the band and circular represent developments of the same principle; they both accomplish their work by means of a serrated blade moving rapidly in one direction, therein differing radically from the principle of the earliest sawing machinery—that of a reciprocating movement—the highest development of which is seen in the modern gang. So handy, effective, reliable and cheap an application of the principle of a continuously moving blade, as is found in the circular saw, cannot give way entirely to any improvement, however economical of timber it may be. For very many situations, the circular mill, of low first cost, adapted to more or less rough usage, not easily got out of repair, rapid in its work, and altogether a reliable device, is better fitted than would be the most perfect band machine, though it might cut a kerf no thicker than a sheet of paper. The fact that there are so many places of this kind which can be better filled with a circular mill than with any other sort of lumber cutting arrangement, insures for it a demand and popularity that will not be perceptibly reduced by the encroachments of the band saw upon its domains. Indeed, it is possible that improvements may still be made in circular saws that will bring it close alongside the band, in point of economy. Astonishing success has been achieved already in the use of thin saws, and who will venture to fix the limit beyond which improvement in this direction shall not go.—*The Timberman.*

THE NOISE OF THE FINGER.

Dr. Hammond says that when you place the end of your finger in your ear, the roaring noise you hear is the sound of the circulation in your finger, which is the fact, as anyone can demonstrate for himself by first putting his finger in his ears, and then stopping them up with other substances. Try it, and think what a wonderful machine your body is, that even the points of your fingers are such busy workshops that they roar like a small Niagara. The roaring is probably more than the noise of the circulation of the blood. It is the voice of all the vital processes together—the tearing down and building up processes that are always going forward in every living body from conception down to death.

THE CANADA

LUMBERMAN

DEVOTED TO THE LUMBER AND WOOD WORKING INTERESTS OF THE DOMINION.

PUBLISHED MONTHLY BY

A. G. Mortimer, Peterborough, Ont.

Terms of Subscription:

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Per line, for first insertion	10
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Special rates will be made for page, half page and column advertisements.

All communications, orders and remittances should be addressed and made payable to A. G. MORTIMER Peterborough, Ont.

Communications intended for insertion in the CANADA LUMBERMAN, must be accompanied by the name of the writer, not necessarily for publication, but as a guarantee of good faith. Communications to insure insertion (if accepted) in the following number, should be in the hands of the publishers a week before the date of the next issue.

Advertisements intended for insertion in any particular issue should reach the office of publication at least six clear days before the day of publication, to insure insertion.

The CANADA LUMBERMAN is filed at the Offices of MESSRS SAMUEL DEACON & CO., 154 Leadenhall Street, London, England, who also receive advertisements and subscriptions for this paper.

PETERBOROUGH, Ont. OCTOBER 1, 1886.

IF you want a situation, or want to find a first class foreman, advertise your wants in the CANADA LUMBERMAN. Only one cent a word.

WE expect a great rush of subscriptions during the next few weeks, as a result of our low offer for the balance of the year. Send in your quarter.

WE desire to secure active agents in every county who are willing to work on liberal pay to take subscriptions for the CANADA LUMBERMAN. Outfits and sample copies free.

THE auction method for selling lumber, recently adopted in New York, does not appear to have gained popular favor. Sales of this nature have been almost entirely discontinued.

THE editor of the *American Builder* grows funny, and says:—The most afflicted part of the house is the window. It is always full of pains, and who has not seen more than one window blind?

THE railroads of the continent require nearly $15,000,000 worth of timber per year for ties alone—equal to the annual product of a strip of woodland 400 feet in width alongside every mile of track.

MANUFACTURING interests in the Dominion show a steady and rapid increase. Lately compiled statistics prove that the total number of factories has risen from 843 in 1878 to 2,135 in 1886. The amount of capital invested in these undertakings has increased from $37,819,731 to $67,293,373, and the value of the products from $39,963,282 to $102,870,166 during the same period.

FROM the next issue the LUMBERMAN will be enlarged and materially improved in every way. Neither the typographical appearance or the arrangement of matter in this issue is up to what we intend making it in the future. Hurry is something which should never be permitted in a printing office, but unfortunately such has been necessary in turning out the present number.

WHAT is stated to be the widest leather belting ever made in Canada, is now in process of construction by the widely known leather belting manufacturers, Messrs. Robin & Sadler, of Toronto and Montreal. It is for the Royal Electric Co., of Montreal, and it is to be used at their lighting station in that city to transfer the power to dynamos. The belt is 111 feet long, 38 inches wide, and double thickness.

DESIRING to make the CANADA LUMBERMAN a medium for the diffusion of information relating to the lumber and wood-working industries, we cordially invite communications on all relevant topics. Not only do we desire to secure all the news from month to month from all sources within the scope of this paper, but we also invite free use of our correspondence page for the discussion and ventilation of any subject likely to be of interest to the lumbering and wood-working fraternity.

COLONEL JEFFERS of East Saginaw, has bought from certain persons in Canada 500 000 acres, or twenty townships, of standing white pine. The land is situated on the Georgian Bay and upon the Serpent, Spanish and Mississaque Rivers. Colonel Jeffers, writes:—I have been engaged for most of my life in the business of buying pine, and think that nothing outside of the Saginaw Valley was ever seen like this whole Georgian Bay country for good pine. It is far superior to the Wisconsin or Lake Superior pine.

TO JANUARY, 1887.

FOR the balance of the year we will send one copy of the CANADA LUMBERMAN to any one sending us 25 cents. To new subscribers who will send us $1 we will mail the LUMBERMAN from now until the 1st of January, 1888. Every lumberman, saw-mill owner and wood-worker in the Dominion should accept this very liberal offer. As this is the only journal of the kind in Canada, and as we propose making it a thoroughly representative organ for the lumber and wood-working industries none can afford to do without it. Send us your money, and receive in return a paper which will keep you acquainted with the ins and outs of the trade, and especially a complete market report.

EXCHANGE ECHOES.

Contemporary Opinions on the Various Matters of Interest to the Trade,

Northwestern Lumberman.

We are told by the manufacturers of machinery that their business has picked up wonderfully of late. The dullness that prevailed in the shops in the early summer months has disappeared, and in its place has come activity. One gentleman says that his shops are overrun with orders, and that the outlook is very promising. Another gentleman visited a section of country not particularly noted in lumber circles, and brought back $40,000 worth of orders; and there will be more to follow. There is without question, a growing feeling of confidence among lumber dealers and manufacturers.

Monetary Times.

Circular advertising is getting to be a terrible nuisance to many firms. About half of their mail is made up of envelopes containing circulars. The experienced eye can now detect these as soon as seen, and they go into the waste basket unnoticed. Business men now a-days cannot spare the time to wade through long-winded circulars. If you have anything to sell say so by means of a judiciously worded and attractively displayed advertisement in a live newspaper. It is cheaper and is more likely to command attention than the most elaborate circular.

Southern Lumberman.

MORE people go crazy on the subject of sawdust than in regard to anything else of the same utility, and more cranky suggestions have been made for its use for more varied purposes than any other refuse and waste incident to the wood-working trades. A German gentleman named Fredrick William Wendenburg, of Bagenz, Prussia, has made application to the government of Canada for a patent for a process of manufacturing cattle feed from sawdust or wood meal and other materials, and also to have patented the use, application and employment of the same in Canada. We suppose cows kept on this food will be expected to yield a fine article of pyroligneous acid and wood alcohol milk and make large yields of oleomargarine butter. When the fool killer comes and does his whole duty we will hear less mention of sawdust.

Southern Lumberman.

NONE of the various log rule tables give any satisfactory method of measuring a hollow log. A very interesting discussion on this subject occurred the other day on a proposed trade for a large lot of standing poplar timber in Giles county, Tennessee. All the terms of the trade were agreed upon except in regard to the timber that should prove to be hollow. The seller proposed to deduct the square of the hollow from the amount of lumber the log would make if sound, and the buyer proposed to deduct one-half the diameter of the hollow from the diameter of the log. For instance, he proposed to count a 24-inch log that had a four inch hollow in it as a 22-inch log. No agreement was arrived at, and our opinion was asked. We would be glad to hear from lumbermen, and learn what the custom is in measuring hollow logs in every locality. Write to us on the subject.

Northwestern Lumberman.

The Duluth lumbermen have a scheme for getting around the difficulty of running logs down the wild St. Louis river. The proposition is to establish the Union Boom works near the mouth of Cloquet river, and secure rail connection between that point and the mills at Duluth, by which to bring logs down from above the rapids. This looks like a feasible undertaking, and one that could be carried out if sufficient capital and energy are employed. It is evident that much of the lumber from the Duluth district can be profitably marketed in the lake cities and at the east. The tendency of a large portion of the mill output at Duluth is already eastward. It certainly seems as if it would pay the owners of stumpage on the St. Louis to provide a means for bringing logs to the mills at Duluth, from whence a choice of markets in all directions can be had.

Southern Lumberman.

The Canadian government wants reciprocity, in other words, free trade, in lumber with the United States, and has placed an export duty of $3 per thousand on pine logs and $2 on spruce logs in retaliation for an import duty levied on Canadian lumber by the United States. Some Michigan lumbermen have made heavy purchases of Canadian timber lands, and from these conditions several question more or less affecting various lumber interests have arisen among our northern contemporaries. Difference of opinion prevails. Whether free trade will have a tendency to protect American forests; whether it will lower the price of American lumber or merely advance the price of Canadian stumpage, are some of the questions discussed. It is a matter that does not affect the lumbermen of the South, and free trade or a high tariff on Canadian lumber are matters of no consequence to them. If we may be allowed to make a purely disinterested suggestion, we should say, that, without having made the question a study, it would be entirely safe to leave the subject severely alone and let it remain just where it is for a few years. Where one is in doubt what course to pursue, it is always safer to do—nothing.

Northwestern Lumberman.

The news from Washington the past week that Canada proposes to make the export duty on pine saw logs prohibitory has pricked up the ears of Canadian pine owners on this shore and they are a little uneasy. W. F. Whitney has just purchased 120,000,000 feet on a tributary of French river, and calculates to put in 8,000,000 feet of logs to be brought here; an Oscoda party proposed to operate quite extensively in long timber in the Georgian Bay region and raft the same to Oscoda to be sawed; the Emery Lumber Company expects to put in 15,000,000 feet this winter to be brought over next season, and two or three Alpena parties proposed to operate extensively and raft the stock to Alpena. If the export duty is made prohibitory it will at once be seen that it will materially affect the calculations of these parties, as it will compel them to either suspend operations or build mills in Canada, as well as curtailing intended supply of mills on this side. The Emery Lumber Company wants its stock to supply its mills at East Tawas and Saginaw, but its timber lies along the line of the Canadian Pacific railroad, and it will possibly be forced to build a mill and manufacture there, and then there is a duty of $2 a thousand on lumber imported into the United States. The Canadian people are determined to derive the benefit arising from the manufacture of the commodity, and the desire is natural.

American Builder.

The planing mill men and other wood workers of Cleveland, have been very greatly interested during the past ten days or two weeks, over one of the simplest and yet most wonderful machines ever set up. It is the Cyclone Dust Collector that has been steadily at work in Smeed & Co's. box factory. It is, as all who see it admit, a final and complete solution of that problem that has been the one great source of trouble, viz., how to send the wind in one direction and the shavings and dust in the other, after the fan has blown them to the shaving room or other place of deposit. The Cyclone Collector does it to a charm. The steam is blown into it, and while the shavings and dust are so quietly dropped that the fireman can feed from the room with the doors open all day long, the blast is carried away through an opening in the top, and nothing else goes with it. It is difficult to make one believe that the machine will do what it does, yet the hundreds who have visited it are limited to a man in witness to the fact that it *does* it, and that too, all day long without a halt or a break. Several others have been ordered, and will be set to work in Cleveland as soon as they can be manufactured.

AN ADVENTUROUS VOYAGE.

The *Mary Graham*, a barque hailing from Quebec, laden with timber, has had an adventurous voyage. She has brought with her the *Ocean*, a Norweigian boat, which left Norway in May, with two men on board, with the idea of crossing the Atlantic. The *Mary Graham* picked her up 270 miles from land off the banks of Newfoundland, after being six days at sea. She measures 5 ft. 6 in. in breadth and about 14 ft. in length. Three days after the rescue the *Mary Graham* was running before a hurricane and shipped a tremendous sea, which carried away all her boats, smashed in the front of her cabin, and cleared out its contents, spoiling all the provisions but a few tinned things. The captain was killed, and the second officer, with one man, was washed overboard. Most of the crew were severely injured, one man having his leg broken and another his arms. The deckload of timber was washed overboard.

THE BIG TIMBER RAFT.

The work of repairing the broken cradle of the big timber raft, at Joggings, N. S., is being vigorously pushed, and from fifty to seventy-five men are engaged in the work. It is expected that a successful launch will be made in a few days. As before described in these columns, the raft is 410 feet long, 50 feet wide, 35 feet high, and contains 2,250,000 feet of lumber. The earth has been cleared away from beneath the huge structure sufficiently to admit new launchways and supporting timbers. Narrow trenches are dug across in which the bed-timbers are placed that support the shores and bilge-timbers Afterwards, the intermediate section of earth and the launchways and crushed timbers are removed, the pressure upon them being relieved by the means of hydraulic jacks. Should the raft be safely launched and towed to its destination at New York, it will doubtless be the finest display of spruce timber ever seen in an American metropolitan market.

SALUTATORY.

WITH the present issue we are called upon to assume the onerous duties connected with the editorial and business management of the CANADA LUMBERMAN. Whether or not we have mistaken our "calling" is a matter which time only and the readers of this paper can determine. We start out, however, in the hope that our past experience in trade journalism may fit us for the work we have undertaken, and that by a careful and practical study of the wants of the trade, we may from month to month fill the pages of the LUMBERMAN with matter best calculated to interest all those from whom this journal seeks recognition and support.

The LUMBERMAN has a broad field to cover, and it will be our endeavor to do equal justice not only to the lumbering, but woodworking industries as well. The news of the trade will be presented in a concise and readable form. Special attention will be given to reports from the various wholesale lumber markets throughout the world, together with reliable prices current. Editorially the affairs relating to the industries represented will be treated with all fairness and candor, in justice to all and with malice towards none.

Among the miscellaneous reading of the paper will be found from time to time valuable articles on technical questions pertinent to the lumbering and woodworking industries. This department is intended alike for the employer and employed, and will assist in disseminating the views of some of the best writers and thinkers on all practical questions.

Communications upon any subject in which the trade is interested are earnestly solicited. The columns of the LUMBERMAN are always open for the fair discussion of any subject in which its readers are concerned. Anyone desirous of expressing his views on any subject connected with the lumber and woodworking industries is at liberty to use these columns.

Our "Personal" department, and "Sketches of leading lumbermen," which we propose introducing in a future issue, will be found of considerable interest. We shall at all times be thankful for contributions from the trade containing personal notes, items of news, or information of any character.

In conclusion we would solicit the hearty co-operation of all interested in the branches of trade of which this journal seeks recognition, for its future success, and we shall do our best to please all.

A. G. MORTIMER.

THE *Journal of Commerce*, Montreal, says of the Ottawa, Ont., lumber business that there is thought to be a prospect of trade looking up, and that its condition now is better than it was a year ago. The deal trade with Quebec is improving, but the export demand is otherwise light. Next year's stock, it is believed, will not exceed that of 1886, and probably less square timber will be gotten out, the market being already glutted with that kind of stock. Wages for woodsmen are about the same as last year, choppers getting $20 to $22 per month, and other laborers $15 to $23.

THE Toronto *Globe* of recent date says that the agreement which was entered into a few months ago between the general freight agents and the lumbermen, by which all lumber shipped should be taken at an estimated weight, has fallen through. The lumbermen were dissatisfied with the arrangements, and on Thursday the old order of things was reverted to. All lumber will be weighed in Toronto in the same way as other freight. The lumbermen want lumber carried at so much per thousand, but as lumber varies so greatly in weight, the railway companies will not agree to this.

UNITED STATES Commercial Agent Hotchkiss, in the course of an exhaustive report to Secretary of State Bayard upon the lumber industry of Canada, says that while the increased export duty upon saw logs is published as being from $1 to $2 per 1,000 feet, board measure, it is evidently intended that when the exports become developed the duty shall be further increased to $3, under the discretionary power vested in the Governor-General, which rate, it is supposed, will be prohibitory. "It is an indisputable fact," he says, "that this tariff will also be further increased if it shall become necessary to find the prohibitory point; for while the Government interposes no objections to Americans owning the timber, it is fixed in its determination that the Dominion shall have the resultant benefits arising from the manufacture."

THE Lumber Manufacturers' Association began its annual convention in Chicago on Sept. 23rd. President A. G. Van Shaack in his address said the lumber trade since 1884 had been less profitable than it should have been. The quantity of pine lumber that will be placed in the market in 1886, he said, "is estimated at about seven billion feet, which, if correct, is evidence that the manufacturers of pine lumber, who now receive only the current price of 1880 for their product, donate to the consumers of their lumber all the advance in timber since 1880, in amount say $14,000,000 for 1886." The timber supply of the Northwest, he said, is far too small for the prospective demand. Secretary Hotchkiss said in his report that if the estimates supplied by individuals were correct, the lumber producing regions of the Northwest had a hung-up stock of from one and a quarter to one and a half billion feet of logs on the first of the present month.

THE office of the LUMBERMAN is in connection with the *Review* Printing and Publishing Company, George street, Peterborough.

PERSONAL.

[Contribution from or concerning our friends and patrons are freely welcome to this column. The name of the sender must always accompany such notices.]

Mr. J. J. Taylor, for some years past associated with the firm of J. C. Wilson & Co., Picton, Ont., has ensconsed himself into the manager's chair of the Rathbun Co.'s Agency at Napanee. Mr. Taylor is an obliging and courteous business man, and is pretty sure of making the Napanee Agency as great a success as it has been in the past.

Mr. James Breault has entered on duties in the Central Office of the Rathbun Company succeeding Mr. Wm. Deans, who has been promoted to the position of assistant to Mr. Rixen.

Mr. J. B. Miller, President of the Parry Sound Lumber Company, has removed his family to Toronto, where he intends to reside during the winter months.

Mr. W. C. Archer, who has during the past two years been connected with the stenographic staff of the Central Office of the Rathbun Company, left on Monday for British Columbia, where he makes his future home. Mr Archer made a host of friends when in Deseronto, and he departs with the best wishes of all. We wish him all success in the far west.—*Deseronto Tribune.*

We congratulate brother Dan. W. Baird, of the *Southern Lumberman*, Nashville, Tenn., on his able essay on the subject of "Class Journalism and Trade Papers," read before the Tennessee Press Association at its late annual meeting. Our thanks are due Mr. Baird for complete minutes of the convention.

PROCESS TO TOUGHEN WOOD.

It is claimed that by a new process white wood can be made so tough as to require a cold chisel to split it. An exchange says: This result is obtained by steaming the timber and submitting it to end pressure, technically "upsetting it," thus compressing the cells and fibres into one compact mass. It is the opinion of those who have experimented with the process, that wood can be compressed seventy-five per cent., and that some timber which is now considered unfit for use in such work as carriage building could be made valuable by this means.

THE LUMBER AND WOOD WORKING INDUSTRIES OF BROCKVILLE.

A representative of the *Lumberman* recently paid a visit to the beautifully situated town of Brockville, and while there visited the various lumbering and wood-working establishments of which that town boasts. From his note book the following information is taken.

KEARNS & MARSHALL—LUMBER.

Perhaps the largest wholesale and retail dealers in Lumber throughout this section is the old established firm of Kearns & Marshall. Having been in business here for the past 14 years, these gentlemen have built up a trade of which they justly feel proud. The yards and business office of the firm are situated on the main street, near the centre of the town, and occupy a space of 175 x 300 feet. The stock usually kept on hand here consists of about one million feet of lumber, together with large quantities of laths, shingles, fence posts and hop poles. Across the St. Lawrence river, in the village of Morristown, N. Y., we also find this firm operating a saw mill, with a capacity for turning out 15 000 feet of lumber daily, in addition to 10,000 to 14 000 shingles. The lumber yard at this point is much larger than the one previously referred to, there being in stock two and a half million feet of lumber. The trade done by Messrs. Kearns & Marshall is principally local, although considerable stock is annually shipped to the New England states. This business foots up to from $10 000 to $12,000 per month, and gives employment to 20 men.

PETER MCLAREN—LUMBER

Opposition, it is said, is the life of trade, and evidently this was the impression formed by Mr. Peter McLaren, when he opened out his extensive yards here two years ago. Being kindly received by Mr. Jno. Peverley, manager, and his assistants, Messrs. T. B. Moore and C. H. Storey, we took a tour of inspection through the various buildings and yards, which are stocked "mountains high" with every description of sawn and dressed lumber, laths, shingles, dressed sheeting, carpenters' lumber, flooring, roofing, scantling, sash, doors, mouldings, etc., etc. This is simply a branch of Mr. McLaren's extensive works, and the stock usually kept here is intended for local consumption only. The extensive saw mills operated by this well-known lumberman, are situated at Carleton Place and Mississippi, Ont., from which forty-five to fifty million feet of sawen lumber is annually produced. The manufacture of square timber is even more extensive. The principal shipments of lumber from these mills are to New York, Portland, Boston, and other American cities, while the square timber is nearly all shipped *via* Quebec to European ports. The following figures indicate the ruling prices in Brockville during the past two months; Lath, No. 1, $2; No. 2, $1 75; Shingles, 18 in, $1 25, $2 and $3; cull lumber, from $6 to $8; shipping cull, from $12 to $14; siding, from $15 to $18; bill timber (hemlock), $12 to $14; pine timber, $17 to $20.

MCNISH & MCKENZIE—LUMBER.

This firm have also been doing business in Brockville for the past two years, and although carrying on but a small trade compared with the firms mentioned above are nevertheless holding their own. The lumber on sale at the yards here is manufactured at the firm's saw mill at Algonquin, Ont. The capacity of this mill is about 7 000 feet per day. The manufacture of shingles, cheese and all kinds of packing boxes is also carried on. They also operate a small custom flour mill for the accommodation of farmers and whatever money they can make out of it. Mr. McNish attends to the business at the mill, and Mr. McKenzie has his head quarters at Brockville.

JNO. BRIGGS & SON—PLANING MILL.

Wood-working establishments always go hand in-hand with lumber as we find it in its rough state. From the log comes the lumber, and from lumber comes every variety of necessary and useful article for all branches of trade. The planing mill operated by the above firm has been running for the past 17 years, and does a full share of the trade of the town. The manufacture consists of sash, doors, blinds, mouldings, and, in fact, all kinds of house furnishings. The mill gives employment to an average of 16 hands. The best Canadian machinery is employed, and is contained in a building 35 x 65 feet, two stories high, with engine and boiler room adjoining.

KEARNS & CO.—PLAINING MILL.

The above firm are engaged in the manufacture of the same class of goods as the one just described, and have large premises situated in the centre of the town. This business has been established since 1874, but has only been controled by the present firm during the past two years. The main building is 40 x 60 feet in size, and stands three stories high. Near at hand are also two large sheds, used for the storage of lumber. The list of machinery used in the mill is complete and of the best Canadian manufacture. A considerable number of hands are employed.

The extensive building operations which have been going on in Brockville for the past year or two, have taxed the capacity of these mills to a considerable extent. Everything considered the lumber and wood-working industries of Brockville are in a prosperous condition.

General News Notes.

COUNTRY shingle mills do not appear to be making much money this year.

MCLENNAN'S mill at Kilworthy has cut 15,000,000 feet since the season began.

JOSEPH SONA, of Deseronto, had some of his fingers lacerated by a saw a few days ago.

THREE million feet of lumber will be required for the new Canadian Pacific elevator at Montreal.

W. A. HUNGERFORD has bought the mills situated at Glen Lewis, formerly owned by C. Wallbridge.

THE opening of the Murray Canal will be celebrated by a grand demonstration at Trenton or vicinity on Oct. 2nd.

SHIPPING at Ottawa still continues brisk in the lumber trade, and shows every sign of remaining so until the close of the season.

THE new forty cord brick kiln for burning charcoal at the Rathbun Co's works at Deseronto, is now completed. It is said to be a fine piece of workmanship.

THE Gilmour Company and the town of Trenton are at loggerheads concerning a water privilege asked for by the above firm.

GEO. GRAY'S sash and door factory at Harriston, Ont., was destroyed by fire on Aug 29th. Loss partly covered by insurance.

ALL the Chandiere and Hull mills, on the Ottawa, Can., are running night and day in expectancy of a brisk fall demand.

IN the Ottawa district large numbers of shantymen are already being engaged to go to the bush to engage in lumber operations for next season.

ABOUT 1,000 railway ties and 1,200 posts are turned out of the Cedar Mill, at Deseronto, each day, besides shingles and dimension stuff.

ADVICES from Vancouver, B. C., state that the ship Beaconsfield is loading with 1,020,000 feet of lumber, value $11,800, for Peru, and the barque Nanimo is taking 465,000 feet to Tientsin, China.

BELLEVILLE was visited with a disasterous fire a fortnight ago, by which about 2,000,000 feet of lumber in Flint & Holton's lumber yard was burned. Loss, $25,000; no insurance.

THE barge which was fitted up by Gilchrist & Co., of Alpena, Mich., to take over logs from the Georgian Bay, after having made one trip abandoned the project.

THE Rathbun Co., of Deseronto, has closed a contract with the Grand Trunk Railway Co., for 300,000 railway ties to be delivered during the coming fall and winter.

The Dickson Company, of Peterborough, have constructed along the river bank at their property about seven hundred feet of piers this year, to protect the shores, and behind which to deposit mill refuse and thus make ground.

IT is claimed that cedar on Manitoulin island, Lake Huron, is getting low. Lately a propeller had to move from port to port along the shore of the island in order to get a full load for Chicago.

THE steamship Cameo lately sailed from Montreal with 1,781,000 feet of lumber on board, shipped by Bryant, Powis & Bryaut, London. It was said to have been the largest cargo of lumber loaded in the St. Lawrence this season.

A GIANT oak weighing about 55 tons has been recovered from the bed of the Rhine, where it is supposed to have laid at least 3,000 years, and is on exhibition on a kind of Noah's Ark moored off the Cours-la-Rhine, Paris.

To find the amount of water required for a condenser divide 1,100 by the difference between the temperature of the hot well and that of the injection water; the result is the number of pounds of water required to condense one pound of steam.

IF it is decided to maintain the Colonial Exhibition permanently in England it is, according to the *Manitoban*, probable that the Manitoba Government will have a space reserved for the products of that province. The land department of the M. & N. W. Railway may also have a permanent space.

THE Northwestern Coal & Navigation Co., has offered to make a free grant of land and ten thousand feet of lumber for the erection of a hospital in Lethbridge, Man., provided that the residents will furnish the labor and other incidental expenses necessary to its erection.

FOREST protection has awakened so much interest in California that the legislature, at its last session, appointed a forestry commission, with instructions to investigate the extent character and rate of destruction of the timbered districts of the state.

AN Ottawa paper says:—"Less square timber than ever before has passed through the Chaudiere Slides this season. A large quantity has been taken over the Cadadian Pacific Railway from Nipissing to Papineauville. This, combined with a smaller cut than usual, accounts for the small traffic through the Slides."

THE local news columns of the *Record*, at Selkirk, Man., show that there is a considerable fleet of steamers and barges on Lake Winnipeg, all largely engaged in the lumber trade between the mills located on that water and Selkirk Apparently there has been an increase in the Lake Winnipeg traffic this season over former years.

MESSRS. SMITH, WADE & CO., timber merchants here, are dissolving partnership at the end of the season, Mr. Smith retiring. It is understood that Mr. Wade, with Mr. Walcot, now with Messrs. J. Burstall & Co., will continue the business of the firm of Messrs. Smith, Wade & Co., which will be represented in Canada by Mr. Wade and in England by Mr. Walcot.

A RECENT letter from a correspondent at the Indian and Colonial Exhibition, says that there have been further enquiries for white oak staves, this time from Spain. The last enquiry was followed by a purchase on account of a New Orleans wine cask manufacturer. Mr. H. F. Coombs, of the Canadian section, has offered to supply all needed information on the subject.

AN oak stain can be produced by mixing powdered ochre, Venetian red and umber in size, in proportions to suit; or richer stain may be made with raw sienna, burnt sienna alone is very effective. To darken oak, strong coffee is sometimes used. To make it very dark, iron filings with a little sulphuric acid and water put on with a sponge and allowed to dry after each application, is good.

THE cut of square timber on the Ottawa, Can., has considerably fallen off of late, owing to the increased demand in Great Britain for sawed stock in preference to that in square form. A less quantity of square timber than ever before has passed through the Chandiere slides this season, but the Canadian Pacific has taken large quantities from Nipiscing to Papineauville, where the sticks are put in the water and floated to Quebec.

GRADING on the Deluth & Manitoba railroad between the Northern Pacific junction and Red Lake Falls, Minn., is about completed, and track laying is in rapid progress. The line between Red Lake Falls and Grand Forks, on Red River of the North, is under contract. Red Lake Falls promises to become an important mill point, since the Red Lake pine region is tributary by way of Red Lake and Clearwater rivers. The new road will furnish a shipping outlet for sawed product, east, south and west.

THERE is a change in the firm of Bewick Comstock & Co., of Alpena. Charles Bewick has retired from the firm, having sold his entire interest in the bank, the lumbering business here, as well as the pin lands of Canada and Mississippi, to A. W, W. B. and J. B. Comstock, who will hereafter carry on the business.

THE Bow River Lumber & Land Company, composed of a wealthy syndicate of Eau Claire, and whose scenes of operations is at Calgary Northwestern Territory, are rushing the work on their new saw mill along with all possible speed. This will be the first saw and plaining mill introduced in that section, and will have a manufacturing capacity of 125,000 feet of lumber per day. A battery of three boilers and the frame work for a gang saw for the mills is in course of construction in Saginaw.

THE prevailing wages for shanty hands now being engaged at Ottawa are as follows:—Choppers, $18 to $20 per month; road cutters $14 to $17 per month; shanty foremen, $36 to $40 per month; shanty cooks, $36 per month.

In consequence of an arrangement between the Canadian Pacific railway management and the lumber firms in the Nippissing valley, Ont., in regard to transportation rates, two large mills will soon be built at McLeod's Bay, near Sturgeon Falls.

A BRITISH COLUMBIA paper says: "Some fine sticks were cut yesterday at the Hastings mill, Vancouver, one of them measuring 100x24 feet square, and weighing nine tons. The logs are free from all knots and imperfection, no better ones having ever been turned out at any mill on this coast.

THE Lethbridge (Alberta, N. W. T.,) *News*, says:—The Company's sawmill is now getting out 15,000 feet of lumber per day and about 4,500 logs are on the bottom in the vicinity of the mill all ready for the saw. This is only about one third of the logs which came down on the drive this spring.

THE rain of the past few days has caused the Montmorency River, Quebec, to rise sufficiently to permit of the driving of the logs which have been stuck all summer, to the mills. This will be a boon to working class of the district who have been out of work for the last six weeks. The rain has had the same beneficial effect on the Chaudiere.

"LAYIN' eout another railroad?" "Surveying for one," was the reply. "Goin' threw my barn?" "Don't see how we can avoid." "Wall now, mister, I calkerlate I've got somethin' tew say 'bout that. I want you to understan' that I got somethin' else tew dew besides running out tew open and shet them doors every time a train wants to go threw."

IT is expected that the cut of logs in the Upper Ottawa country next season will be very large Messrs. Lord & Hurdman have twelve shanties in the bush, and other firms are proportionately well represented. The wages paid lumbermen are good. There are 20,000 logs in the Des Joachim boom, which when passed through will finish operations there for this season.

THE Canadian government has made another increase in the export duty of logs. The tariff on pine logs has been placed at $3 a thousand and on spruce $2 a thousand. On shingle bolts a specific duty of $1.50 a cord has been declared. This will interfere with the operations of the Michigan men, who have recently invested largely in timber limits on the north shore of Lake Huron.

THE Canadian lumbermen are not satisfied with the export duty on pine logs and have renewed their demand for its increase to $3 per thousand feet. The original tariff resolutions brought down by the finance minister at the last session made the duty $3, but it was afterwards reduced to $2. Manufacturers of sawn lumber say that $3 per thousand export duty on logs is not more than equivalent to $2 per thousand import duty imposed upon lumber by the United States government.

A DEALER who had been scurrying around in the Saginaw valley, called at the *Northwestern Lumberman* office recently and had something to say about the tricks of manufacturers "They have been charging all the schemes in the catalogue to the jobber, but now they are onto them themselves. Over in the valley it is amusing to notice how lumber is piled. The best edge of the board is piled out. Unless a man gets down in the pile, or behind it, he knows no more than the man in the moon what kind of lumber it contains. And on that account there are eastern buyers who have had it set to 'em finely. The face of the pile looked well; seeing is believing, they think, so they buy; but in good time they found out that they could see about as far into a lumber pile as they can into a grindstone. I don't go on the face of a pile worth a cent any more." Wonder if the Chicago dealer expected the Saginaw valley manufacturers would order all the best stock put in the middle of the pile and the poorest outside. As they buy by inspection they get what they pay for.

THE *Journal of Commerce* is authority for the statement that the cut of square timber has fallen away of late, owing to the increased demand for sawn lumber in the old country in preference to the bulk block. A less quantity than ever in Ottawa's history has passed through the Chaudiere slides this season, the Canadian Pacific railway taking large quantities down by rail from Nippissing to Papineauville, where the logs are rafted and floated onwards by water to Quebec. There is not at all a large cut expected this year, and on account of the railroad facilities a very much smaller proportion than usual will pass through the Chaudiere slides.

MR. R. REEVES, head boiler-maker at the Wm. Hamilton Manufacturing Co, works, Peterborough, has returned from Waubashene, where he has been engaged in putting in the hugh boiler, made at the company's works, in the steamer Maganettawan, the property of the Georgian Bay Lumber Company. This boiler is the largest ever turned out of the Hamilton works. It is nine feet in diameter, twelve feet long, has one hundred and fourty-seven three inch tubes, has two corrugated furnaces forty inches in diameter, and weighs fourty four thousand pounds. Though made to carry one hundred pounds of steam, when tested by the Government Inspector, 160 cold water pressure was put on thus giving it a capacity of carrying one hundred and six pounds of steam.

ATTEMPTS have before now been made to utilize the water power of the falls of Niagara, but for some reason they have not been very successful. The new Manchester, which the imagination of its projuctor called into being, is far from being the scene of busy industry which he painted it. Now, a company has been formed with a capital of $3,000,000, for the purpose of making a great hydraulic tunnel, a mile and a half long, on the American side, at a distance of about 400 feet from the river. Enough power will be obtained to set in motion 240 mills of 500 horse-power each. In cheapness, it will be difficult to compete with this power. The company has already secured a fair proportion of the land necessary to carry on its operations. By the proposed utilization of this force, the great altar of nature will be left intact and not be defaced nor deformed.

COL. WALTER C. LARNED, the famous art connoisseur, has been in San Francisco for several weeks on a curious mission. He wishes to transplant to the handsome lawn of his magnificent summer residence, at Lake Forest, one of the big California trees, and he has just closed a contract with the Wells & Fargo Express Company to this effect. Special cars are to be constructed to transport the tree across the plains and the umbrageous leviathan will have to be drawn by horse power after the Missouri river has been reached, because the obstacles in the way of railroad curves and bridges east of that point cannot be overcome. The tree which Col. Larned has selected is somewhat over 300 feet in height, is 98 feet in circumference near the base, and weighs about 40,000 tons. The cost of transporting this monarch of the forests will exceed $18,000.

THE depression in the English timber trade, which has had so discouraging an effect on the American exporters during the season, still continues, and the London lumber journals of August 28 do not indicate that the cloud has lifted to any appreciable degree. Of the situation in London, *Timber* said: "The consumption, as evinced by the dock deliveries, drags onward with monotonous sluggishness, and the latest returns render it impossible to gathe eithes grounds for hope of better times or the reuerse." *The Timber Trades Journal* also presents a very lugubrious picture of the situation, particularly in London, and of Liverpool says: "The arrivals of wood-laden vessels have again been comparatively unimportant in number, when the season of the year is taken into consideration. A walk round the timber docks and the appearance of the quays and wharves at the various railway and canal companies reveals an amount of stagnation which it would otherwise be almost impossible to conceive when contrasted with the usual busy scene at this period of the import season."

General News Notes.

MAYOR WALKERS new saw mill at Kanauaskis, Calgary district, is in full operation.

MR. E. B. EDDY'S new sash factory at Hull will be ready for occupation in a short time.

THE Rathburn Co. are busily engaged establishing their shanties for the coming winter's work,

SOOT, SCOTT & Co., the Medonte Lumber Mills, Elsie, has cut 3,000,000 feet of lumber this season, and has 1,000,000 feet more to cut before the mill shuts down.

EXTENSIVE forest fires have been raging in the central and northern portions of Wisconsin. North of Milwaukee. Thousands of acres of valuable wood have been burned over.

GEO. GREY'S sash and door factory, at Harriston, Ont., was burned August 30th. Valuable machinery and a quantity of finished work was destroyed. The loss is heavy; partly insured.

LUMBERMEN get twenty cents a log at Wausaw, Wis., for raising "dead" or watersoaked logs from the bottom of the Wisconsin River. They have already raised about 600,000 feet and logs that have been dead for twenty years are said to be as sound as the day on which they were cut.

THE Ottawa *Journal* says that forest rangers are at present inspecting, on behalf of Messrs. J. R. Booth & Co., a tract of timber fifty miles square in the Nipissing district, with a view to its purchase. The owners of the limit, which is deemed a very valuable one, are Messrs. Barnet & McKay, and their price is $300,000.

THERE is said to be a small tree growing in a gulch near Tuscarora, Nevada, the foliage of which at certain seasons is said to be so luminous that it can be distinguished a mile away in the darkest night. In its season it emits sufficient light to enable a person to read the finest print. Its luminosity is said to be due to parasities.

UNITED STATES Marshal Crawford returned recently from an official visit to St. Mary's Lake, where he learned that citizens of the Canadian Northwest Territory are cutting timber on United States public lands by the wholesale, and are floating it down to Canadian territory, where it is cut into lumber, and sold to the residents of the North west Territory.

IT is understood, says the Port Hope *Times*, that the C. P. R. Co. and the lumber firms in the valley of the Nipissing are likely to agree on the subject of rates for transporting manufactured and unmanufactured lumber, and that upon the consummation of this most desirable arrangement, two superior saw mills will be erected in McLeod's Bay, near Sturgeon Falls.

IT is expected that the cut of logs in the Upper Ottawa country next season will be unusually large, says the Perth *Expositor*. Messrs. Lord & Hurdman have twelve shanties in the bush, and other firms are proportionately well represented. The wages paid lumbermen are good. There are 20,000 logs in the Des Joachim boom which, when passed through this week will finish operations there for this season.

ON Tuesday morning the 7th inst., Mr. Wm. Blashill, met with a serious accident at Saunders & McPherson's saw mill at Burk's Falls, in having his right hand caught against the edging saw, by which he loses a portion of all the fingers of that hand. Mr. Blashill, says the *Arrow*, is a very careful, sober, industrious man, highly respected, and he has the sympathy of the entire community. It will be a long time before he can resume his duties and then likely with difficulty.

MR. J. R. BOOTH, the well known lumberer and mill-owner, of Ottawa, has purchased a timber limit on the Temiscamingue some 75 miles in extent, from La Banque Nationale, for which he paid $77,500. Mr. Booth has made a number of purchases of limits recently. Every limit of any value that has been offered for sale of late has been readily disposed of, the mill-owners evidently realizing that a day is coming when those who do not own limits will find it difficult to obtain logs to keep their mills running.

THE biggest load of saw-logs ever hauled over a road in Washington territory recently arrived at Seattle. There were eighteen logs ranging from 24 to 120 feet in length. The longest ones are intended for vessels, masts, and one has a diameter of thirty six inches and another forty eight inches in the middle. The latter contains 13,000 feet of lumber, and the total measurement is about 100,000 feet. Their gross weight is about 650,000 pounds, and they are to be shipped to the Atlantic coast.—*New York Tribune.*

COMMENTING on the sawdust nuisance, a Pembroke despatch tells how James Dempster, of Petewawa, was brought up before the police magistrate by fishery officer Grant, on the 1st instant, and was fined $20 and costs, making in all $24.45, for putting sawdust in Petewawa river. The O tawa *Citizen* adds: "It is a pity that the law under which this fine was inflicted could not be put into operation in this city. Then some other way of disposing of the sawdust than throwing it in the river would be found."

OTTAWA millowners were not so busy last fall, nor are they this, as they were in previous years, this they attribute to the increase of railway facilities. In old days people had to obtain the whole of their winter stock before the end of the fall, but now with the increased powers of transit, they can receive lumber by rail at any time. This means increased employment at the lumber yards during the winter. The trade is steady at unchanged prices. But little lumber is obtained in Ottawa, the output having been principally disposed of for the American market. The local demand is moderate.

ON Saturday last a gang of men numbering 27, passed through here for Messrs. McLachlin Bros.' limits on Pock Lake. Another gang op men for Mr. Moore will pass through to-day (Wednesday) for his limits on Byers' Creek. Mr. Ed. Elcome is "walking boss" on the Bonnechere this year for McLachlin Bros. Messrs. R. Reeves & Co. have entered into a contract with McLachlin Bros. to draw provisions to their different shanties on the Bonnechere and Madawaska rivers. The first consignment started from Cobden to day.—*Eganville Enterprise, Nov. 22nd.*

During the season of 1886 the Gatineau boom has been busier than ever, an immense number of pieces and logs having passed over the slide, The following are the number of pieces credited to some of the leading firms: McLaren and company 94,000, Boyle & McCracken 14,868, Edwards & Co.. 65,000, Posey, 1,500 cedars, Gilmour & Co, 9 677, Rathbone & Co. 19,367, Hamilton Bros. 68,507, giving a total amongst these firms of 272,919 pieces. This does not, however, give the entire work of the season. A large quantity of odds and ends still remain in the boom to be sorted out and claimed. Messrs. Rathbone & Co., too, have brought down a great number of ties, whilst Messrs. Whitly & Booth have the making of a large raft still on the Madawaska river, which is uncertain whether they will be able to run through this season. The above returns are entirely distinct from the Ottawa slides, over which timber is still arriving.

ONE hundred and two thousand shingles have been shipped from Puget Sound to Port Moody for shipment across the Canadian Pacific to the east. This is only the beginning of a future great trade between the Pacific and the Atlantic coasts. Cedar grows here in abundance, and the shingles cut from the lumber are the most substantial in the world, tests having proved that, placed on tops of buildings, they can withstand the rain and tempests beating down upon them for 40 years. The shingles will not rot; the action of the weather wears them away, but decay never attacks them. Our eastern friends speaks highly of the shingles turned out on this coast, and the first shipment of them over the C. P. R. is the beginning of an immense trade. The forests of Cedar in the Atlantic States are well nigh exhausted, but in British Columbia there are such immense supplies that a century will pass away before all the trees will have fallen under the unerring aim of the axeman—*Vancouver News.*

CHIPPEWA FALLS, Wis., claims to possess the largest water saw mill in the world, and it stands pretty well up with the largest saw mill run by any power. The mammoth institution is owned and operated by the Chippewa Lumber & Boom Company, and furnishes employment to over 700 men. Its annual capacity is the enormous amount of 65,000,000 feet of lumber; 16,000,000 lath; and 16,000,000 shingles, and from 1,500 to 1,900 horse power is required to operate the numerous saws, etc. A remarkably large manufacture by this mill is reported. The record for the two weeks ending July 31 was 3,220,880 feet, and the total cut of the season up to Aug. 1 amounted to 22,468.-242 feet, or at the rate of nearly 270,000 feet per day. It is said that there is a 24 foot head of water at this point, and the lowest estimate of available horse-power is 80,000. The Chippewa River Improvement Company, the Chippewa Logging Company, the French Lumbering Company, the Mississippi River Logging Company, and the Chippewa Manufacturing Company have headquarters at Chippewa Falls, and the place contains two large flowering mills, plaining mills, etc.

THE thriving little village of Scotstown, Que., in the township of Hampden, Comton county, is situated on the Salmon river, and has about 500 inhabitants. It is a centre for lumber and has two lumber mills owned by Messrs. Parker & Jencks, which are at the present time running night and day, and giving employment to some eighty-five people. One of these, is a steam clapboard mill and turns out upward of 10,000 boards per day. They make thirty-one grades of clapboards, and ship mostly to Boston. The other is a water-power board mill and turns out 35,000 feet of lumber per day, which is shipped mostly to Portland. The Scotstown Chemical Pulp company have their mills here. Your correspondent through the kindness of Mr. Arkley, their manager, had the pleasure of a trip through the mills and witnessing the process of reducing wood to pulp, which was very interesting. These mills were erected in 1884 and are run night and day, and give employment to thirty-five persons. At present they turn out three tons of dry pulp per day, but the proprietors are increasing their capacity so that in the course of a month they will be able to turn out over twice the present quantity. The pulp from this mill has a nice long fibre, and is the finest your correspondent has ever seen. There are only two pulp mills in Canada doing a shipping trade, although some paper mills manufacture some of their own pulp. These three mills comprise the principal industries of the place. There are two churches, nine stores, a post-office and two good hotels in the village, and these have mostly grown fu during the past few years.—*Montreal Gazette.*

THE Peterborough *Review* scribe has been writing up the industries of Norwood, and has the following to say regarding the saw mill located there:—

Mr. S. H. Brown's saw mill is the only one inside the corporation. It is a lumber and shingle mill, and also contains machinery for planing and turning. Mr. Brown suffered from fire a few years ago. He now occupies a building 60x30 feet and two stories high. Steam power is used, a fifty horse power engine being enclosed in a detached brick building. There are in the mill seven different kinds of circular saws, a planer, matcher, lathe and rip and gig saws, etc. Mr. Brown has done a considerable business this year in sawing cedar paving blocks for Messrs. Van Vlack & Co., of Toronto the timber is procured in the vicinity of Norwood and is sawed at this mill. About 2,000 cords of the blocks have been sawn so far this season, and the prospects are favourable for a better season with them next year. Mr. Brown is preparing to erect another building, 20x50 feet and two stories high, which will be used for the planing and shingle mill. New machinery will be put in when it is completed, including a shaper, sticker and band saw.

ENGLISH TIMBER MARKET.

Messrs. A. F. & D. Mackay's timber circular of the 4th September, 1886, contains the following:—"Those who profess to be able to guage the reading of the barometer of trade and commerce believe that it indicates an improvement. This may be so; but it is manifest to those who are actually engaged in commerce, and have consequently a practical acquaintance with its working, that the improvement, if there be any, is of a slight character. Still the smallest reft in the dark cloud of depression that has so long overshadowed trade will be gladly welcomed as a happy omen of the revival so long hoped for. In this respect the timber trade will form no exception. There would seem, from the statistics of consumption as if there was a tendency of an increased demand among the actual users and consumers of timber. The consumption of Quebec square pine in the last month was 205,000 feet, as against 264,000 in the corresponding month of 1885; New Brunswick spruce and pine deals: 1885, import, 12,051 stds; stock, 16,522; consumption, 7,678; 1886, import, 9,050; stock, 14,133; consumption, 9,307."

GLUEING.

A furniture journal says: Experienced woodworkers have always contended thata glue joint properly done, is stronger than the wood itself. And yet joints often give way at the surface where the glue is used, which is accounted for by bad material. A similar reason is frequently the true cause, which few artisans wish to acknowledge. It is merely that skill is lacking. In glueing wood, it is asserted by competent authority, that bad work is produced by applying glue to both surfaces. A good job is secured by applying the glue hot, but not extremely so, to one surface, which should be cold, while the other surface should be heated at the stove, but should have no glue upon it. By this method the glue will permeate the wood and bind the surfaces together firmer than nature binds the fibers. It is said by good cabinet makers that if these precautions are taken, less difficulty will be found with glues which skillfully handled, usually will do the work reduired of them.

THE AMOUNT OF SPACE STEAM OCCUPIES AS COMPARED WITH WATER.

Steam, as compared with water, occupies 1728 times as much space. A cubic inch of water will make 1728 cubic inches of steam at atmospheric pressure. Now, if this steam is compressed into half the space it occupies at atmospheric pressure, it will be double that pressure, or 15 pounds above the atmosphere; it will then occupy only 864 cubic inches. If reduced again to half its volume it will occupy 432 cubic inches, and will have 30 pounds pressure. Reduced again to half the volume the steam will occupy 216 cubic inches, and will have 60 pounds pressure to the square inch. We can go on reducing in this way until we find that a cubic inch of water turned into steam and compressed into a space of three cubic inches, will have the somewhat enormous pressure of 3840 pounds to the square inch.—*Boston Journal of Commerce.*

WOOD-WORKING PATENTS.

The following list of patents relating to the wood-working interests, granted by the U. S. Patent Office, Sept. 14, 1886, is specially reported by Franklin H. Hough, Solicitor of American and Foreign Patents, 925 F street, N.W., Washington, D.C., who will furnish copies of patents for 25 cents each:—

349,143—Saw, G. N. Clemson, Middletown, N.Y.

349,180—Saw mills, feed-work for, B. E. Sergeant, Greensborough, N.C.

349,008 — Stump-extractor, G. Y. Smith and E. A. Charles, Cedar Rapids, Iowa.

10,765—Lathe for turning spirals, V. Merklen, New York, N.Y. Re-issue.

349,365—Saw-mill, circular, W. F. Parish, Minneapolis, Minn.

.49,601 — Saw-set, P. A. Potter, Wellsborough, Pa.

THE lumbering business at Sturgeon Falls, Ont., is commencing to boom again and promises to be brisker than ever this year.

Market Reports.

TORONTO.

From Our Own Correspondent.

SEPT. 9.—Our Industrial Exhibition being now in full swing, business has quieted down for the time being. Engine power being in demand for the conveyance of passengers and live stock, etc., lumber has to take a back seat for awhile. Trade has kept exceedingly good up to the present, and considerable lumber is now moving over our docks, having averaged during the past two weeks about one vessel cargo per day, the larger portion of which has not left the saw more than two months, and so far as I am aware, there is only one wholesale firm that have any dry lumber to place on the market, and that only in limited quantities. Figures at the yards keep the same, and there is no immediate prospect of any change in that respect. Although held more firmly by mill men, long bill stuff is about the only class of lumber having any money in it just now for the dealers, and manufacturers having a stock of long logs have a chance to realize well.

As predicted by me in a former letter, the new tariff adopted by the R. R. companies, in carrying lumber by the M, at estimated weights, has been of but short duration. Nothing more could have been anticipated as to the fate of so absurd a scheme. The carriage of lumber by weight is all right. It is the high rates charged per cwt. that is wrong, and which must eventually be lowered, if the coarser grades of lumber are to be brought to market and sold at a profit. If the R. R. companies can bring a car of lumber 100 miles for shipment to a foreign port for say $16.00, why should they charge $21.60 for a car intended to be used on the local market? It is not the former rate that is too low, but the latter that is too high, and such discrimination against a community having granted large bonuses to aid in the building of such roads, is a gross injustice which should not be tolerated, and could soon be altered if insisted upon by all who are interested. Let our Board of Trade take up this matter in a business-like spirit, and much more good might be done than by devising schemes to carry lumber by the M. Mill men and dealers alike are interested in this question. Green pine bill stuff and hemlock cannot be brought here and sold except at a loss under the present rates charged for freighting it, and it frequently becomes a question with the dealers as to accepting delivery of cars of green hemlock, or of letting the R. R. companies keep it for the freight, and it is useless to try and put a market value on this grade of lumber that it does not intrinsically possess. It can only be sold because it is of lower value than pine, and can therefore be sold in limited quantities.

SEPT. 24.—Our Industrial Exhibition being over business has returned to its normal condition once more. Our city as a whole has no doubt received a benefit by the influx of visitors during the period of the fair, but so far as the building and retail lumber trade is concerned, it is simply a week lost, not to be regained by any after exertion.

Shipments from our docks have gone on steadily—about six cargoes per week. Nearly all of this passes through the hands of Messrs. Christie Kerr & Co., either as owners or shippers, much the larger portion of which has consisted of 1 x 10 in. and 1 x 12 in. com. stocks. The amount of clear, picks and cut up coming forward is small as compared with the total amount being shipped. The reasons for this are two-fold: 1st, the danger to be apprehended from staining while in transit where not sufficiently dry; 2nd, the yearly decreasing yield of good lumber; 5 to 10 per cent. is now thought to be a fair yield, while a few years ago 40 to 50 per cent. clear and picks was frequently obtained from a stock. Such stocks will not again be cut in Ontario.

We now have plain sailing once more with the R. R. authorities, extremely little friction being observable between them and their customers, and so long as both endeavor to further each other's interests there will be but little to complain of. All that dealers require at the hands of the former now is, a lower freight on the inferior grades of wood, notably on hemlock, and the R. R. companies by taking this step will not lower their revenue by one dollar. Figures at the retail yards have, if anything, weakened, caused mainly by the return to the old tariff in R. R. freights. The rigid system of weighing in force for a time was not an unmixed evil, as it resulted in convincing the R. R. companies that their estimated weights on green, half dry and wholly dry lumber was above what it should have been, hence the more liberal usage now accorded to the shippers.

All the retail yards are carrying a fair stock, and sales from track side are good; dry 1 in. sidings and stocks are now difficult to obtain; long bill stuff is more plentiful, with prices lower. The supply of maple, elm, oak and ash is fully up to the demand. Only two or three firms here make a specialty of hardwoods, and therefore enjoy a monopoly in that line. Profits require to be large on this class of lumber, as the waste is large from various causes.

Mill cull boards and scantling	$10 00
Shipping cull boards, promiscuous widths	12 00
" stocks	13 00
Scantling and joist, up to 16 ft	13 00
" " " 18 ft	14 00
" " " 20 ft	15 00
" " " 22 ft	16 00
" " 24 ft	17 00
" " " 26 ft	18 00
" " " 28 ft	19 00
" " " 30 ft	20 00
" " " 32 ft	21 00
" " " 34 ft	22 50@22 50
" " " 36 ft	24 00
" " " 38 ft	27 00
" " " 40 to 44 ft	30 00
Cutting up planks to dry	20 00@25 00
" boards "	20 00
ound dressing stocks	16 00@18 00
Picks Am. inspection	30 00
Three uppers, Am. inspection	35 00@40 00

B. M.

1½-inch flooring, dressed	25 00@30 00
1½ " " rough	14 00@15 00
1¼ " " dressed	23 00@25 00
" " undressed	14 00
" " dressed	16 00@20 00
" " undressed	12 00@14 00
⅜ Beaded Sheeting, dressed	18 00@20 00
Clapboarding, dressed	12 50
XXX sawn shingles, ₱ M	2 75@2 90
Sawn Lath	2 25
Red oak	20 00@25 00
White "	25 00@30 00
Basswood, No. 1 & 2	18 00@20 00
Cherry, No. 1 & 2	50 00@60 00
White ash 1 & 2	25 00@30 00
Black ash 1 & 2	20 00@25 00

LONDON TRADE.

The lapse of a month seems to have produced the impression of a changed prospect, both in this as well as in most of the principal wood-markets of the country, and men speak hopefully, as they have not done for months, of the improvement which, like the rising sun as it begins to gild the distant horizon, is just visible to those whom restlessness or extreme interest prompts to take the earliest observations. Early risers at high elevations profit by the fact of their exalted position in being able to descry the first promise of the coming sunshine; but it not infrequently happens that, even while they herald the hopeful prospect to their less observant brethren in the valley, the clouds are gathering which may shut off the anticipated sunshine before it has surmounted the surrounding peaks and penetrated the lower regions which it was expected to fertilize. Such may, perhaps not inaptly, be taken to represent the position of the wood-market at this moment.

The opinions of those whose position in the trade qualifies them to make a statement, based on a bird's-eye view of the present situation, unanimously incline to the prospect of improvement later on, although the more cautious among them do not hesitate to imply the danger of failure, should any of the present conditions, upon which such expectations have been formulated, become hereafter reversed through misguided action on the part of those whose province it is to supply this market. It goes a long way in favor of the uninterrupted development of this prospect, however, that all markets coincide in the outlines of such presumptive improvement; but still, at the best, a rise in values cannot be described more favorably than as "potential," while it is very necessary to remember that, should the ratio of import to consumption be even slightly interfered with, or should the future increase in stock come in the shape of reckless consignments, there must occur a relapse which would plunge the market into greater straits than it was before the prospect of better times was announced. —*Timber, Sept. 18th.*

MONTREAL.

Some facts relating to the lumber trade of Montreal are furnished in a recent issue of the *Herald*: "The Montreal trade is almost altogether in deals and lumber. The deals are chiefly sent to Great Britain and the lumber to South America and the West Indies. The deals are pine, and the greater part of them come from the Ottawa district; a small proportion is brought from Michigan. The great bulk of the deals is conveyed by water in barges; very few, comparatively, are carried by rail. As many as 80,000,000 feet of deals were exported from the port last year, being one hundred per cent. more than the shipments of 1884. The exports of the current year will, before navigation closes, be considerably in excess of those of last year. Some idea of the importance to Montreal of this young and growing timber trade may be gathered from the fact that about fifty thousand dollars was paid last year for the labor connected with loading the deals. A considerable portion of the deals exported from Montreal is required for the match factories of Great Britain, where they are converted into matches and match boxes. Deals of all qualities are used for this purpose."

MONTREAL LUMBER MARKET.

MONTREAL, Sept. 25.—Quotations remain steady and unchanged, but the market is as has been fo some time past decidedly active, and a brisk demand has kept up a cheering business at the yards. The imports are quite extensive, and large quantities are continually arriving per barges via the Lachine Canal. The increase in trade for September is generally from 40 to 50 per cent in excess of that of the corresponding month of last year. It is a marked evidence of better times, to see so many buildings in course of erection in every quarter of the city, and the suburbs are not behind hand in this particular Orders continue to arrive freely from the country, and a good business is being done daily in carloads. The exports to date include 2,727,383 pieces deals, deal ends, boards and battens to Europe, and 13,156,400 feet of lumber to South America. Quotations for freights remain unchanged at 47s 6d. to 50s. per standard to the United Kingdom, and $11 to $12 per M. to the South American ports.

The following are the quotations at the yards:—

Pine, 1st quality, ₱ M	$00 00@40 00
Pine 2nd " "	00 00@30 00
Pine, shipping culls, ₱ M	14 00@16 00
Pine 4th quality deals ₱ M	10 00@12 00
Pine, mill culls, ₱ M	8 00@10 00
Spruce, ₱ M	10 00@13 00
Hemlock, ₱ M	9 00@10 00
Ash, run of log culls out, ₱ M	20 00@25 00
Bass, " " ₱ M	18 00@20 00
Oak, ₱ M	40 00@50 00
Walnut ₱ M	60 00 100 00
Cherry, ₱ M	80 00 100 00
Butternut, ₱ M	35 00@40 00
Birch, ₱ M	20 00@25 00
Hard Maple, ₱ M	25 00@30 00
Lath, ₱ M	1 50@ 0 00
Shingles, 1st, ₱ M	2 00@ 3 00
Shingles, 2nd, ₱ M	2 50@ 0 00

Cordwood, prices are steady.

ALBANY.

Pine, clear, ₱ M	$55 00@60 00
Pine, fourths	50 00@53 00
Pine, selects	42 00@47 00
Pine, good box	22 00@33 00
Pine, common box	13 00@15 00
Pine, 10-in. plank, each	00 45@00 47
Pine, 10-in. plank, culls, each	00 25@00 27
Pine boards, 10-in	00 30@00 32
Pine, 10-in. boards, culls	00 16@00 20
Pine, 10-in. boards, 16 ft., ₱ M	28 00@32 00
Pine, 12-in. boards, 16 ft	28 00@32 00
Pine, 12-in. boards, 13 ft	28 00@00 00
Pine, 1¼ in. siding, select	40 00@43 00
Pine, 1-in. siding, common	15 00@18 00
Pine, 1-in. siding, select	40 00@42 00
Pine, inch siding, common	13 00@15 00
Spruce, boards, each	00 00@00 16
Spruce, plank, 1½-in., each	00 00@00 20
Spruce, plank, 2-in., each	00 00@00 30
Spruce, wall strips, each	00 12@00 12
Hemlock, boards, each	00 00@00 14
Hemlock, joist, 4x6, each	00 00@00 32
Hemlock, joist, 2½x4, each	00 00@00 14
Hemlock, wall strips, 2x4, each	00 00@00 11
Black walnut, gook, ₱ M	100 @120 00
Black waluut, ¾ inch	80 00@90 00
Black walnut, ¾ inch	00 00@85 00
Scaymore, 1-inch	28 00@30 00
Scaymore, ¾-inch	21 00@23 00
White wood, 1-inch and thicker	38 00@40 00
White wood, ¾-inch	28 00@30 00
Ash, good, ₱ M	40 00@43 00
Ash, second quality, ₱ M	25 00@30 00
Cherry, good, ₱ M	80 00@85 00
Cherry, common, ₱ M	25 00@30 00
Oak, good, ₱ M	40 00@43 00
Oak, second quality, ₱ M	20 00@25 00
Basswood, ₱ M	25 00@30 00
Hickory, ₱ M	40 00@40 00
Maple, Canada, ₱ M	28 00@30 00
Maple, American, per M	26 00@28 00
Chestnut, ₱ M	38 00@40 00
Shingles, shaved, pine, ₱ M	0 00@ 6 50
" 2nd quality	0 00@ 5 00
" extra, sawed, pine	4 30@ 4 50
" clear, "	0 00@ 3 00
" cedar, mixed	0 00@ 3 30
" cedar, XXX	0 00@ 0 00
" hemlock	2 25@ 2 71
Lath, hemlock, ₱ M	0 00@ 2 13
Lath, spruce, "	0 00@ 2 25

QUEBEC.

The following is a comparative statement of timber, staves, &c., measured and culled to 9th September, at Quebec :

	1884.	1885.	1886.
Waney White Pine	1,726,409	2,036,713	2,365.398
White Pine	3,029,783	1,502,329	2,172,838
Red Pine	278,641	60,574	243,392
Oak	626,550	1,345,755	829,677
Elm	644,073	947,690	378,541
Ash	377,105	251,996	126,685
Basswood	4,415	47	218
Butternut	1,121	3,083	192
Tamarac	18,730	2,186	3,459
Birch and Maple	195,175	380,268	160,641
Std Staves	38.1.2.25	45 8.2.10	49 7.3.26
W. I. Staves	78.0.0.2	81.8 0.20	67.9.2.6
Brl Staves	0.6.2.13	195.9.3.25	.....

OSWEGO, N.Y.

From Our Own Correspondent.

Three uppers	$42 00@46 00
Picking,	32 00@35 00
Cutting up	24 00@26 00
Fine Common	22 00@25 00
Common	14 00@18 00
Culls	11 00@14 00
Mill run lots	16 00@22 00
Sidings, selected, 1 in	30 00@35 00
" 1½ in	32 00@36 00
Mill run, 1x10, 13 to 16 ft	16 00@21 00
Selected	21 00@24 00
Shippers	14 00@16 00
Mill run, 1¼x10	17 00@20 00
Selected	21 00@30 00
Shippers	14 00@16 00
Mill run, 1 & 1½ in, strips	15 00@18 00
Selected	22 00@30 00
Culls	11 00@13 00
1x6 selected for clapboards	25 00@35 00
Shingles, XXX, 18 in. pine	3 10@ 3 50
XXX Cedar	2 75@ 3 00
Lath 1½, No 1	1 85@ 2 00
No 2	1 00@ 1 25
Ash, 1st & 2nd 1 to 4 in	16 00@20 00
Basswood, 1st & 2nd, 1 & 1½ inch	18 00@20 00
" culls, " "	8 00@11 00
Hard Maple, ℔ M	25 00@30 00
Lath, ℔ M	1 50@ 0 00
Shingles, 1st, ℔ M	2 00@ 3 00
Shingles, 2nd, ℔ M	2 50@ 0 00

CORDWOOD.

Long Maple, per cord	$ 6 00@6 50
Long Birch "	6 00@0 00
Long Beech "	5 00@5 50
Tamarack "	5 00@0 00

GLASGOW.

The *Timber Trades Journal* of the 18th Sept., says:—Arrivals here of Quebec pine deals per steam liners continue ample for the wants of the market; a cargo of same by a sailing vessel is also included in the past week's imports at Glasgow, though nearly all the deals imported from Quebec and Montreal to Glasgow are now brought per steamer. Deliveries from Yorkhill Yard have been pretty active lately; the amount for the past four weeks being about 70,000 pieces deals and planks.

At the public sale here on the 15th inst. an attractive catalogue was submitted, comprising an extensive assortment of Quebec pine deals, various qualities, also parcels of U.S. black walnut, &c. Transactions publicly in deals were few, the greater part of catalogue being withdrawn, as offers did not come up to exposers' figures; of the other goods in catalogue a portion was put up without reserve.

There have been no arrivals of pitch pine at Clyde ports since begining of August, and, as stocks are large, a cessation of imports for a time is desirable; the arrivals of pitch pine last year during six weeks from 1st August were eight cargoes.

The quantity of log timber imported from Quebec to Greenock is about a third under that of last year at corresponding date.

NEW BRUNSWICK.

ST. JOHN, Sept. 1st, 1886.

Since my last communication quite a number of vessels have come to this port, and the harbour at the present time is busier than it has been since the spring fleet was here. There is quite a number of vessels due, and, as the deckload law comes into operation on the 1st of October, there is a feeling among dealers to hold back, as there will likely be a local demand for deals in order to give vessels a full deckload and clear them previous to the 1st prox.

At this writing wood goods are dull enough, and certainly the reports from Great Britain are not such as to warrant us in expecting any immediate rise in the price of our staple commodity. Dimension deals, that is 7, 9 and 11 in., can be bought at 8 dols. per *m*, and all width specifications can be procured at 7.50 dols. per *m*. This price is not rumunerative to the seller, but even low as it is, and with the present depressed state of freights, the shipper cannot make any money with the English market as it is.—*London Timber Trades Journal.*

LIVERPOOL.

The business during the past week has been only of a limited description, and the quays and docks have had a very lifeless look about them. The import has been small, the chief items being a few cargoes of spruce deals, chiefly from St. John, N. B, but some of the vessels are of large size, their carrying capacity being six hundred standards and upwards. There is also a steamer just arrived with a cargo of pitch pine timber and planks. Some of the latter just landed appear to be of fine dimensions and excellent quality, and should readily find purchasers amongst contractors and builders.

There is a widely spread opinion that the steady improvement in trade in the manufacturing districts is likely to continue, and, should these anticipations be borne out, the effects will not be long before they are felt in our trade, though past experience has generally shown that it is one of the last to feel any upward movement.

PROVINCIAL FOREST AND PARK.

Mr. A. Kirkwood, in a letter addressed to Mr. Pardee, Commissioner of Crown Lands for Ontario, proposes to set apart for a provincial park and perpetual forest 330,000 acres of land and 60,000 acres of water. The declared object is "to set aside a forest reserve principally for the preservation and maintenance of the natural forest," and to protect "the head waters and tributaries of the Muskoka, Petewawa, Bonnechere and Madawaska rivers, wherein it shall be unlawful for any person to enter and cut timber for any private use, or disturb or destroy the fur-bearing animals." In this forest the wild animals are expected to be tamed and domesticated "to some extent, for use and profit." The preservation of these four streams in undiminished volume is pointed out as important to manufacturers. The lands which it is proposed to reserve have already been surveyed and comprise the townships of Coningsby, McLoughlan, Bishop, Freswick, Bower, the township south of Bower and east of Coningsby, Peck, the east part of Hunter and the southwest quarter of the township east of Bower. Here, within reasonable distance of civilization, Mr. Kirkwood proposes to establish "a national forest and park," to which he gives the name of "The Algonkin Forest and Park."

As the lands have been surveyed, full particulars of the character of the region is in possession of the government. The proposed selection, it may be taken for granted, contains much picturesque scenery, and would be found to be appropriate for the purposes designated as well as being easy of access. The lands are almost due north of Toronto, at a distance of about one hundred and fifty miles. A park formed there would be more central than one, for which a good site could easily be found, north of Lake Huron or Superior. A similar reservation might possibly follow north of one of these lakes, in course of time.

The proposal is one which will, we think recommend itself to public approbation, even in this money making age. Indeed, it is based chiefly on economic grounds. In carrying out the details some difficulties would be met. It would be hard to prevent the stealing of timber and harder still, perhaps impossible, to prevent the hunting of wild animals. Still, enough could be done to ensure the preservation of deer, which will otherwise dissappear before long. But in the perpetual forest would be the greatest value of the park. The timber harvest could be gathered as it matured, and the young trees left to attain the size that might be made the standard below which none should be cut. Precautions would have to be taken against the ravages of fire, to which the park would be specially liable from the numerous camp fires that would enliven its gloom.

One of the four rivers which have their sources within the limits of the proposed park, the Muskoka, flows into the Georgian Bay; the three others, the Petewawa, Bonnechere and Madawaska, empty into the Ottawa. The sources are near together; two of them, Island Lake, which starts the Muskoka, and Otter Slide Lake, the head of the Petewawa, are not half a mile apart. The height of each is over fourteen hundred feet (1,405 85-100) above the sea level.

Fish abounds in the waters, which include the great Opeongo lake. Here the momentary idler, snatching a short repose from exhausting business and toil, could amuse himself with fishing in the assurance that he would meet with fair success. The preservation of this forest would undoubtedly have an important influence on the rain-fall; its destruction would lessen precipitation and decrease the volume of the rivers.

As the author of the pamphlet is on the staff of the Crown Lands department, its publication is probably intended to feel the public pulse on the proposals made. The response can scarcely fail to be favorable. In any case an expression of public opinion will be evoked, and it will be useful as a guide to the government in making or refusing to make the proposal official.

The same kind of duty the Federal Government is going to perform, on a scale befitting the whole Dominion, amid the enchanting scenery of the Rocky Mountains, where nature displays herself on a colossal scale. The site of the new national park of the Dominion, now understood to be under survey, is in the neighborhood of Banff, on the Canadian Pacific. The prime condition of accessibility will therefore be secured. The two projects will, in some measure, mutually support one another; for, though each will be sustained on its own special grounds, the prime element of the national park is common to both.

NEW YORK LUMBER AUCTIONS.

Some time ago an institution was started in New York which had for its object the trial of a new plan of selling lumber—the auction method. The scheme appeared to flourish for a time, and the semi-monthly sales came to be looked upon in some quarters as noteworthy features of the market. A notice, however, lately sent out from this concern, by which its clients and customers were advised that the regular sales would be discontinued, and occasional sales substituted. The stock on hand being meanwhile advertised at private sale, would apparently indicate that the business done did not result satisfactorily. *The Timberman* of Chicago has heard rumours, heretofore, to the effect that the auction plan did not give entire satisfaction, at least to shippers. This may not be the reason the business has fallen into a decline, though it appears possible that such might be the case. Whatever may have been the direct cause of the failure of the scheme, its abandonment is not likely to prove a great detriment to the lumber business. Forced sales are not likely to lead to good results in any line of trade. They do not tend to a stable condition of values, nor to a generally satisfactory outcome for the owner of the property sold. When it is necessary to force goods upon the market, or for any reason a public sale is required, the auctioneer is a proper person to be employed, but in ordinary transactions, arising out of the natural course of business, the less resort that is had to the vicious and uncertain methods of which he stands as the representative, the better for all concerned. It may do very well for kinds of merchandise which are liable to a rapid depreciation unless promptly marketed; for such goods an auction mart, where they may be quickly got off at some price whenever they begin to show signs of slow sale in the regular way, may be the very thing. But lumber is an article of a different character. It is as staple as the stuff of which coins are minted. If it is not sold to-day, it will be no less in style, and no less valuable, intrinsically, to-morrow or next month or next year. There is no apparent necessity in this case for undue haste in selling, except when the holder is for some cause obliged to realize, and there are hardly enough of these to support a special auction for their accommodation. The result of the experiment referred to proves this, if nothing more.

NEW BRUNSWICK TIMBERS.

An endeavour is being made to introduce birch and maple staves into this country. The staves of this wood from New Brunswick are said to be highly suitable for vinegar casks, and Mr. H. F. Coombs, of St. John who is now over here, has a sample case made of these staves on view at his stall in the machinery court, Canadian section of the Colonial Exhibition. The casks of birch and maple are being used now by local dealers in Canada for the purpose mentioned, and are taking the place of oak, on account of their cheapness. The sample staves we inspected appeared to be every way suited for vinegar casks, the wood is close-grained and free from knots, besides being pliable and tough. We understand that this wood can be put on the market here in its converted state, at a much less price than oak. To those looking for cheap casks we recommend a visit to Mr. Coombs' stall, where they can inspect for themselves a sample vinegar cask of New Brunswick birch.

We also inspected some washtubs at Mr. Coombs' stall of New Brunswick cedar, which struck us as being a very useful wood to have over here. There is said to be any quantity available for shipment at Miramichi as well as St. John. A special tract composed of cedar has been opened by the Northern and Western Railway of Canada, constructed by Mr. Alexander Gibson, of Maryville, and Mr. J. P. Snowball, of Chatham. This wood is said to be practically indestructible, and is used for fence-posts and foundation timber, besides telegraph poles and railway sleepers. It is surprising that wood bearing all these attributes should have been so overlooked by consumers here.

Mr. Gibson has a very fine exhibit of this cedar in the ground near the agricultural trophy in the Canadian court, in the shape of shingles, and there seems to be no use to which it cannot be applied. For racing boats its extreme lightness makes it especially suitable, and some highly finished sailing canoes of this material are on view. Whilst speaking of Canadian wood products it may be interesting to mention the a peculiar feature of the forest growth throughout the Dominion, and very likely in other countries as well, is that timber lands burnt over, which prior to the destruction yielded hard woods, have regrown pine and *vice versa*. Our forest friend might give us some useful information on this point.—*Timber Trade Journal.*

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A. G. MORTIMER, Publisher,
Peterborough, Ont.

Perhaps the most extraordinary that success has been achieved in modern science has been attained by the Dixon treatment for Catarrh. Out of 2,000 patients treated during the past six months, fully ninety per cent. have been cured of this stubborn malady. This is none the less startling when it is remembered that not five per cent. of the patients presenting themselves to the regular practitioner are benefitted, while the patent medicines and other advertised cures never record a cure at all. Starting with the claim now generally believed by the most scientific men that the disease is due to the presence of living parasites in the tissues, Mr. Dixon at once adapted his cure to their extermination; this accomplished the Catarrh is pratically cured, and the permanency is unquestioned, as cures effected by him four years ago cures still. No one else has ever attempted to cure Catarrh in this manner, and no other treatment has ever cured Catarrh. The application of the remedy is simple and can be done at home, and the present season of the year is the most favorable for a speedy and permanent cure, the majority of cases being cured at one treatment. Sufferers should correspond with Messrs. A. H. DIXON & SON, 305 King street west, Toronto, Canada, and enclose a stamp for their treatise on Catarrh.—*Montreal Star.*

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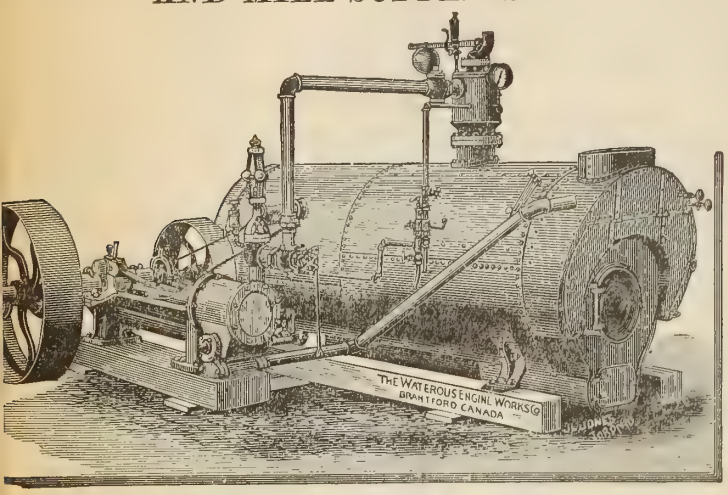

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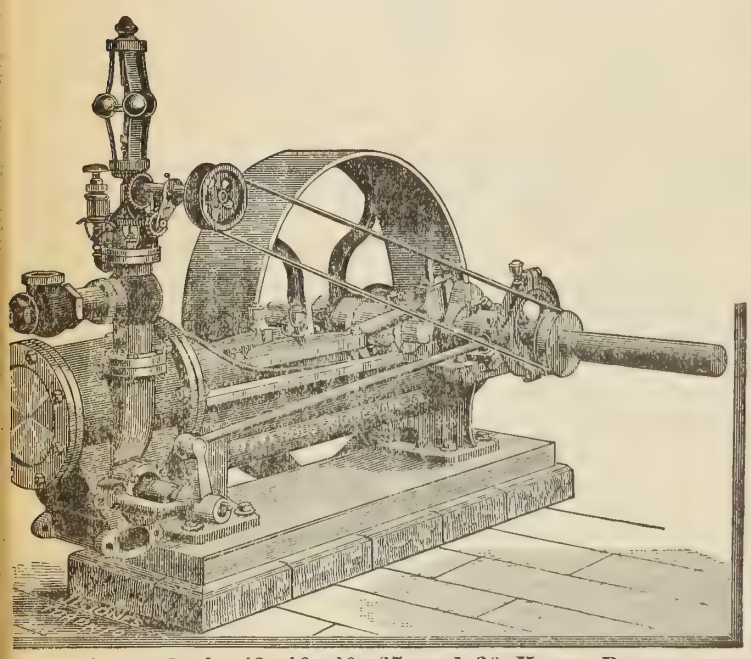

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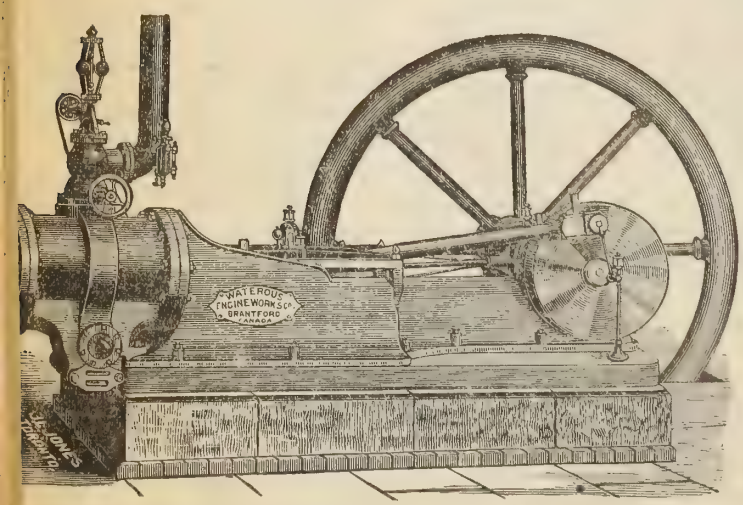

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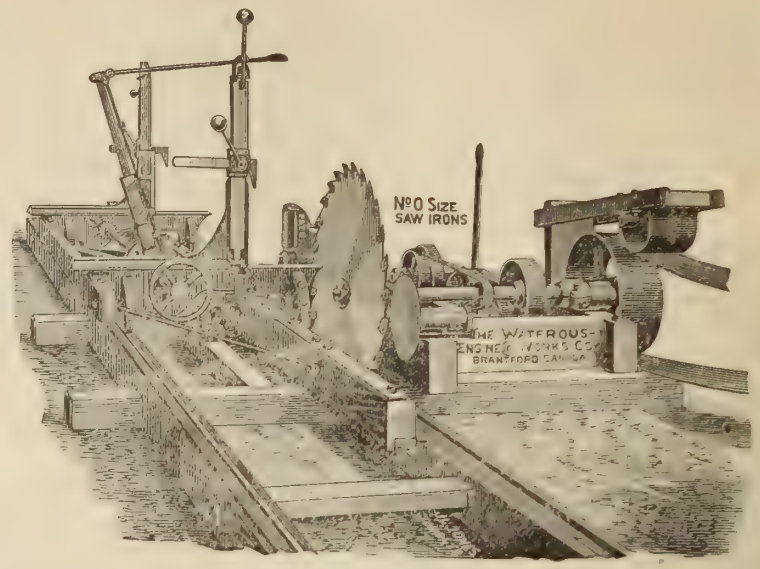

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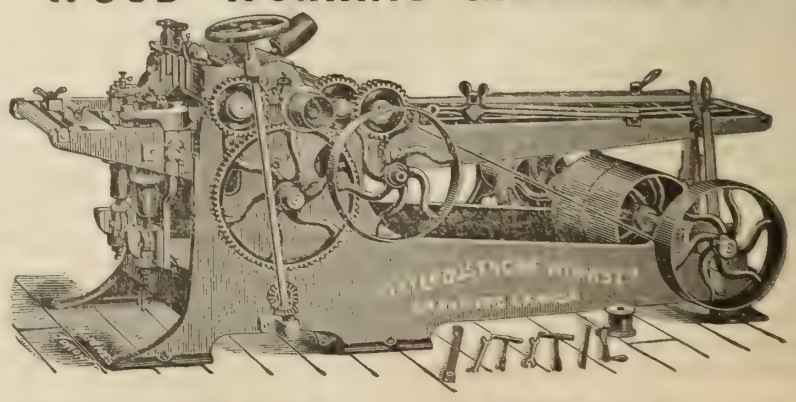

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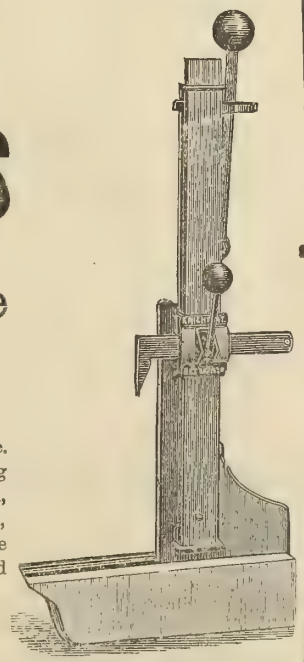

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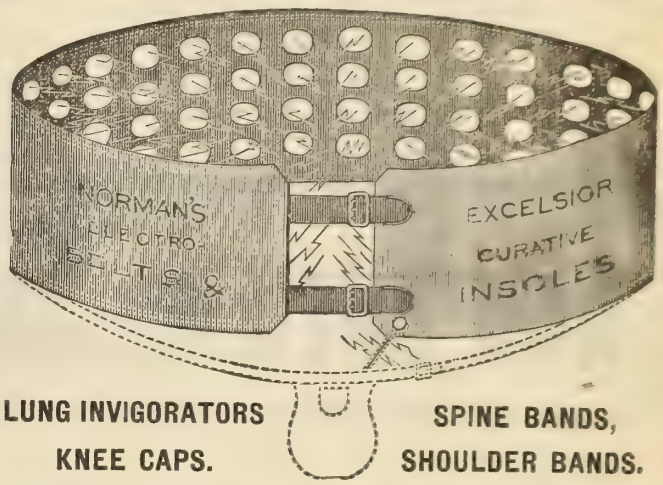

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W. SMITH, Manager.

TIMBER SALE.

THE TIMBER on certain lots in the townships of Eastnor, Lindsay, St. Edmund, Albemarle, and Amabel, in the County of Bruce, and Keppel, in the County of Grey, in the Province of Ontario, will be offered for sale at Public Auction in blocks of 200 acres more or less, on the 12th day of October next, at ten o'clock a.m., at the Indian Land Office, in the Village of Wiarton.

Terms of Sale to be: A Bonus payable in cash, a License Fee also payable in cash, and dues to be paid according to Tariff upon the Timber when cut.

The purchasers of timber to have the option of purchasing, without any conditions as to settlement, the land on which it grows, at a price to be determined by the Department, and to be made known at the time of sale, and to be paid one-third down and the balance in two equal consecutive annual installments, with interest at six per cent.

For full particulars please app'y to Wm. Simpson, Esq., Indian Land Agent, Wiarton, or to the Department of Indian Affairs, Ottawa

No other paper to insert this advertisement without authority through the Queen's Printer,

L. VANKOUGHNET,
Deputy of the Supt. General of Indian Affairs.

DEPARTMENT OF INDIAN AFFAIRS,
Ottawa, 30th August, 1886.

Notice to Contractors.

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for Breakwater, Port Arthur," will be received until FRIDAY, the 8th day of October next, inclusively, for the construction of a further length of

BREAKWATER

AT

PORT ARTHUR,

THUNDER BAY,

according to a plan and specification to be seen on application to Mr. W. F. Davidson, Harbour Master, Port Arthur, and at the Department of Public Works, Ottawa, where printed forms of tender can be obtained.

Persons desirous of tendering are requested to make personal enquiry relative to the work to be done, and to examine the locality themselves and are notified that tenders will not be considered unless made on the printed forms supplied, the blanks properly filled in, and signed with their actual signatures.

Each tender must be accompanied by an *accepted* bank cheque made payable to the order of the Honorable the Minister of Public Works, *equal to five per cent.* of the amount of the tender, which will be forfeited if the party decline to enter into a contract when called upon to do so, or if he fail to complete the work contracted for. If the tender be not accepted the cheque will be returned.

The Department does not bind itself to accept the lowest or any tender.

By order,
A. GOBEIL,
Secretary.

Department of Public Works,
Ottawa, 10th September, 1886.

Wrought Iron Shanty Cook Stoves

The Best Article ever offered to the Trade.

I have much pleasure in drawing attention to my **WROUGHT IRON COOKING STOVE**, for Shanty, Hotel and Boarding House use. These Stoves are made of Heavy Sheet Iron, the top and lining of the fire-box being of Heavy Cast Metal and all the connecting parts of substantial Wrought Iron Work. The dimensions of these Stoves are as follows:

Top surface contains six 10-inch holes, fire box 28 inches long, and one oven 19x34x23.

The Best Stove I have ever Used.

PETERBOROUGH, May 31, 1880.

ADAM HALL, Esq., Peterborough. Dear Sir,—I have used your Wrought Iron Cooking Stove in our lumbering operations since its introduction here, and have no hesitation in saying that I prefer it to any other. For durability, economy and efficiency, where a large number of men are employed, it is the best stove I have ever used. You can, with confidence, offer it to hotels, boarding houses and lumbermen.

Yours truly, THOS. GEO. HAZLITT.

The Stove for Lumbermen.

PETERBOROUGH, June 3rd, 1880.

ADAM HALL, Esq., Peterborough. My Dear Sir,—We have used your Wrought Iron Cooking Stove and find it is very satisfactory for lumber operations, especially so on drives. We can recommend it highly.

Yours truly, J. M. IRWIN.

Gives the Greatest Satisfaction.

PETERBOROUGH, June 3rd, 1880.

A. HALL, Peterborough. Dear Sir,—I have had the Wrought Iron Cooking Stove, purchased from you, in constant use ever since last fall, and it gives the greatest satisfaction in every respect. I can recommend them highly to any one who is in the lumber business. Very truly yours, GEO. HILLIARD, M. P.

EVERY STOVE GUARANTEED

All the necessary TINWARE and CUTLERY for Shanties supplied at the Lowest Prices.

ADAM HALL, Peterborough, Ont.

FOR SALE

FOR ACCOUNT OF THE

Joseph Hall Machine Works

OSHAWA,

White Oak, Soft Maple Hard Maple, Basswood, Lignum-Vitæ, Hickory, Mahogany.

HEMATITE PIG IRON.

LEFFEL WATER WHEELS

All sizes from 5¾ to 96 inches.

GORDEN PRINTING PRESSES,

Nos. 1 and 2.

DOUGHERTY SHINGLE MACHINES,
THE RUBICON TRACTION ENGINE—10 HORSE POWER,
"THE BEST"
OSHAWA 12 HORSE POWER PORTABLE ENGINES.

JOHN LIVINGSTON,
TRUSTEE.

THE

Gutta Percha & Rubber Mfg. Co'y

T. McILROY, Jr., Manager,

MAIN OFFICES and WAREHOUSE at the Factories, 135 to 155 West Lodge Avenue, P. O. Box 494. **TORONTO**

The largest Manufacturers in the world of Vulcanized India Rubber Goods for mechanical purposes.

Rubber Belting from ONE to SEVENTY-TWO inches wide. ***Hose,*** for conducting, suction and steam. ***Packing,*** Cloth Insertion and pure ***Tubing*** of all kinds. ***Rubber, Linen and Cotton Fire Hose. Leather Belting,*** Extra heavy American Oak Tanned.

A Full Stock always on hand. Write for Price Lists and Discounts.

Works also at NEW YORK and SAN FRANCISCO.

THE TANITE COMPANY

STROUDSBURG,

MONROE COUNTY, PENNSYLVANIA, U. S.

MANUFACTURERS OF

Solid EMERY WHEELS

AND SHARPENING MACHINERY.

The products of the Manufacture of the Tanite Company have, for almost 18 years, enjoyed a great reputation, and have been recognized for a long while, in all the countries of the world as a type of excellence in this class of work. In order to increase in Canada their already widely extended use, the Co'y has recently added to the liberality of its terms and conditions, and has chosen the following Houses, so extensively known, to be its Agents:

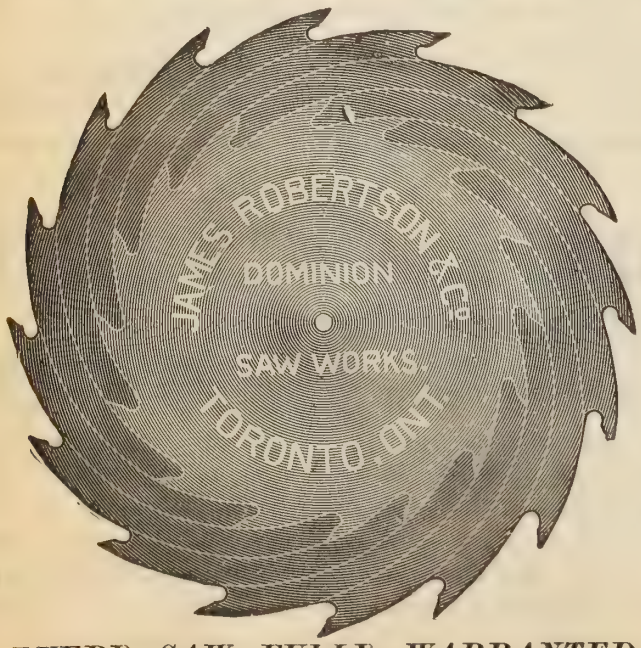
BEAUDET & CHINIC } QUEBEC.
F. H. ANDREWS & SON }
A. R. WILLIAMS, . . TORONTO.

MONTREAL SAW WORKS . . . .
MACHINERY SUPPLY ASSOCIATION } MONTREAL
R. H. BUCHANAN & CO. . . . . }

Dominion Saw Works!

JAMES ROBERTSON & CO.

253 to 267 KING ST. EAST, TORONTO, ONT.



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Prices on Application.

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Circular, Shingle, Gang, Cross Cut,
Concave, Mulay, Drag, Grooving.

THURBERS ROYAL

Anti-Friction Babbit Metal

IMPORTERS AND DEALERS IN

Band Saws, Emery Wheels, Files,
Saw Swages, Rubber Belting, Saw Sets,
Saw Gummers, Leather Belting, Iron Pipe, &c.

THE CANADA LUMBERMAN

AND MILLERS' MANUFACTURERS AND MINERS GAZETTE

PUBLISHED MONTHLY By A. G. MORTIMER.

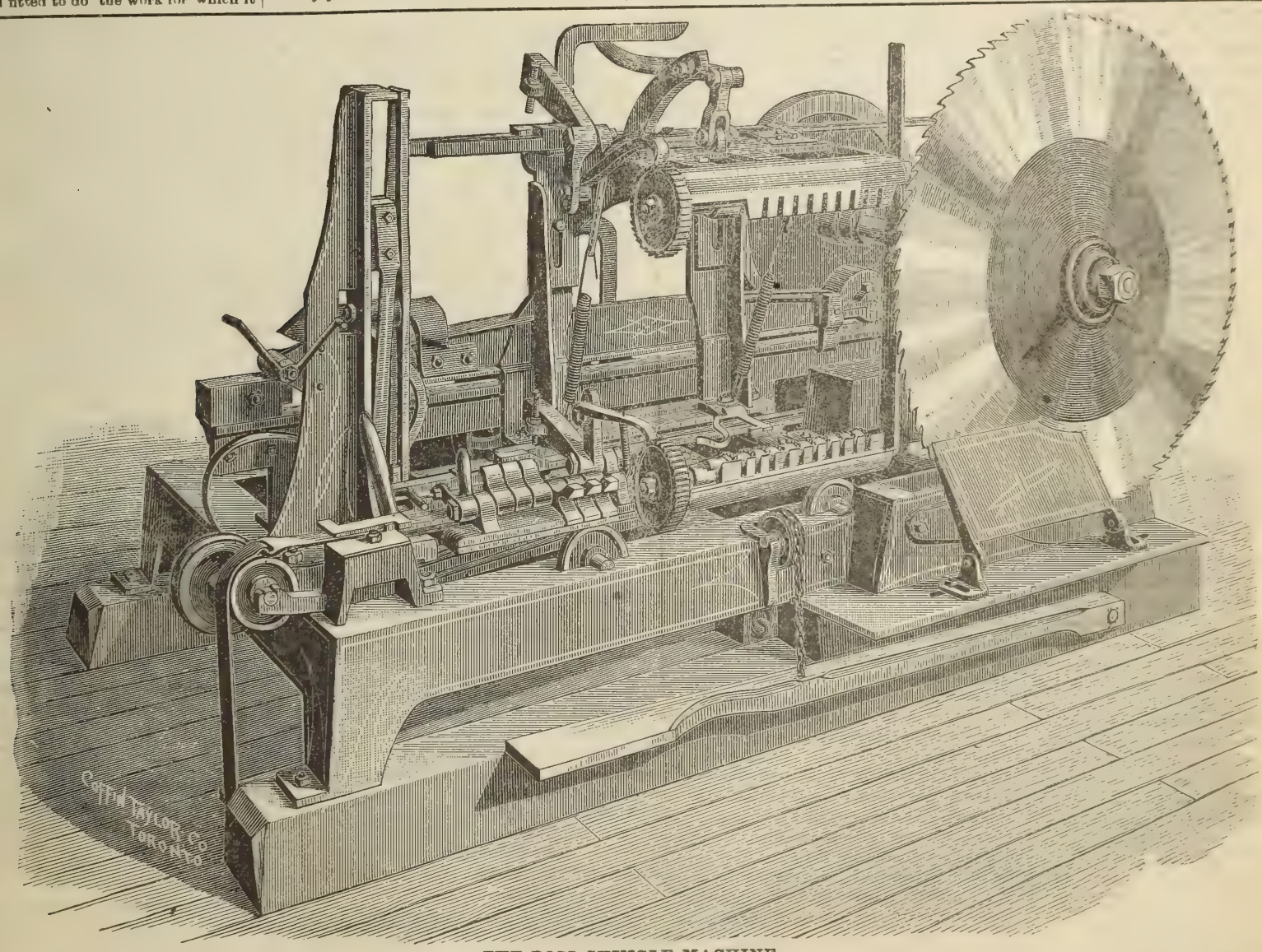
The only Newspaper devoted to the Lumber and Woodworking Industries of the Dominion.

SUBSCRIPTION $1.00 PER ANNUM

VOL. 6. PETERBOROUGH, ONT., NOVEMBER, 1886. NO. 20.

THE "BOSS" SHINGLE MACHINE.

It has very rarely occurred in the manufacture of machinery, for specific or particular work, that the inventor has been able at one step to produce a machine simple and complete in all its parts, and fitted to do the work for which it was designed in a first-class manner. On the other hand, it is the experience of inventors and users of machinery, that by slow processes of development and minor improvements from time to time, crude and imperfect machines have been brought to such a state of mechanical perfection as to far exceed their most sanguine expectations. With the machine that we herewith illustrate (which is the invention of Mr. Isaac M. House, of Gravenhurst) this latter thought is especially true. Mr. House has been engaged in the perfecting of machinery for the manufacture of shingles and lath for the last twenty years. He has at least four patents for shingle machines in the Canadian patent office, each of which is a marked improvement over its predecessor, but it was only within the last year that Mr. House was able to produce a machine which he believes will fully please every manufacturer. His machine has a number of excellent points about it. It is automatic in its operation, and thoroughly under the control of the sawyer. Buts or tips can be cut continously at either end of the block, at the pleasure of the operator, thus enabling the sawyer to take the best shingles possible out of the material. Another very important improvement is in connection with the feed carriage, which travels at a fast rate of speed for narrow shingles, and at a slow rate of speed for wide shingles or heavy cuts; there is no jar about the carriage when reversing and the top jaw is raised by a foot lever instead of by hand, thus leaving the operator with both hands free to arrange or handle the block. The whole machine appears to be very simple and complete in all its parts and perations—strong and durable and not likely to get out of order. Its capacity is from 25 to 50 M. of shingles per day, according to the quality of the material and the speed at which the machine is run. We understand that these machines are already attaining quite a popularity and in some cases are displacing automatic machines of less modern design.



THE BOSS SHINGLE MACHINE.

Mr. A. R. Williams, of the Soho Machine Works, Toronto, controls the patents for Canada and the United States.

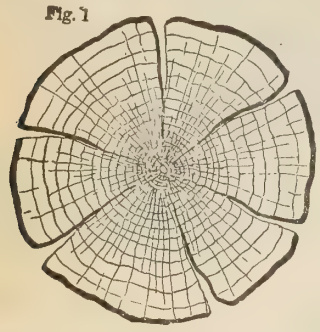
MONTREAL papers are agitating for a graving dock for that city.

HOW LUMBER SHRINKS.

A story is told by the "Arkansaw Traveller," about the manner in which lumber was "hauled" across the mountains down in his country. "Why!" said he, "they saw it green, leave it in the sun, and off it starts. I have seen a board turn three summersaults in less than a minute, and get to the other side of the mountain before sunset." "What," asked a bystander, "would be the result if it was attacked in its wild career by a shower of rain, would it come back?" Here was a poser, but the traveller was equal to the occasion and replied: "No, it would turn on the other side and continue its course."

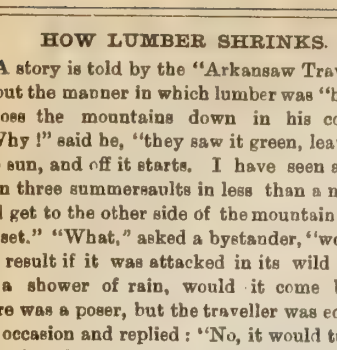
The subject of the contraction of lumber is an interesting one to wood-workers, and the doors

Fig. 1



and shutters in many of our mushroom cities are said to come off the hinges in retalation of the persistent disobedience of the natural law of shrinkage. An examination of the end of an oak or beech tree will show the arrangement of its structure. It consists of a mass of longitudinal fibrous tubes, arranged in irregular circles that are bound together by means of radial strings or shoots, which have been variously named; they are the "silver grains" of the carpenter, or the "medullary rays" of the botanist, and are in reality, the same as end wood, and have to be considered as such, just as much as the longitudinal woody fibre, in order to understand its action. From this it will be seen that the lateral contraction or collapsing of the ongitudinal, porous, or tubular part of the

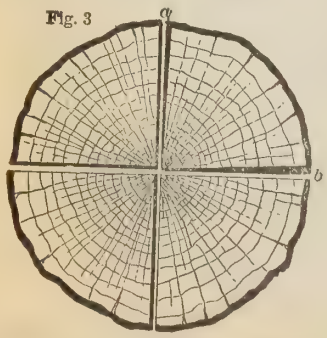
Fig. 2



structure, cannot take place without first crushing the medullary rays, hence the effect of the shrinking finds relief by splitting in another direction, namely in radical lines from the centre, parallel with the medullary rays, thereby enabling the tree to maintain its full diameter, a shown in Fig 1.

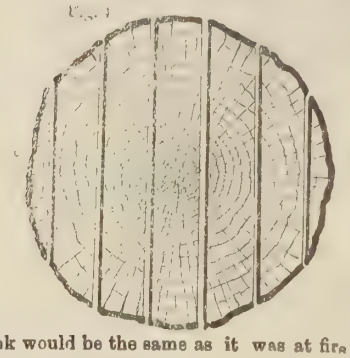
If the entire tubular fibre composing the tree were to contract bodily, then the medullary rays would of necessity have to be crushed in the radial direction to enable it to take place, and the timber would thus be as much injured in proportion as would be the case in crushing the wood in the longitudinal direction. If such an oak or beech tree is cut into four quarters, by passing the saw twice through the centre at right angles, before the contracting and splitting

Fig. 3



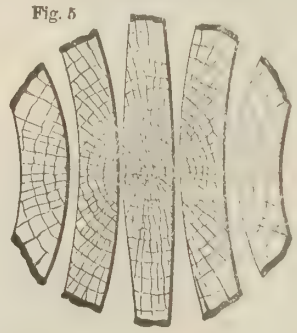
have commenced, the lines *a c*, and *c b*, in Fig 2 would be of the same length, and at right angles to each other, or in the technical language of the workshop, they would be square, but, after being stored in a dry place, say for a year, it would then be seen that a great change had taken place both in the form, and in some of the dimensions; the lines *c a*, *cb*, would be the same length as before but it would have contracted from *a* to *b* very considerably, and the two *c a*, and *c b*, would not be at right angles to each other by the portion here shown in black in Fig. 3. The medullary rays are thus brought closer by the collapsing of the vertical fibre.

But supposing that six parallel saw cuts are passed through the tree so as to form it into seven planks, as shown in Fig. 4, let us see what would be the behavior of the several planks. Take the centre plank first. After due seasoning and contracting, it would then be found that the middle of the board will still retain the original thickness, from the resistance of the medullary rays, while it will be gradually reduced in thickness toward the edges for the want of support, and the entire breadth of the



plank would be the same as it was at first, for the foregoing reasons, and as shown in Fig. 5. Then, taking the planks at each side of the center, by the same law their change and behavior would be quite different; they would still retain their original thickness at the centre, but would be a little reduced on each edge throughout, but the side next to the heart of the tree would be the reverse, or hollow, and the plank would be considerably narrower throughout its entire length, more especially on the face of the hollow side, all due to the want of support. Selecting the next two planks, they would be found to have lost none of their thickness at the centre, and very little of their thickness at the edges, but very much of their breadth as planks, and would be curved round on the heart

Fig. 5

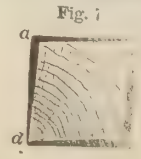


side, and made hollow on the outside.

Supposing some of these planks to be cut up into squares when in the green state, the shape that these squares would assume, after a period of seasoning, would entirely depend on the part of the tree to which they belonged; the greatest alteration would be parallel with the medullary rays. Thus if the square was near the outside the effect would be as shown in Fig. 6, namely, to contract in the direction from *a* to *b* and after a year or two it would be thus, as Fig. 7, the distance between *c* and *a* being nearly the same as they were before, but the other two are brought by the amount of the contraction closer together. By understanding this natural law, it is comparatively easy to know the future behavior of a board or plank by carefully exam-

Fig. 6

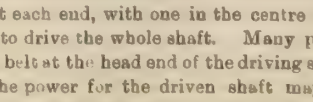
Fig. 7



ining the end of the wood, in order to ascertain the part of the log from which it has been cut as the angle of the ring grows and the medullary rays will show as in Fig. 8.

A plank that has it will evidently show to ave been cut from the outside, and for many years it will gradually shrink all to the breadth. While the next plank shown in Fig. 9, clearly points to the centre or heart of the tree, where it will not shrink to the breadth, but to the varying thickness with the full dimensions in the middle, but tapering to the edges, and the planks on the right and left will give a mean, but with the centre sides curved round, and the outside still more hollow. These remarks apply more especially to the stronger exogenous wood, such as beech, oak, and the stronger firs. The softer woods, such as yellow pine, are governed by the same law, but in virtue of their softness another law comes into force, which to some degree effects their behaviour, as the contracting power of the tubular wood has sufficient strength to crush the softer medullary rays to some extent, and hence the primary law is so far modified. But even with the softer woods, such as are commonly used in the construction of houses, if the law is carefully obeyed, the greater part of the shrinking, which we are all too familiar with, would be obviated, as the following anecdote will serve to show: It was resolved to build four houses, all of the best class, but one of the four to be pre-eminently good, as the future residence of the proprietor. The timber was purchased for the entire lot, and the best portions were selected for house No. 1, but by one who did not know the law, and to make certain of success this portion of the wood had an extra twelve months' seasoning after it was cut up. The remainder of the wood was then handed over to a contractor for the other three houses, who had an intelligent young foreman, who knew the structure of wood as well as how to obey the law, and who, therefore, had the

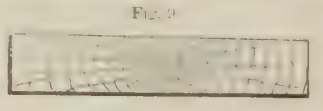
Fig. 8



wood for the three houses cut up in accordance therewith. The fourth house was built the following year by another man; but long before ten years had passed to the great surprise and annoyance of the proprietor it was found that his extra good house had gone in the usual manner, while the other three houses were without a shrinkage from top to bottom.

A similar want of correct knowledge of the natural figure and properties of the structure of wood, such as the oak, is constantly shown by the imperfect painting to resemble that wood, as exhibited on doors and shutters of many houses. If we cannot afford to have genuine wainscot doors as in France and other countries, but yet desire

Fig. 9



to have an imitation, it would surely be worth the trouble to have a block cut from the quarter of an oak tree, and to have each of its six sides planed and polished, in order to make plain their several features. The house painter would then see who nature really is, and thus save us from the ridicule of other nations, when we mix up "silver grains" and all the other natural features upon one side of a board or panel. This is a subject that should interest all wood-workers and builders and a great deal of attention should be given to the structure of the various woods. It is almost as necessary for a wood-worker to understand the anatomy of his tree, so to speak as a surgeon to understand the anatomy before he commences to operate. The importance of the subject is therefore obvious.

SUPPORTING THE SLACK SIDE OF AN OPEN BELT.

One of the simplest problems in belting is to make use of the open belt in connecting one line of shaft with another, yet how greatly mill men differ in this respect. One must have a belt at each end, with one in the centre large enough to drive the whole shaft. Many prefer a single belt at the head end of the driving shaft, where the power for the driven shaft may be taken at once without creating an extra loss of transmitting power any further than need be. And there are others who admire the idea of having the power for the farthest extremity pass down the driving shaft across to the other on a belt, where the slack on the under side will hang down in front of a doorway, and then back again very nearly opposite from where it started. Rope belts and bevel gears still take an interest in this problem and friction wheels in special cases are still recommended. A stiff connecting rod, with slip-bearing in the centre, has been patented in a number of forms for this very purpose, and the three tie connecting rods made from wire rope will work very well where the shafts extend in opposite directions from the wheels that must have three equidistant crank pins, and all for the purpose of accomplishing what an open belt will do to a nicety if the belts are anywhere near perfect. There is nothing that will cause a belt to switch and thrash so well as to lace in a piece of old belting that is of an entirely different grade of material, and yet how quietly they travel when every portion of the belt is similar throughout. When the shafts are supported on the same level, it is no doubt desirable to bring the slack side on the upper fold where the sagging of the belt will have a tendency to increase the hold on the pulleys, but mill men do not always have their choice in the direction that an extra line of shafting is to run, and where the distance is very great a supporting wheel must be called into play to help the slack side from sagging down into the way of the machinery. The shafts are up in the loft of the building where glass cutting and grinding is carried on, and the upper fold has none too much room to pass from one pulley to the other. In this method the three-quarter twist is made use of, which allows the lower stretch to be carried as much above the tight side as it would be desirable to have it below, which gives the belt all the advantage found in a crossed belt. The tight side comes perfectly flat in the centre of the fold where it is in need of all the room there is to spare. If the belt is inclined to brush together much in the crossing, the supporting wheel can be placed to favor it in this respect the same as in every case where three wheels enter into the system for a belt to travel in one direction and still retain sufficient lead in the pully to hold the belt in place while running in the opposite direction.—*Boston Journal of Commerce.*

LABOR SAVING MACHINERY.

Discussing a question which it is not easy to keep down, especially in times of labor agitation and discontent, the Washington *Post* says: "Every labor-saving machine is also a laborer-saving machine. It works for far less than men can, and yet, curiously enough, it oppresses nobody, and robs nobody of wages. On the contrary, it increases wages.

"When George Stevenson, fifty years ago, flung his railway track from Liverpool to Manchester, and whisked a train across it at twenty five miles an hour, all the stage companies held indignation meetings. When the Central Railroad crept up to Rochester, N. Y., farmers met and mobbed the 'new-fangled contrivance,' and drove off the workmen, on the ground that if it should succeed, 'horses wouldn't be worth $10 apiece.' What was the result? Horses that were worth $50 apiece before, readily sold for $100 as soon as the road was finished.

"When Patrick Bell set his reaper into an English wheat field, the excited sickle-reapers broke over the hedge, and captured and burnt up the machine. But those who lived ten years saw it was a blessing to all. The threshing-machine does the work of seventy men; the mowing-machine, tedder, horse-rake, horse-fork and portable engine, in agriculture, are almost equally as effective; yet the wages of farm hands have doubled since these auxiliaries were invented, and were never so high as now.

"Is the sewing-machine, which does the work of twenty women, a disadvantage to seamstresses? Of course not; for their wages are a great deal higher now than they were before.

"Is the automatic boom a disadvantage? No; the number of employed is proportionately less, but their wages are higher, and all the other works in the world are tremendously benefitted by the increased cheapness of fabrics.

"Does the gang-saw rob the lumberman who used to split out boards with wedges? No; for it has enabled men to live in houses, who before dwelt in shanties of bark or in cabins of mud. The workingman is the chief consumer of the oducts of work."

ADVERTISEMENTS.

Those wishing to **BUY** or **SELL TIMBER LANDS, LUMBER** or **SECOND HAND MACHINERY** will find THE CANADIAN LUMBERMAN an excellent medium in which to make known their wants. Advertisements, of this character will be inserted at the low rate of **1 CENT A WORD**, cash to accompany the order in every case. Address.

A. G. MORTIMER, Publisher,
Peterborough, Ont.

General News Notes.

LUMBERING is said to be booming at Baysville, Ont.

THE Ottawa mills are now nearly finished sawing.

THE *Echo* is agitating for a port of entry at Fort William.

THE Essex Centre Manufacturing Co. have sold out their extensive saw mill to T. H. Decew.

IN the turtle mountain district of the northwest $1 000,000 worth of timber has been destroyed by fire.

EDWARD SWALES, of Midland, had his hand badly cut by a drag saw falling on it at Chew's Mill recently.

THE *Armenia* was recently loaded at Deseronto, with a cargo of lumber for a life saving station which is to be established at Smith's Bay.

AN exchange asks: "What has become of the straw lumber which three or four years ago we were told would revolutionize the lumber business?"

MR. A. C. Manzor. of Burk's Falls, is running the Spring Valley Saw Mill to its full capacity on local trade and cannot supply the demand, the call for lumber for local purposes being so great.

THE mills of Messrs. Grier & Co., at the Chaudiere, shut down Thursday for the season. They have lately been employed cutting dimension timber for the erection of a new and more capacious saw mill.

SINCE January 1st there has been added to the wood-working industries of the South about 250 lumber mills, or an average of one and half new lumber mills per day. Within the same time over $60,000,000 has been invested in productive establishments of various kinds.

A READER of the Kingston *Whig*, says that during the time the dockyard was in operation, there was any quantity of oak timber in Navy bay, and that some must be sunken under water in the mud. Some of it was recovered many years ago, but plenty of it he says must remain.

THE *Observer* says, the steamer Sir John Young, owned by the Upper Ottawa Towing Company, and heretofore plying on Lower Allumette and Coulonge Lake, has been condemned and broken up. Her machinery has been taken out and brought to Pembroke, where it will be placed in a new hull to be built this fall and winter.

THE Chaudiere during the last heavy rains rose some 30 inches, and some 20,000 to 30,000 logs were driven nearer the mills; it however, fell very rapidly again, and it is far from certain whether even that small proportion of the logs stuck will be driven to the mills in time to cut up this fall.

IT is now a very serious question with the Chaudiere owners of logs whether they will be able to drive the logs this fall, and get them into a safe place to winter them before the ice comes on, in which case it would be a heavy loss as the freshets in the spring would carry all the logs into the St. Lawrence.

THE Chaudiere mills are all running at full speed at present. Logs are getting scarce in some of the mill ponds. Mr. E. B. Eddy, intends to run his saw mill until the closing of navigation. Messrs. Perley & Pattee, J. R. Booth, Hurdman & Co. will probably close about the end of this month.

THERE has been a great flood in Muskoka by the bursting of Osborne's mill dam on the Little East Muskoka river. Four bridges were swept away in Cheffey, and the N. & P. J. Railway iron bridge across the Little East River greatly damaged. Much damage has been done, and will take some time to repair it.

A despatch from St. Paul under date of Oct. 20th says:—A great fire is raging in the Turtle mountain district. Over 200 square miles of the prairie and timber land have been burned. Thousands of tons of hay have been destroyed with a large number of houses, barns and crops and all kinds of stock. Many of the settlers have lost all there possessions. Losses $1,000,000.

A CORRESPONDENT to the Bobcaygeon *Independent*, writing from Haliburton says: "There is more lumbering this year than last. A firm has started shanties out eastward in Harcourt, and all supplies come this way by railway, and are sent in by team. We shall do a good business this season in lumber, and there will be plenty of market for farm produce.

Archibald McArthur, near Madoc, Ont., has raised a good saw mill on the Mississippi Branch on the site of the old mill which was burned two years ago. The new mill is one hundred feet long, three storeys high, and will contain apartments for wool carding. Mr. McArthur intends to build in future a grist mill, and a mill for manufacturing cloth.

THE sailing barge *Bentley* which left Parry Sound, Thursday, Oct. 14th, with 500,000 feet of Lumber was caught in a big storm on Thursday night. She lost a portion of her deck load off Red Rock Light-House but managed to run across the Georgian Bay to Cabot's Head when the wind shifted and drove her ashore. She is thought to be a total wreck; the crew were all saved. Two other vessels are also ashore at Cabot's Head.

THE Saunders & McPherson Saw Mill at Burk's Falls is running from daylight to dark on the Ontario Lumber Company contract, and cannot as yet cut for the local trade. This firm has been making important improvements—having cribbed along the edge of the mill pond to the Government Road, and are filling and levelling up, thereby adding a large extent of piling ground. They are paying out from $20 to $25 per day for labor, and this is expected to last until the close of the season.

A correspondent writing to the Pembroke *Observer* says:—"Just to ease my mind, I drove up to Messrs. Booth & Gordon's shanty on the Indian River, where Mr. James Carmichael was improving. I witnessed some of the biggest work, done by him in twenty-four days, with seven men and one span of horses, three dams and three slides, one dam 400 feet long, 12 feet high, the slide being 307 feet long, the other 198 feet long, 14 feet high. The slide was 208 feet long. The other dam was 50 feet long, 21 feet high. The slide was 64 feet long. I think it is about the biggest work that has been done on that or any other stream since the first dam was built in Canada.

PREPARATIONS are in progress for the erection of a large building in connection with the car works and shipyard department of the Rathbun Company, Deseronto. The new structure will be 110x36 feet, and 14 ft post. It will contain a large dimension planer for dressing car sills and long plank and timber; also a circular edger for cutting up refuse and edging long stuff. The ship-frame saw will also be transferred to it and a railway track will run through its whole length to carry stuff to and from the shops. The machinery in the old shipyard shed will be regulated to suit the new machinery. The old shed will be used for mortising, tenoning, cutting off and fitting up the material for car and ship-building. In fine the new establishment will be quite an acquisition to Deseronto.

PARTICULARS come from Camp Gilmour, Que., of one of the worst crimes ever perpetrated in Canada. A party of six lumbermen came up from Lower Gatineau lumber camps, bringing a large quantity of rum. They were all more or less intoxicated. Soon after midnight the gang made a raid on a house occupied by Mrs. Turcotte, just outside the camp, and finding only the old lady Turcotte and her daughter Nellie at home, they fastened the old lady to a chair gagged her, and then tying the hands and feet of the daughter, the men criminally assaulted her. The girl, who is but 16 years old, fainted, and fearing that she was dying the men released her mother. Finding herself free the old lady made her escape to arouse the camp, when the men set fire to the cabin and escaped to the woods. It was not known for some time whether the girl was left to perish or carried away, as the cabin was so far destroyed when help came that it was impossible to make any search. Later the girl was found with her throat cut from ear to ear, in a thicket near the remains of the cabin. The men have escaped, and while there has been a searching party out to look for them, it is doubtful if they will be discovered, owing to the great number of men constantly going and coming from this section, which is purely a lumbering region.

THE Chicago *Timberman* remarks that "Mr. T. K. Edwards, who is well known in this part of the country, and through the south, as the lumber agent of the Illinois Central Railway, is entitled to the credit of introducing, to this city, a new finishing wood, red cypress, which though it has been employed in other places, has never before been used here. Mr. Edwards has had a room in his own house finished in the wood, and the result is especially gratifying. The color of red cypress finished resembles gum, but the markings are more distinct, and in infinitely greater variety. In its peculiar varieagations of color the wood is remarkable, and its beauty in this respect, with its fine, close texture and susceptibility to a high degree of polish, must give it a foremost place among fancy finished woods, It will necessarily come into this category, as the quantity of it to be had is very small. The lumber used by Mr. Edwards came from the mill of Messrs. Farr & Williams, at Pattersonville, St. Mary's Parish, La. This variety of cypress grows altogether in the water, and it is so heavy when it is cut that it can only be floated by chaining it between two logs of lighter wood. It is a handsome material for inside finish, or even for cabinet work, and it is bound to be in demand when its beauty becomes generally known."

NEW BRUNSWICK.

MADAWASKA, October 28th, 1886.

MR. EDITOR.—It's good for sore eyes to see the CANADA LUMBERMAN again on our table, and I must say that the earnest welcome always accorded its readers for the free use of its columns for the discussion of all pertinent questions is too well known to make further comment necessary.

I notice among your "Exchange Echoes," the *Southern Lumberman* seems to have various opinions about the custom relative to the measurement of hollow logs. No doubt it will be a difficult task to frame any correct rule, which will satisfy both the purchaser of lumber and the manufacturer. Surveyers are supposed to measure lumber so it will hold out after it has been put through the mill, and in order to do so he must use his own discretion as to how much to throw off for defects, and make the lumber merchantable. In measuring cedar for shingles in this province, they measure two thousand as they come, allowing one thousand of the same as merchantable, throwing off one half to make them hold out. The same paper further says: "The Canadian Government wants reciprocity or free trade in lumber with the United States." I beg to disagree. If we look after the interest of Canada, not one stick of lumber should be allowed to leave it before it is manufactured, and Canada reap the benefit of its own resources. The article above quoted winds up as follows: "Whenever there is a doubt what course to pursue, it is always safer to do—nothing." If we never experimented on doubt, we will continue to live in doubt, and the rest of humanity will be content to leave us in the same frame of mind. All doubts should be tested. One thing is certain, where no doubts exist, if we allow our forests to be slaughtered and manufactured over the lines, we are killing the goose that lays us the golden eggs, and the near future will prove it to the sorrow of the rising generation.

I believe in free trade, provided it was universal, and am satisfied that free trade and direct taxation is the true policy for any nation to deal out equal rights to rich and poor. Under the revenue tariff system, a poor man raising one dozen children adds more to our revenue than a rich man with no children at all; but we may not expect any change so long as capital rules labor. The former has the power and will hold on to it as long as they can.

I see remarks about our export duty on logs, which should be prohibited until manufactured. Americans seem to think the export duty is only put on to retaliate against the import, but if they would change places with us Canadians, and see their forest wealth slaughtered, and brought over on our side to be manufactured, and by that means build up our trade, they could see themselves as others see them. However, if the export duty is not enforced more elsewhere than it is in Madawaska, the Americans will not know that such a duty exists. I always thought that the N. P. was intended to encourage the manufacture of raw material, and the building up of mills, etc., but, strange to say, the forest wealth of Madawaska, is slaughtered and taken over the lines, and there manufactured in order to save import duty, and this by New Brunswick capital, which has monopolized nearly all our wild lands, and erected mills on the American side, and robbed our country out of fifty million dollars a year in shingle stuff and other lumber. No doubt capital will cause a delay to exact the export duty until the horse is stolen, then our government will lock the door.

Hoping that the CANADA LUMBERMAN may find its way into every dealer's hands in Canada, in order that they may be kept posted on matters so important to this great industry.

Very respectfully yours,
P. O. BYRAM.

RAILWAY NOTES.

WORK on the Hudson Bay railway began on Oct. 11th.

IT is reported that a contract has been let to take out 40,000 ties from Rat Portage District for the Hudson Bay Co.'s Railway.

THE survey of the extention of the Napanee, Tamworth, and Quebec railway, from Tamworth to Marlbank has just been commenced.

THE Grand Trunk railway directors have decided to recommend a dividend of 1 per cent. per annum on the 4 per cent. guaranteed stock, leaving a small debit balance.

H. WHYTE, general superintendent of the C. P. R., has accepted the presidency of the C. P. R. library board, formerly held by the late general superintendent, Mr. Egan.

THE Canadian Pacific railroad have been compelled to put on extra forces of men in their car shops in Cobourg, Perth, and elsewhere, in order to meet the increasing demand for car caused by the enormous growth of traffic on their line.

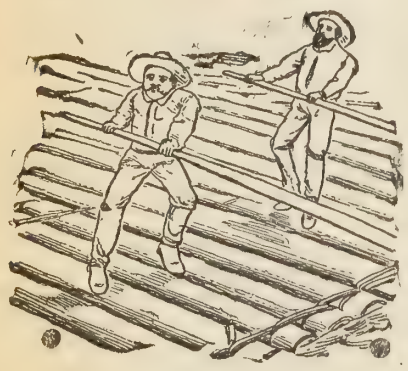
A COMPANY of local capitalists has been formed in Winnipeg for the purpose of securing the construction of a line from Winnipeg southerly one hundred miles to the eastern boundary of Carillon county. The company is to be known as "The Winnipeg, St. Boniface & Carillon railway company."

Perhaps the most extraordinary that success has been achieved in modern science has been attained by the Dixon treatment for Catarrh. Out of 2,000 patients treated during the past six months, fully ninety per cent, have been cured of this stubborn malady. This is none the less startling when it is remembered that not five per cent. of the patients presenting themselves to the regular practitioner are benefitted, while the patent medicines and other advertised cures never record a cure at all. Starting with the claim now generally believed by the most scientific men that the disease is due to the presence of living parasites in the tissues, Mr. Dixon at once adapted his cure to their extermination; this accomplished the Catarrh is pratically cured, and the permanency is unquestioned, as cures effected by him four years ago cures still. No one else has ever attempted to cure Catarrh in this manner, and neither treatment has ever cured Catarrh. The application of the remedy is simple and can be done at home, and the present season of the year is the most favorable for a speedy and permanent cure, the majority of cases being cured at one treatment. Sufferers should correspond with Messrs. A. H. DIXON & SON, 305 King street west, Toronto, Canada, and enclose a stamp for their treatise on Catarrh.—*Montreal Star.*

LIFE ON A RAFT.

Men and Methods Formerly Seen in Daily Life.

The days of rafting on the Mississippi have gone to join the days of romance, says a writer in a late issue of the St. Louis *Globe-Democrat.* Progress has pushed this business with a great many other slow, but sure, and good things to the wall, and steam machinery sings a monotonous lullaby above its cradle. More white pine comes to this market now from the Wisconsin, Black and Chippewa rivers than ever before, and if the process of getting here was the same as in the early days the grand army of raftsmen, instead of being reduced to almost insignificant proportions, would be as magnificant in its numbers as are the ranks of other industries that have maintained their own against the march of invention. The good old days when rafting was much lower than it is now, will be recalled by many. Those were darling times, as the boys say. Men followed rafting as a regular business, and experience was as necessary as in any other line of skilled work in which a man might embark. A good rafter knew the river like a pilot and was as much at home in its channel as a red dog is under a kitchen stove. Life in the lumber camps and on the rolling wave, was full of its pleasures, and even the hours of toil were sent spinning along on the wheels of music and song. There was lots of fun in the business, and the girls along the shore had their little romances to tell as the fleets went by—romances just like those girls on land can tell.



PULLING INTO THE CHANNEL.

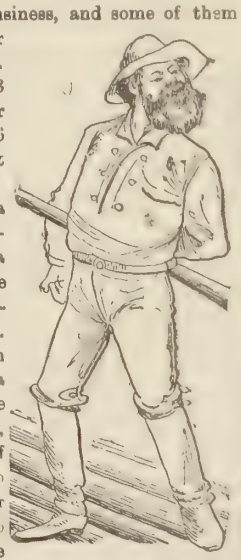
The same old tale.

The old, old story, that has often been told before,
For one heart will trust and another will fail
Until time and change shall be no more.

The history of those days and nights are left in pleasant rhymes, rattling stories and gleesome songs—some printed and some carried around in the shape of traditions—that once gladdened the hearts of thousands of rafters. As has been said, rafting was slower then than now. It took over two months to bring a fleet of lumber in those times from Wisconsin to St. Louis, where now it takes but two weeks, and of course it was necessary to beguile the hours with pleasures of a popular sort. Every fleet had its fiddler who could scrape out a break-down and play "Rye Straw," the "Rocky Roads," "Haste to the Wedding," and so on; its warblers who filled the moonlight night with glorious songs; and its story-tellers, always primed to the chin with yarns that raised a laugh and made hearts happy. The saga of those days are replete with the genuine poetry that belongs to simplicity and to nature's children, and the history of the period, if written by some scribe with a Mark Twain vein of humor and a Herodotian fidelity to facts, would make as readable a book as any press ever turned out. The story of rafting on the Mississippi is interesting in every detail. The first recorded arrival of a raft of white pine lumber at St. Louis was in the spring of 1840. The raft was run by twenty men, contained 800,000 feet, and was the first raft to reach here from the vast lumber regions of Wisconsin. The fleet came from near the mouth of the Wisconsin river, and was thirty-five days in making the trip. The history of rafting on the Mississippi, however, antedates this period. It goes back to 1831-32. In those days all the rafting was done within 300 miles of the city. E. O. Shepardson, possibly one of the oldest Mississippi river raft pilots, gives it as his opinion that the first lumber raft arrival at St. Louis was in the spring of 1835 He describes the raft as having been 100 feet in length, 30 feet wide, and carrying 150,000 ft. The lumber was yellow pine, cut and rafted in the Gasconade river, about 125 miles from the mouth. The distance from there to St. Louis was 250 miles, and the time required to make the run was seven days. Up to 1840 the principal lumber arriving here in rafts was yellow pine and hard woods. From 1835 to 1840 the receipts ranged anywhere between 1,500,000 to 3,000,000 feet per week.

THE COOK'S CASTLE.

In 1840 the receipts of white pine lumber aggregated 3,000,000 feet. The rafting business from that time on, had a most remarkable growth, and the following two years numerous saw-mill men of the North followed the example of the pioneer raftsmen, and the result was that hundreds of men were furnished with work in the new field, and the upper river was continually filled, in season, with moving rafts. In 1842, two years after the arrival of the first fleet of white pine lumber, the receipts aggregated 75,000,000 feet, which gives a well defined idea of the rapid increase in the interest. The growth continued with each season until 1860, when the rafts landed 200,000,000 feet of white pine lumber at the North St. Louis landings. During the four years following there was a slight interruption, the result of the civil war. The urgent demand for lumber, however, during that bloody period, brought many new capitalists into the business, and some of them retired after the war with large fortunes. From 1865 to 1872-73 the raftsmen saw their best days. In 1866 the Schulenburg & Boeckeler Lumber Company invented a patent steam windlass, which enabled a steamboat to handle a raft of from 1,000,000 to 3,000,000 feet. This invention brought with it a great reduction in the cost of running a raft, reduced the danger of wrecking it, and also reduced the number of men required to handle it. The Mollie Whetmore was the first steamer to attempt to run a raft in this way and she proved a success. Other steamers followed in the business, and last summer there were 100 boats employed in the trade, the aggregate value of which is put down at $1,000,000.



CAPTAIN OF RAFT.

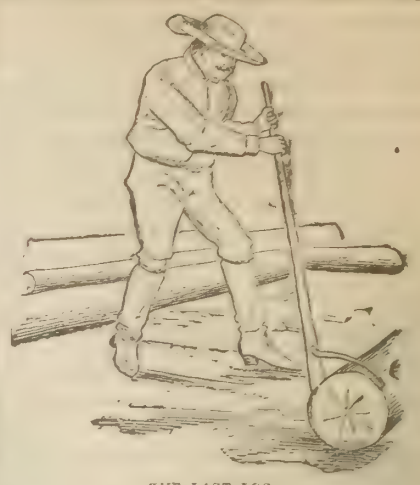
The average raft boat carries a crew of eighteen, which includes the mate and captain. A good stout raftboat is able to push a fleet containing as much as 3,500,000 feet of lumber. To move this vast quantity of lumber by rail, would require seven trains of fifty cars each. The time necessary to tow such a raft from La Crosse, Wis., 700 miles north, to St. Louis, is generally fourteen days, although runs have frequently been made in less time. Nearly all the white pine lumber received in St. Louis comes from Wisconsin, Black and Chippewa rivers. The rafting season opens in the spring as soon as the ice runs out. The first raft of the season from the Upper Mississippi usually arrives here at the beginning of May, and the season windsup about November 15th. The local season, however, has been known to extend into December. With the advent of raft boats, the days of floating rafts reached their end, and the business to day compared with its former greatness is but a shadow, there being very few floating rafts now seen. Where it formerly required two months' time and thirty five men to run a raft from Wisconsin to St. Louis, a steamboat now does the work in fourteen days, with the aid of eighteen men, thereby reducing the cost more than one-half In the best days of floating rafts, the cost of running one from Reed's Landing or Stillwater to St. Louis, would reach as high as $6,000.

CHEF DE CUISINE

From 1865 to 1870 lumber rafts were frequently taken as far South as Memphis and Vicksburg. Now not more than two rafts in a year go south of St. Louis, and these only as far as St. Mary's and Chester. The longest distance ever run by a raft on the Mississippi, was from La Crosse, Wis., to New Orleans. The trip was made in 1870, and this lumber raft was the only one that ever went to New Orleans from the Upper Mississippi. The fleet was made up of ten strings, or about 1,100,000 feet. It was owned by the Gruner Brothers Lumber Company, and was valued at $30,000. Mr. E. O. Shepardson, at present raft superintendant of the Ganahl Lumber Company, piloted the fleet as far out as Vicksburg, where a Lower Mississippi River pilot took charge. The run from La Crosse to New Orleans was made in ten weeks. There are eight regular raft boats coming to this port which bring in each season about 150,000,000 feet. This does not include what outside steamers tow in here, which swells the figures to 200,000 000 feet. The principal lumber landings are located in North St. Louis, and take in the principal part of the wharf from North Market street to Bissell's point. The landings are controlled by the Knapp, Stout & Co. Company, Eau Claire Lumber Company, Gruner Brothers Lumber Company, Henry Lange, the Schulenburg & Boeckeler Lumber Company and I. G. Buckley. The landing in the southern part of the city is in charge of the Ganahl Lumber Company.

These are dry details that do not by any means suggest the departed greatness of the days of floating rafts. The captain of a fleet was, as it were, monarch of all he surveyed. He was the political, religious and civic boss of the men in his employ, and he lorded it over them in a majestic, but, at the same time, quite a humane way. Usually a man of magnificent build, the shaggyness of his exterior gives no idea of the bigness of his heart. Heavy-bearded, top-booted, and filled with the bracing health of the pineries, his presence inspires awe for the moment, but as soon as his mouth opened and the pleasantness of his coarse mouth fall upon the ear, the feeling of sublimity gave way to one of admiration, and soon he held your heart in his hand. There were, of course, some rough captains in the old days, but they have quite perished out of memory, and only the agreeable characters remain behind.

There were many exciting times in the lives of the old rafters. When they made the shoot of the rapids there was danger in their positions, but just like the men who court death in the log booms, these old chaps braved any danger, and their days and nights were often full of the enthusiasm and excitement that are born of the proximity of trouble. There were not, as a matter of fact, many such thrilling experiences as that related by the literary liar who wrote the "Pike County Folks," but there were some almost equally as interesting. Shooting the rapids was frequently the least dangerous of their exploits. Pulling the channel or steering shy of a bridge, calls for as much care and coolness of nerve as any other effort put forth by the raftsmen. The forward sweeps had to be worked with great skill, as the slightest error of judgment or misapplication of strength might prove fatal to the rafter and injurious to the fleet. The cook was the canonized saint of the party. The sound of his dinner gong was sweet and welcome to the raftsmen's ear, and it always got a kind greeting from an overwhelming appetite. The cook's hut, with its V shape, its smoking stove-pipe and bough-trimmed apex—the temple in which about the only worship the rafters knew took place. Here they worshipped three times a day regularly. The culinary high priest took pleasure in tickling the palates of his devotees, and when at work, whether peeling potatoes on the shady side of his hut, or stirring the huge pots of boiling meat, kept their individual and collective tastes in view, and tried to make the meals and meal hours pleasurable to all. The time passed so agreeably that it was really felt to be a moment of sadness when "breaking-up" came and the rafts were picked to pieces, to be piled away in the lumber yards. Then there came the partings for awhile, often for ever, for in the early days raftsmen were as human as men are now and had their frailties. Whisky often brought on fights, and then the knife and pistol came into play. Many a rafter died a violent death, and the story of his taking off furnished gossip on future trips for those who had known and associated with the unfortunate fellow.



THE LAST LOG.

THE LUMBER BUSINESS IN THE OTTAWA VALLEY.

Enormous Output of Square Timber and Sawn Lumber.

Our excellent contemporary the Ottawa *Free Press*, has the following exhaustive article on the lumber industry of the Ottawa Valley:—The leading commercial industry of the Ottawa district is of course the making of square timber and the taking out and manufacturing of lumber of all kinds. A moderate estimate of the capital invested in the lumbering business throughout the watershed of the Ottawa places the figure at sixty million dollars, though some practical authorities place it as high as seventy and seventy-five millions. It may safely be said that the amount of capital invested in the lumbering industry in the Ottawa valley, is almost if not quite equal to the whole of the capital invested in manufacturing in the Dominion. The principal properties or assets of the firms engaged in lumbering are timber limits—that is areas of natural or standing wood, saw mills, improvements on rivers and streams to facilitate log driving, stocks of lumber on hand, piling grounds, and machinery. The area of timber limits under license on the Ottawa and its tributaries in Quebec province is 9,732 square miles and in Ontario 7,153 square miles. The dues upon these limits payable to the provincial governments of Ontario and Quebec are collected at the Crown timber office, the district tributary to that office including the counties of Ottawa and Pontiac in Quebec, and all the territory situated in Ontario, drained by streams falling into the Ottawa. On the Ontario limits within this territory, there were cut, during the season of 1885, saw logs to the amount of 241,000,000 feet broad measure which with about 255,000,000 feet from the province of Quebec furnished material for the employment of some thousands of men and teams in the woods and saw mills and on the rivers. In addition to the saw logs about twenty

million feet of dimension timber were taken out last year. The greater portion of the vast area of limits before mentioned is worked by firms with head quarters in Ottawa city. The following statement shows the principal licensees and workers of limits on the Quebec side of the Ottawa river, and the total area of square miles worked by each :—

Gilmour & Co., 2,659, Gatineau, Keepawa, and Pickanock.
Hamilton Bros., 1,686, Gatineau, Keepawa and Pickanock.
J. R. Booth, 1,423, Coulonge, Black and Keepawa.
James McLaren, 968, Gatineau, Desert, Black, Coulonge and Pickanock.
Ross & Co., 935, Gatineau, Desert, Black, Coulonge and Pickanock.
Alex. Fraser, 848, Ottawa, Black and Dumoine.
Bronson & Grier, 968, Gatineau and Jean de Terre.
Bronson & Weston, 680, Dumoine, Black and Deep
Hon. George Bryson, 652, Coulonge, Keepawa and Ottawa.
Gillies Bros., 744, Coulonge, Keepawa and Ottawa.
Perley & Pattee, 700, Keepawa, Dumoine and Coulonge.
E. B. Eddy, 715, Ottawa and Keepawa.
Hurdman & Co., 558, Coulonge and Magniwippi.
W. C. Edwards, 414, Gatineau, Keepawa and Desert,
Bronson, Weston & Edwards, 369, River Ottawa. Block A.
David Moore, 350, Keepawa river.
McLaughlin Bros., 290, Coulonge.
Latour Estate, 280, Ottawa and Keepawa.
John Ross. 360, Keepawa.
Bryson & Charlton, 385, River Ottawa.
Thomas G over, 330, Keepawa and Dumoine.
Thompson & Mackay, 400, Gatineau.
Grier & Co., 188, Coulonge and Temiscamingue.
Folkerts & McPhee, 191, River Ottawa.
T. & W. Murray, 108 Dumoine and Black.
Jas. Findlay, 100, Black river.
W. R. Oswald, 222, River Ottawa.
William Mackay, 124, River Dumoine.
R. White, 101, Black river.
Peter McLaren, 231, Coulonge river.
Martineau Estate, 100, Jean de Terre river.
Rochester & Doherty, 91, Ottawa river.
McLaren & Edwards, 80 Dumoine river,
James Cotton, 50, Dumoine river.
D. Murphy, 50, Coulonge river.
J. B. Dickson, 81, Keepawa and Ottawa.
John Roche, 56, Le Peche, Gatineau.
H. V. Noel, 65, Gatineau river.
John Smith, 50, Coulonge river.
Est Sir F. Hincks, 50, Coulonge river.
Est. Allan Grant, 85, Black and Dumoine.
R. White, 71, River Ottawa.
Small holders, 630, rivers before named.

The following statement shows the names of the principal holders of limits in the Ottawa agency of the province of Ontario :—

J. R. Booth, 1,208, Ottawa, Lake Temiscaming, Indian, Petewawa and Bonnechere rivers.
Perley & Pattee, 955, Ottawa, Chalk, Montreal, Madawaska, and Petewawa rivers.
Bronson & Weston, and Grier & Co., 636, Mattawa, Petewawa and Amable du Ford.
McLachlin Bros., 676, Madawaska and Bonnechere.
Bronson & Weston, 334, Madawaska and Chalk.
Gillies & McLaren, 283. River Mississippi.
Barnet & McKay, 268, River Bonnechere.
E. B. Eddy, 229, River Madawaska,
Wm. McKay, 174, River Madawaska and Amable du Ford.
McClyment & Co., 118 River Petewawa.
James McLaren, 284, Indian river,
Alex. Fraser, 310, Nipissing, Mattawa and Madawasca.
Thistle, Carswell & Co., 318, Petewawa and Madawasca.
Boyd, Caldwell & Son, 135 Madawasca and Mississippi.
R. Kock, 100, River Ottawa.
Hurdman & Co., 126, Petewawa river.
R. Ryan, 100, Montreal river.
N. E. Cormier, 89, Petewawa river.
Gillies Bros., 54, Mississippi and Montreal rivers.
O. Latour, 75, Ottawa and Temiscaming.
A. Barnet, 50, River Petewawa.
A. & P. White, 30, Ottawa river.
H. M. McLean, 61, River Bonnechere.
Small holders under fifty miles, 500, on streams before menticned.

THE SQUARE TIMBER TRADE.

The following is an approximate estimate of the quantity of square timber made in the Ottawa and Nipissing district during the season of 1885-86 :—

Name of Manufacturer.	Cubic feet.
Fraser, Sereny & Co.	355,000
David Moore	660,000
E. Moore	180,000
Timmons & Gorman	175,000
Klock & Son	295,000
McCool & Doran	177,000
J. & G. Bryson	150,000
J. R. Booth	245,000
R. White	175,000
William Mackey	180,000
McLaughlin Bros.	350,000
Thistle & Carswell	200,000
Barnet & Mackie	390 000
A. & W. Mohr	100,000
Robert Grant	180,000
John Lamb	75,000
Francis & McCray	55,000
Total	4,042,000

The square timber business has declined in recent years. In 1882-83 the estimated output was 8,760,000 feet, and in 1883-84 6,290,000 feet. The output of 1886 was made principally on lake Nipissing and the Keepawa, Colonge. Quinze, Ottawa, Sturgeon, Bonnechere, Madawaska, Mississiaga, Black, Petewawa and Amble du Ford rivers. During recent years the production of square timber has fallen off considerably, but that of sawn lumber has increased with the improved facilities for taking out logs, river driving and shipping the lumber. The square timber produced in this district is taken to Quebec in rafts and there sold for shipment to Europe. Quebec is the great timber market of Canada.

THE SAWN LUMBER.

cut at the mills on the Ottawa and its tributaries is shipped principally to the United States and to other points in Canada. The manner of shipping to the United States is chiefly by means of barges, which are towed down the Ottawa and St. Lawrence and through the canals to Sorel, thence up the Richelieu river and lake Champlain to Whitehall, and down the Hudson to Albany and New York. Considerable quantities of lumber are also shipped by the Rideau canal and Canadian Pacific and Canada Atlantic railways, and latterly some large shipments of square timber have been made over the Canadian Pacific from the lake Nipissing region. The entire annual output of sawn lumber in the Ottawa district is estimated at from 700,000,000 feet to 800,000,000. It is all white pine excepting a small percentage of red and Norway pine. Of the exports to the United States from the Ottawa consular district for the year ending June 30th, 1886, 97.53 per cent, was made up of lumber. In 1885 the percentage was 97.65, and in 1884, 98 22.

THE TOTAL VALUE

of sawn and manufactured lumber exported from this district to the United States in the three years named was :—

1884	1885	1886
$2,843,575	$2,254,801	$2,170,814

The following statement shows the kinds and value of the lumber shipments from the Ottawa district to the United States in the year ending 20th June, 1886 :—

Sawed pine lumber	$2,045,809
Box shooks	46,428
Laths	26,456
Railroad ties	11,604
Pickets and curtain sticks	24,761
Match blocks	8,450
Telegraph poles	2,633
Hemlock bark	528
Fence posts	921
Shingles	976
Doors and moulding	2,118

PROVINCIAL TIMBER REGULATIONS.

The timber limits of Ontario and Quebec are owned and controlled by the governments of the respective provinces. The Ottawa Crown Land agency collect crown timber dues for the Ontario and Quebec governments as well as slide dues for the inland revenue department of the Dominion government. The rates of dues charged upon limits in Quebec is somewhat higher than those charged in Ontario. In each province the limits are disposed of at public auction, at so much bonus per square mile, subject to the payment of the regular annual ground rent or dues. The purchaser receives his title in the form of a license for the territory, each birth or limit comprising so many square miles of 640 acres. The license conveys simply the right to cut the timber on the territory therein described for one year, with the prior right to renewal annually in accordance with the prescribed regulations. The purchaser or licensee of a timber limit obtains no rights in fee to the lands covered by his license, but after securing his license at public auction pays a yearly tax for the privilege of cutting timber; and settlers who take up lands within the area mentioned in any license are not liable to be disturbed or prevented from clearing or cultivating land by the holder of such license. The yearly ground rent payable by limit holders is two dollars per square mile, and the transfer bonus one dollar per square mile.

DUES IN ONTARIO AND QUEBEC.

As before stated the timber dues in Quebec province are generally speaking slightly higher than in Ontario. For oak and walnut the dues are four cents per cubic foot in Quebec and three cents in Ontario; red and white pine, cedar and other square timber, two cents in Quebec, 1¼ cents in Ontario; five logs 13½ feet long, 17 inches, 22 cents each in Quebec, 15 cents each in Ontario; pine logs, 13½ feet long, less than 17 inches, 11 cents in Quebec, 15 cents in Ontario; spruce logs, 5½ cents each in Quebec, 10 cents in Ontario; pipe staves $7 per 1.000 in each province; West India staves, $2.25 per 1,000 in each province; boom timber, round or sided, pine or tamarac, 1 cent per lineal foot in Quebec, 1¼ cents in Ontario; pine for shingles 20 cents per cord in Quebec, 12½ cents in Ontario; cedar for shingles, 16 cents per cord in Quebec, 12½ cents in Ontario; cedar rails per hundred, 25 cents in Quebec, one cent in Ontario; cedar telegraph poles, 6 cents each in Quebec, one cent in Ontario; railway ties, 2 cents each in Quebec, 15 per cent *ad valorem* in Ontario; hemlock logs 6 cents each in Quebec, and 10 cents in Ontario; hemlock bark, 32 cents in Quebec and 30 cents in Ontario; hardwood logs and tamarac, 22 cents each in Quebec, 25 cents in Ontario; floors or birch (28 feet long) 25 to 30 cents in Quebec, 1 cent per cubic foot in Ontario. In addition to the foregoing provincial dues, export duties are imposed by the Dominion government upon the following classes of lumber when exported :—White and Norway pine saw logs, per 1,000 feet, board measure, $2 00; spruce and hemlock logs, per same measurement, $1.00; shingle bolts, per cord of 128 feet, $1.50.

LUMBERING OPERATIONS.

Large amounts of ready cash are required by all operators in lumber. In the early autumn months men and horses are engaged "to go to the shanties," that is to go and work cutting timber and logs upon the various limits.

The men and horses must be well housed and fed, in the woods, and all wages must be paid promptly. Immense quantities of provisions, flour, pork, potatoes, beans, tea, oats, hay, etc, must be purchased and shipped to the shanties, the cost of transportation to the distant limits being one of the principal items of expenditure. The construction of the Canadian Pacific railway has greatly reduced the cost of sending men and supplies to the shanties on the Upper Ottawa and tributary streams. A small army of shantymen are kept in the woods every winter by the Ottawa "lumber kings." The shanties in which the men live are usually built of logs, and are made as comfortable as circumstances will permit. In the spring when the snow melts the men usually come down the streams "on the drive," that is with the logs that they have cut during the winter, and are paid off, and go to work in the mills or seek other employment. The logs which are cut 13½ and 16½ feet in length are floated down the various streams to the mills. The regulation length of logs is 13 and 16 feet, but in running the rapids, the ends get "broomed," and so six inches additional length are allowed at each, and these ends are sawn off leaving each log smooth and square and proper length.

SAWING THE LUMBER.

Generally the best of the logs are cut into deals for the English market. These deals are three inches thick, ten feet and upwards in length and any width from nine inches upward. They are assorted into firsts, seconds, thirds and fourths, each class having its respective market value, and these grades only are exported, leaving an amount of inferior stock to be disposed of in the most profitable way possible. The balance of the logs are sawed into 10, 12 and 14 inch boards, which are generally exported to the United States. These stocks are culled and piled, according to the various grades. Great care is given to piling, the stocks being arranged in square blocks, single courses, very open. The immense piles of lumber on both sides of the Chaudiere never fail to attract the attention of strangers visiting Ottawa.

THE OTTAWA MILLS.

The immense water power furnished by the Chaudiere and Rideau Falls has been utilized to run a great number of lumber mills as well as some flour mills and cloth factories. The saw mills in this district are generally of large capacity, and are equipped with all the modern appliances for rapid, smooth and economical work. They are all "gang," and contain from four to eight gangs of from thirty-six to forty two saws each, with all the necessary edging tables, all lumber being made parallel and passed over chain butting tables. The lumber manufacturers of Ottawa are fully alive to the necessity of keeping abreast of the times and the necessities of the industry. The mills are run night and day through the short season if not over seven months. They are generally lighted by electricity, which aids materially in night sawing. About two-thirds of the sawn lumber of this district is produced at the Chaudiere and Rideau Falls Mills. Eleven hours a day constitute a day's work for mill hands and others connected with the manufacture and handling of lumber, and wages are paid weekly to mill hands and to men in the woods as their necessities and those of their families require it.

RATES OF WAGES.

The number of men who find employment in connection with the lumbering business in the Ottawa district is very large, being variously estimated at from ten to twelve thousand. There is of course no fixed rate of wages for any class of workmen, but the following statement as published by the U. S. consul here may be regarded as approximately correct.

Foremen in woods	$40 to $60 per month.
Choppers and skidders	15 to 20
Road Cutters	12 to 15
Teamsters and loaders	16 to 18
Cooks	30 to 40
Log measurers	45 to 50
Horse team and teamster	35 to 40
Mill foreman	" to 100
Head sawyer for gangs	40 to 45
" " for circulars	" to 60
Tail sawyers	30 to 35
Edgers and trimmers	35 to 40
Filers	50 to 60
General help, teamsters &c.	30 to 35

The wages paid to men in the woods are in addition to board, but men employed in and about the mills board themselves. The principal lumber mills of the city and district are those of Messrs. Bronson & Weston, Perley & Pattie, J. R. Booth, Grier & Company, E. B. Eddy, Hurdman Bros, at the Chaudiere Falls; Messrs. James Maclaren and McClymont & Co., at Rideau Falls; W. C. Edwards & Co., at Rockland; Gilmour & Co., on the Gatineau; James Maclaren and Ross Bros., at Buchingham; Hamilton Bros., Hawkesbury; Peter McLaren, Carleton Place; Boyd, Caldweel & Son, at Almonte, and other points on the Mississippi; W. J. Conroy, and E. B. Eddy at Dechene rapids; W. R. Thistle, Pembroke; McLaughlin Bros., Arnprior; Gillies Bros. Braeside. There are also a number of smaller mills cutting chiefly for home consumption.

The Biggest Book in the World.

"Just outside of London they are at work on the biggest book in the world," said a New York publisher, the other day, who has recently returned from a trip to England. "It will be more than four times as large as Webster's Dictionary, and will contain something like eight thousand pages. It is to be the ideal dictionary of the English language, and will supersede all pre-existing authorities. It has long been realized by scholars that the English language is deficient in this respect. The French have two dictionaries, that of M. Littre and of the academy, that are far superior to our own. The Worterbuch, of the German Brothers Grimm, is still more exhaustive and authoritative. Even the Portuguese dictionary, by Vieira, decidedly surpasses anything in English. But the British Philological Society proposes to fill this yawning gap in our reference books. They hold that a dictionary should be an inventory of the language, and that its doors should be opened to all words—good, bad and indifferent. This new work will not be confined to definitions and cross references. The life history of each word will be fully given, with a quotation from some standard writer, showing its shade of meaning and the variations in its usage from one generation to another."—*New York World.*

In Vancouver there is said to be a land office established in a hollow tree forty-four feet in circumference. In the same section there is a table forty one feet long and four or five feet wide, made out of a solid board.

Fort William *Echo*:—Fort William is the centre from which radiate all the great lumbering enterprizes of Algoma West. Each winter camps are established in every direction, and from the almost boundless timber limits which surround it the products of the forest are culled and prepared for their voyage to the Fort in the spring. Most of the timber employed by the C. P. R. Company in their many and vast enterprises is procured by companies having their headquarters here. From the mills of Messrs. Carpenter and Graham, and Horne & Co., it is an almost daily occurrence to see carloads of timber and lumber of all descriptions and dimensions proceeding east and west, intended either for the repair of old works or the construction of new ones. Customers for the manufactured material are found as far west as Calgary, and as far east as Sudbury.

THE CANADA

LUMBERMAN

PUBLISHED MONTHLY BY

A. G. Mortimer, Peterborough, Ont.

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Per line, for six months..... 40
Per line, for three months..... 25
Per line, for first insertion..... 10
Per line, for each subsequent insertion to 3 mo's. 04
Cards not occupying more than 12 lines (1 inch) per annum..... 8 00
Cards not occupying more than 12 lines (1 inch) for six months..... 5 00
Cards not occupying more than 6 lines per annum 5 00
Cards not occupying more than 6 lines, for 6 mo's 3 00

Special rates will be made for page, half page and column advertisements.

All communications, orders and remittances should be addressed and made payable to A. G. MORTIMER Peterborough, Ont.

Communications intended for insertion in the CANADA LUMBERMAN, must be accompanied by the name of the writer, not necessarily for publication, but as a guarantee of good faith. Communications to insure insertion (if accepted) in the following number, should be in the hands of the publishers a week before the date of the next issue.

Advertisements intended for insertion in any particular issue should reach the office of publication at least six clear days before the day of publication, to insure insertion.

The CANADA LUMBERMAN is filed at the Offices of MESSRS SAMUEL DEACON & Co., 154 Leadenhall Street, London, England, who also receive advertisements and subscriptions for this paper.

PETERBOROUGH, Ont. NOV. 1, 1886.

WE expect a great rush of subscriptions during the next few weeks, as a result of our low offer for the balance of the year. Send in your quarter.

WE desire to secure active agents in every county who are willing to work on liberal pay to take subscriptions for the CANADA LUMBERMAN. Outfits and sample copies free.

THE September fire report for the United States and Canada shows that the fire bug, the small boy with matches and the hired girl and her kerosene can are still putting in their deadly work. Only $6,500,000 worth of property was consumed, but the annual aggregate this year will far exceed that of 1885.

THERE are increasing signs of an improvement in trade in England, and some branches already show a marked advance in prices, notably in wool, and to some extent in metals. Commercial reports from nearly all the large centres of industry are unanimous in stating that a more hopeful feeling generally prevails.

A new and plausible explanation of the destructive fires occurring in pine forests is offered. The pine resin exuding from the trees is often of lens shape, and before it thoroughly hardens frequently of crystelline clearness. It is surmised that while in that condition a resin lens may focus the sun's rays upon some light twig or resinous point and so start a blaze that quickly eats up a forest.

REPORTS from Ottawa are rather discouraging as regards the American demand for lumber. The state of affairs is principally attributed to the recent strikes in New York and other States. It is estimated that the stocks now piled at the Chaudiere, and which will likely not be removed this season, is greater than at any similar period during the past ten years. Owing to the labor trouble referred to industry was paralyzed for several months, the result being that American lumbermen were left with large supplies on hand. When the strikes ended they were unable to make as large sales as were expected, hence the accumulation at Ottawa.

A VALUABLE sale of timber limits took place at the Russell house, Ottawa, on the 19th Oct., there being a large attendance of capitalists. The limits in question are situated on the Georgian bay as per government map, being berths Nos. 6, 14, 15, 113, 186, 187 and 198, containing 36 square miles each; and those on Lake Nipissing, being berths Nos. 12, 20, 31 and 39, containing 30 square miles each. There were disposed of No. 6 to Mr. J. G. Bryson, at $11,300, No. 15 to Mr. David Moore, at $15.100, and No. 187 to A. & T. McArthur for $25,100.

PROMINENT shingle manufacturers in Aroostook, Me., say that the present arrangement of manufacturing Aroostook lumber in Americanized New Brunswick mills, taken in connection with the rates of freight for shingles from Aroostook to Boston, if continued, will drive every shingle manufacturer in upper Maine out of business. They assert, and give figures to prove, that lumber cut in Aroostook can be run to St. John or in the provinces, manufactured and returned to the States for from 20 to 25 cents cheaper than they can be made there and shipped by rail at present rates.

DURING the past month a meeting of gentlemen was held at Chelsea, Eng., for the purpose of testing the various qualities of different colonial timbers exhibited at the Colonial and Indian Exhibition. The object of the meeting was to bring together the leading civil engineers, timber merchants, builders and other users of wood, to meet experts from the various colonies and to witness the conversion of samples of the woods into railway sleepers, joinery, casks, spokes for wheels, etc. We have not yet learned the result of the investigation.

THE publisher of the CANADA LUMBERMAN desires to obtain a reliable and well-informed correspondent in every lumbering centre in the Dominion of Canada, and to that end would ask those disposed to act as such, to communicate the fact at once stating the facilities they possess for obtaining *reliable*, early and full information as to the lumber trade in their respective districts, and the remuneration which they will expect for their services as such correspondents.

MR. HOOPER, President of the Coachbuilders Guild, and member of the London Chamber of Commerce, has recently given some attention to an examination of the woods of Canada as shown at the Colonial Exhibition, As the outcome of his inspection, he is now visiting Canada to inquire into the possibility of obtaining direct from the Dominion the various kinds of woods used in carriage building. Mr. Hooper will spend some time in Ontario, where the chief supply may be met with, and will on his return read a paper on the subject before the Guild. Professor Macoun is also, we believe, to read a paper giving further details as to the qualities and uses of Canadian woods.

IT is curious to note that in the long list of national emblems there are but two trees, viz., the lime or linden tree for Prussia and the pomegranate of Spain. All other nations are represented by flowers or plants which do not rise to the dignity of trees. King Henry VII chose the hawthorn as his device, because the crown of Richard III was found in a hawthorn bush at Bosworth.—*Ex.* The writer of the above, although an American, evidently forgets that in Canada we have a tree which has long been considered an emblem of the country. We call it the maple, and have every reason to be proud of it.

FIRES, lumbering, tanning, wood pulp mills, charcoal, iron smelting, railroad building, all draw on the forest growth, and these are legitimate demands. Fires are the great causes of destruction of forests. In 1880, if the report presented by Prof. C. S. Sargent is reliable, the area burnt over in the United States was 10,250,000 acres, and the value of property destroyed $25,462,250. In the State of New York, according to the same authority, 149,491 acres were burned over, with a loss of something like $1,250,000. The largest number of these fires of any one class were traced to farmers clearing land and allowing brush fires to communicate with the forest. Locomotives are set down among the list of causes, as having set fire to woods 508 times, hunters 628 times, malice 262 times, clearing land 1,152 times.

FOR the balance of the year we will send one copy of the CANADA LUMBERMAN to any one sending us 25 cents. To new subscribers who will send us $1 we will mail the LUMBERMAN from now until the 1st of January, 1888. Every lumberman, saw-mill owner and wood-worker in the Dominion should accept this very liberal offer. As this is the only journal of the kind in Canada, and as we propose making it a thoroughly representative organ for the lumber and wood-working industries none can afford to do without it. Send us your money, and receive in return a paper which will keep you acquainted with the ins and outs of the trade, and especially a complete market report.

SOME idea of the extent to which mechanical ingenuity and efficiency have advanced may be had from the following statement:—"It is now possible to construct a complete sewing machine in a minute, or sixty in one hour; a reaper every fifteen minutes, or less; three hundred watches in a day, complete in all their appointments. More important than this even is the fact that it is possible to construct a locomotive in a day. From the plans of the draughtsman to the execution of them by the workman, every wheel, lever, valve and rod may be constructed from the metal to the engine intact. Every rivet may be driven in the boiler, every tube in the tube sheets, and from the smoke-stack to the ash-pan a locomotive may be turned out in one working day, completely equipped, ready to do the work of a hundred horses."

OF all the days in the week "Washing Day" is looked upon by the average house wife as the most disagreeable and least to be desired. Inventive genius, however, is coming to the rescue in this as in all other departments of labor, and what a few years ago took a whole day to accomplish can now be done in a couple of hours, and the heavy work of the operation almost entirely dispensed with. A reference to our advertising columns will show the merits of the Improved Washer and Bleacher, manufactured by Mr. C. W. Dennis, Toronto, Ont. This simple device has proved a surprise wherever introduced, and although weighing but four pounds, is so constructed as to do any kind of washing without injury to the finest fabric, and in a marvellously short time. The inventor has selected the LUMBERMAN as the medium to more fully introduce his machine to the public of Canada, and as far as our knowledge of this washer goes, we can recommend the same to the wives of our readers as the best article of the kind yet introduced.

CHURCHILL & SIM, (London, Eng.) in their October circular, show that the slight improvement which began to make itself felt in August has been maintained through September, foreign wood in particular having met with better demand at gradually advancing prices. There is an important reduction in the stock of foreign deals, and a large increase in that of colonial pine. The supply from Canada to the end of September has been:—Pine deals, &c., 1,549,000 pieces against 1,161,000 pieces in 1885; spruce, 1,051,000 pieces against 1,188,000 pieces in 1885; and from New Brunswick, &c.:—Spruce deals, &c., 344,000 pieces against 281,000 pieces in 1885; birch timber 2,000 pieces against 3,000 pieces in 1885. Spruce deals have been slightly reduced in stock. Pine has been sent in more liberally, and the stock compares unfavorably with that of last year. The variations in value have been unimportant. Timber generally remains unaltered. London is fairly supplied with all classes of Canadian timber; but the general demand is not satisfactory. Business during the month has been entirely by private sale.

THE "Toronto Permanent Exhibition of Manufactures" is something quite new for Canada, and when in operation will doubtless prove not only an interesting place to visit, but also a profitable place in which to do business. The scheme has been set on foot by Messrs. Nicholls & Howland of the Queen City, and a special building is now being erected which will be ready for occupation by January next. Some of the advantages likely to accrue to manufacturers are in brief as follows:—The exhibition will be free to all and open throughout the year. It will afford the advantages of a Toronto branch establishment at a very moderate cost. Competent salesmen will be in charge for the purpose of explaining the merits of each exhibit to interested visitors. Machinery will be shown in motion, and the whole establishment will, to all appearances, be a hive of industry.

"BEAUTIFUL Homes and How to Build Them" is the title of a little book just issued by W. B. Judson, publisher of the *Northwestern Lumberman*, Chicago. It contains a series of practical building plans, comprising something like 19 separate designs for modern frame and brick dwellings, a church and a public school. They were drawn by a prominent Chicago architect and are printed in five colours, making a strikingly handsome and attractive little book. The designs cover a very broad range of architecture, giving nearly all the prevailing modern styles, a remarkable feature of them being the fact that the publisher guarantees to furnish scale drawings, with full details ready to build, of any of the plans to purchasers of "Beautiful Homes," at a further cost not exceeding $3. The price of the little book is only 50 cents, and besides the plans themselves it contains much valuable technical information for both practical builders and people who desire to build homes.

FOR the kindly greetings extended the LUMBERMAN during the past month, by our Canadian and American exchanges, we beg to extend our thanks. Kind words do much good, and every reference to our paper from different parts of the country, has a very desirable effect. It is the intention of the publisher to make the LUMBERMAN, both in point of technical interest and typographical appearance, second to no other trade publication in the Dominion. One step has been taken towards this end in adding an attractive cover to the present issue. Next month we propose introducing a fine toned paper throughout; and so improvements will go on until the desired excellence has been attained. We solicit the co-operation of every reader to further this end. If you do not feel equal to writing us something of interest occasionally, you can do a good work by handing a copy of the paper to a friend, and securing his subscription to the same. Stir up, and let us have a grand rush of new subscribers for the coming year.

EVERY mechanic and business man should know the journals especially intended to advocate his respective branch of industry or trade. Aside from the numerous books on the kindred arts, there are many journals published that might and ought to be of great service to the wise craftsman who read them, for there is hardly a single issue of one of them that does not contain a greater or less number of items which would afford a better knowledge of some part of the business to which they have given their time and attention, and through which they gain their livelihoods. Even the advertisements—especially if they be of new material, new machinery, or new processes—contain information well worthy the attention of every one who would better himself, or the craft of which he is a member. Every paragraph which gives an insight into other people's modes of doing business, or which calls attention to new inventions and discoveries, or new uses of old facilities is worthy of study and preservation. The assertion that one "cannot learn from books," is disproved by even a careless examination of any of the numerous trade journals published in America, and the mechanic, master or workman, who would keep himself abreast of the world's progress in his own branch, must give them careful attention. We hope that every lumberman and wood-worker who receives it, will not only read and preserve the successive issues of the LUMBERMAN, but also those of all other similar journals he may be so fortunate as to obtain. They will, in years to come, be even more valuable than now, and, like new friends and new wine, improve with age.

EXCHANGE ECHOES.

Contemporary Opinion on the Various Matters of Interest to the Trade.

Saw Mill Gazette

THE chief timber exporting countries of Europe are Norway and Sweden. From Norway 80,000,000 cubic feet come annually, half of them to England; and 33,000 men are at work in the forests and in the timber and wood-work trades in connection therewith. Large as is this production, it is under control; and no tree is now cut unless another is planted; and only enough are cut to keep within the period of rotation. This country might take a valuable lesson from this, and in time will probably see the necessity of doing something to keep up the supply.

Lumber World.

LUMBER lore is being revised every day by the same class of minds that have decided there never was a William Tell who shot an apple from his son's head, never a Lucrezia Borgia who beguiled her hours in administrating fatal poisons to her casual friends, and never a Washington who refused to lie about the hatchet and the discombobbolated cherry tree. It has lately been demonstrated by these minds that the southern pine is not the native heath of the festive and nocturnal bedbug, that the bark on the north side is not thicker than that on the south side, and that the age of the tree cannot be even approximately judged by the number of rings visible in its trunk. Thus do cherished traditions disappear in the light of science!

Northwestern Lumberman

A CORRESPONDENT makes inquiries as to the best way to pile shingles. Some manufacturers lay the bunches flat, others on the edge; and without being able, perhaps, to give any specific reason that would convince others why the latter is the better, the LUMBERMAN gives it the preference. In either case it is better to use long strips than short ones between the different layers, for by so doing the whole pile is strengthened and less liable to be blown over, or from other causes tumble down. A space of a foot should be left between the piles so as to assure a free circulation of air. No shingles are half piled that are not covered. Especially if the bunches be set edgewise, if a rainstorm strikes them before they are roofed the top bunches will be wet clear through. Ordinarily a manufacturer on a moderate scale carries his piles up ten or twelve feet.

Timber Trades Journal, (London, Eng.)

Although a few isolated transactions may still be expected to take place, we may, nevertheless, consider f.o.b. business as practically at an end for this season. Buyers, both in London and on the coast, look forward with equanimity to passing through the winter with light stocks, adhering to the conviction which they have expressed throughout the summer, that no immediate improvement in the inland timber business is to be expected for some time, in spite of the admittedly better feeling in other branches of the trade. Shippers and their agents still endeavor to prove that stocks must run short, and prices consequently rise considerably during the next few months. But buyers remain absolutely indifferent, replying that in such case they be well content to realize a larger profit on a smaller quantity rather than run the risk of holding unwieldly stocks. The anticipations, therefore, of an active autumn trade seem likely to be falsified, more especially as all chance of a brisk business has been destroyed by the advance in freights, which prohibited fresh f.o.b. or c.i.f. transactions. Most of the chartering now effected is for goods contracted for, and we understand that the amount of tonnage taken up on consignment or speculative account is considerably smaller than usual. This will prove of especial benefit to the London market, where the present stocks, as far as we can judge, will prove amply sufficient for any legitimate demand likely to be made upon them.

The Timberman, (Chicago.)

A comparison of the stock on hand in this market on the 1st inst., with the amount held one and two years ago on the said date, makes a very significant showing. It bears out fully the position THE TIMBERMAN has taken that there is much less lumber here than it has been the habit of the trade to have in pile at this time. As contrasted with last year, the shortage is 67,982,431 feet, or about twelve per cent. of the total, while as against 1884 there is a difference of 95,227,733 feet or about sixteen per cent. These figures show that the market is not accumulating stock as rapidly as it usually does toward the close of the season, and therefore that there is little chance that it will recover any of the present shortage; it is far more likely that the amount it is behind will increase with each report. The receipts are running from ten to fifteen per cent. below last year, and with the present low range of cargo prices, and the high and increasing cost of transportation, there is nothing to induce mill men to push forward anything for which they can find piling room at the mills. There is an explanation in the facts of the complaints which are prevalent of a short supply of many grades of lumber at the yards, and a hint of what may be expected in the future. There can be no question but that nearly all the shortage indicated by the comparisons above made is in the grades of stock that are in best demand, and which are hardest to find—long piece stuff, fencing, and common and cull boards, with a few items among the better qualities of lumber.

The Timberman.

Predictions in respect to the condition of lumber prices in the early future are heard now and then, and as usual there is a notable difference of opinion among the prophets. Some rather careful students of the business conditions affecting the lumber trade, hold, and are not afraid to express, rather sanguine views of the outlook. Basing their opinions upon the improved and improving condition of general business, the active demand for labor, and the evident shortage in the lumbor supply, they think they are able to see, just ahead, the opportunity to sell lumber for more than it is now bringing. Less optimistic observers consider the low price of grain, and the condition in which it places a large number of lumber buyers, and are inclined to be somewhat doubtful of the result. It is certain that the market generally, despite the admitted and increasing shortage of dry stock, does not show the strength that should precede an advance in prices. The reason of this is largely that the demand has not been as brisk as was anticipated, and it is possible that even a little improvement therein, of which the better reports received of the past week's trade raise some hope, might result in changing the appearance of things markedly. It is not easy to see how the limited stock of many items in sight for the fall and winter trade, can fail of producing upon values the legitimate effect of a supply that is less than the demand. For such things, at any rate, if not for all grades and kinds of pine lumber, it would seem that higher prices should soon obtain, simply in accordance with the well known principle which is universally admitted to govern their rise and fall.

WHAT THEY SAY OF US.

THE CANADA LUMBERMAN is still published monthly by Mr. A. G. Mortimer, of Peterborough, and is devoted to the lumber and wood-working industries of the Dominion. It is a valuable technical journal.—*London Free Press.*

THE first issue of the CANADA LUMBERMAN under its new management clearly indicates that Mr. Mortimer has not missed his calling, and that the Dominion is going to have a newsy exponent of the lumber trade. Success to it.—*Chicago Lumber Trades Journal.*

MR. A. G. MORTIMER, who has for many years been connected with the *Mechanical and Milling News*, has assumed the proprietorship of the CANADA LUMBERMAN, which will hereafter be issued on the first day of every month.—*Deseronto Tribune.*

THE CANADA LUMBERMAN published at Peterborough is now under the editorial and business management of Mr. A. G. Mortimer. The LUMBERMAN is a good trade journal, and should meet with success.—*Bobcaygeon Independent.*

THE CANADA LUMBERMAN published at Peterborough, Ont., has been sold by the Peterborough Review Printing and Publishing Company, Limited, to A. G. Mortimer. The paper has been published semi-monthly, at $2 a year, but now it will be made into a monthly, the subscription price being placed at $1.—*N W. Lumberman.*

THE CANADA LUMBERMAN has been purchased by Mr. A. G. Mortimer, an old office mate of the editor of the *Star*, who has changed the paper to a monthly, and has reduced the subscription price to $1 per year. We wish him every success in his new undertaking.—*Parry Sound Star.*

THE October number of the CANADA LUMBERMAN is undoubtedly the best copy of that journal which we have yet received. Every person interested in the lumber industry of Canada or the preservation of our forests should subscribe for the LUMBERMAN.—*Deseronto Tribune.*

THE CANADA LUMBERMAN, hitherto published by the Peterborough Review Printing Co., will hereafter be published by Mr. A. G. Mortimer, of the *Mechanical and Milling News*, on the 1st of every month, at $1 a year. The LUMBERMAN will now be in good hands.—*Uxbridge Guardian.*

THE CANADA LUMBERMAN, published in Peterborough, we are pleased to notice, continues to flourish. Is the only journal in the Dominion devoted to the lumber and wood-working industries, and should find a ready patronage from wood-workers and those connected with the lumber interest.—*Port Hope Times.*

We are pleased to notice that under its new management the CANADA LUMBERMAN is being enlarged and improved in many ways. Mr. Mortimer seems to have the correct idea of how to conduct a trade publication, and one of his first improvements has been the addition of an attractive cover to be followed by the adoption of a fine toned paper throughout. We wish our successor every success that his enterprise merits.—*Peterborough Review.*

THE CANADA LUMBERMAN now in its seventh year, has passed under the editorial control and business management of Mr. A. G. Mortimer, who has had considerable experience in the management of trade journals. The LUMBERMAN contains several special features of much value to those engaged in the lumbering business and promises, by its trade reports and attention to the interests which it represents, to be an indispensable periodical.—*Ottawa Journal.*

A. G. MORTIMER, brother of the publisher of the *Dominion Mechanical and Milling News*, has purchased the CANADA LUMBERMAN from the Review Printing and Publishing Co., of Peterborough, Ont., and will hereafter conduct it as a monthly journal. The subscription price, which, as a semi-monthly, was $2 per annum, has been reduced to $1. Under its new management we hope to see the LUMBERMAN live and prosper.—*Dominion M. and M. News.*

THE CANADA LUMBERMAN, published monthly by Mr. A. G. Mortimer, at Peterborough, Ont., is one of the best trade journals in the Dominion. As its name denotes, it is devoted chiefly to the discussion of matters affecting the lumber trade of Canada, in all its branches, from getting the logs out of the forest till they are ready to be put on the market in various manufactured states. It is a large 16 page journal, now in its sixth volume, and has so far deserved success that its publishers have decided on introducing several improvements in its make-up, commencing with the next number.—*Montreal Gazette.*

OUR Canadian cotemporary, the CANADA LUMBERMAN, published at Peterborough, Ont., has been purchased by Mr. A. G. Mortimer. Under the new management the LUMBERMAN will be issued on the first of each month, and the subscription price will be $1 a year. Mr. Mortimer has made himself known in Canada by his connection with the Toronto *Mechanical and Milling News*, and his experience in trade journalism will enable him to keep the LUMBERMAN at a high standard of excellence as a news journal and an advertising medium.—*Lumber World, Buffalo, N. Y.*

AMONG the many other new advertisements which appear in this issue of the LUMBERMAN we have much pleasure in referring to the one occupying the last page of the cover, that of the Dodge Wood Split Pulley Co., 81 Adelaide St. West, Toronto. The special advantages of this style of pulley can be briefly summed up as follows:—The compression fastenings of wood on iron, with wooden bushings, will hold this pulley firmly upon the shaft, and is, in a majority of cases, better than an iron pulley, from the fact that it can be made lighter, and thus save weight on the line shaft, and bearings, thereby reducing friction. It is a well known fact that a wooden pulley is better than an iron pulley, from the fact that it holds a belt much better. From the best authority, this latter amounts to at least 33 per cent. The manner of fastening the pulley to the shaft does not mar nor injure the shafting in the slightest degree, and therefore does not tend to throw the pulley out of balance, as the tendency is with pulleys secured by keys and set screws. The pulley is built of wooden segments, the face being made of poplar. The two halves of the pulleys are secured to the shaft with eight bolts. The bushings to fit different sized shafts are made of hard-wood, thoroughly air-dried, then bored and kiln-dried; then each bush is counterbored to exact size of shaft, then carefully turned on the outside to fit the bore of the pulley. They are then cut transversely in halves. Any further information regarding these pulleys will be cheerfully furnished by the manufacturers.

THE BRITISH WHIG

The neatest Daily in Canada, bright and newsy, $5 by Mail.

THE WEEKLY WHIG

Rivals Toronto and Montreal papers, giving a better selection of general news, fair and independent.

ONLY $1 TILL END OF 1887.

The Whig has a larger circulation than the three other Kingston journals combined. It pays always to advertise in the best.

E. J. B. PENSE, Proprietor.

GEORGE GALL

WHOLESALE and RETAIL

HARDWOOD LUMBER

MERCHANT

Car Lots sold on Commission, railway switch in to yard and plenty of room for storage. Yard corner of Stachan and Wellington Ave. Office, 9 Victoria St. Telephone Connection.

A SPLENDID

MILL SITE FREE.

Adjoining Village and new R. R. with Fifty Million feet of Pine and One Hundred Million feet of Hardwood within radius of ten miles, is fifteen miles from any other mill. A great opportunity to the right man. Mill site of eight acres given free to party who will erect mill or manufacturing establishment. Address

C. T. KENNAN, Milwaukee, Wis.

GRATEFUL—COMFORTING.

EPPS'S COCOA

BREAKFAST.

"By a thorough knowledge of the natural laws which govern the operations of digestion and nutrition, and by a careful application of the fine properties of well-selected Cocoa, Mr. Epps has provided our breakfast table with a delicately flavored beverage which may save us many heavy doctors' bills. It is by the judicious use of such articles of diet that a constitution may be gradually built up until strong enough to resist every tendency to disease. Hundreds of subtle maladies are floating around us ready to attack wherever there is a weak point. We may escape many a fatal shaft by keeping ourselves well fortified with pure blood and a properly nourished frame."—"*Civil Service Gazette.*"

Made simply with boiling water or milk. Sold only in packets by Grocers, labelled thus:

JAS. EPPS & Co., Homœopathic Chemists. London, England

General News Notes.

PEMBROKE is to have a new machine shop and foundry.

THE new mill at Canning, Ont., is in operation again.

J. C. BLAKNEY, saw mill owner, Elgin, N. B., has assigned.

EDWARD BURNS, lumber dealer, Hamilton, Ont., is dead.

JOHN MCALLISTER, lumber dealer, Windsor, Ont., is dead.

THE International Tent and Awning Co., Ottawa, has assigned.

BUILDING operations are reported brisk at Edmonton, N. W. T.

BRITISH COLUMBIA shingles have been shipped as far east as Calgary.

IT is said Rathbun intends starting a sash and blind factory in Piction.

J. A. KILLAM'S saw mill at West Brook, Nova Scotia, was lately destroyed by fire.

A NEW saw mill has been started a short distance from Calabogie, Ont., by Mr. A. Grant.

SAW MILLS round about Ottawa are shutting down earlier this year than usual, owing to a scarcity of logs.

THE Canadian Pacific Company is building five miles of snow sheds in the Rocky mountains at a cost of $1,500,000.

IT is estimated that nearly 10,000,000 feet of lumber will be required at Duluth for elevator building before next fall.

A DESPATCH from Byng Inlet says:—A saw log drive of over ten million feet has been struck twenty miles up the Magnettawan River, for want of water.

MR. CHAS. LOUTLIT, manager of Gilmour & Co's saw mills at Crow Bay, reports having cut over one million feet of lumber this season. The sales have been as large as last year.

A YEAR ago box-wood found a ready market in the United States at $100 a ton. Now the market is dull at $20. The bursting up of the skating-rink bubble did the business.

MR. JAMES MARTIN has purchased the sash and door factory on Fifth St. Collingwood, Ont., from Mr. McKean. He has also a factory on Hurontario Street, in the same town.

OWING to a break-down of some of the machinery the Midland and North Shore Lumber Company's steam mill at Parry Sound, had to be closed down for the season on the 6th, Oct.

THE wood-working shop of O. Goulette, at Gananoque, Ont., occupied also by P. O'Hearn, for wagon making, was burned Sept. 29th. The property was insured for $5,400 which covered most of the loss.

A meeting of the Council of the Board of Trade will be held soon at Toronto, to consider the purchase of the site for a new building. The American Hotel site is spoken of at a cost of $55,000. A building to cost $300,000 is mentioned.

MESSRS. S. J. HOGG & Co., recently received the first consignment of lumber from New Westminister that has been brought to Calgary. The lumber is very clear stuff and can be sold at about half the price charged formerly for this class of lumber.

TRADE prospects in England are brightening. The stocks on hand are nearly 750,000 loads short of the supply last year at this time. Unless there is a remarkable influx to fill up the deficiency, trade is likely to become more active and prices stronger.

THE last issue of the LUMBERMAN contained a sketch of the wood-working industries of Brockville, among which was mentioned the planing mill, and sash factory of Messrs. Kerns & Co. We have this month to chronicle the destruction of these works by fire. The loss is heavy.

THE Campbellford *Herald*, says:—Two carloads of railway ties were daily shipped from the Rathbun saw mill during last week and the week previous. The mill will be kept running at its greatest speed to complete the work undertaken this season. The frost will close operations there in a few weeks.

THE growth of the lumber trade of the Australasian colonies has been extraordinary within the last few years. The total quantity of rough and finished lumber imported into New South Wales alone during the year 1885 was 65,822,037 feet, valued at $2,296,760, against 49,608,825 feet, valued at $1,903,900 for 1884,

A SYNDICATE of well-known Montreal citizens have bought the mills and limits of L'Assomption Lumber Co. from the Exchange Bank liquidators for $30,000, and propose running the mills again. The area over which the purchasers have a right to cut timber embraces three hundred miles, part of which is situated at Ste. Julienne.

THE Chicago *Herald* says:—"G. W. Sheldon & Co. entered the first cargo of foreign lumber received at this port for many years yesterday. The cargo contained 200,000 feet of pine and ash lumber from St. Joseph Island, Canada, to Hitchcock & Foster, Chicago. The duty is $2 per thousand feet, and that is what has made it unprofitable to import."

Kingston *Whig*: Yesterday Mr. McRossie went to the Cape to see the base ball match. He combined business with pleasure and purchased the machinery belonging to Mr. A. G. Burnham's saw mill. It will be brought to the city and removed to a point, not yet selected, beside the Kingston & Pembroke railway. where Mr. McRossie intends erecting a saw mill.

INFORMATION is wanted concerning the whereabouts of one Patrick O'Connor, about twenty-five years of age, brother of Daniel and John O'Connor. He followed lumbering around Orillia and Gravenhurst, working for Geo. Cox about eleven years ago; boarded at the Cooper House. Any information will be thankfully received by Daniel O'Connor, Cavalier P. O., Pembina Co., Dak., U.S.

MR. LOUIS BRITTON, of Parry Sound, was recently severely injured by the falling of a tree in one of the Conger Lumber company's camps. While walking through the woods on the edge of a lake he was struck by a falling tree, which knocked him into the lake, and but for the prompt aid of a person who was near him he would have been drowned. As it was several ribs were broken, and he was otherwise badly bruised.

MONTREAL is likely to increase materially its export of timber by the opening up of the great railway thoroughfare westward, as 3,500 carloads of square timber, representing 2,000 square feet, have arrived in Montreal within the last two months over the Canadian Pacific Railway from the Georgian Bay and Lake Nipissing districts. These consignments were formerly sent down by water at a much slower rate of progress. If cubic feet are understood, this would foot up to 40,000 loads.

WM. WHITNEY, of Bay City, Mich, is preparing to start lumbering operations on his recently purchased land in Canada. He will run one camp on the Restole river, a branch of the French river, sixty miles from Georgian bay The cut will be from eight to ten million feet. The present calculation is to take the logs to Bay City to be sawed. Men and camp equipments will be taken from Bay City. Mr. Whitney's mill at Point Lookout has cut 3,000,000 feet this season.

ON the night of Oct. 14th a fire broke out in the saw mill of the Port Arthur Lumbering Co. The flames had made considerable headway before being discovered, and in a very brief space of time the whole building, full of inflammable material, was ablaze. Two engines were soon brought into service, and were kept at work for some hours. A good deal of anxiety was felt at first for the safety of the immense piles of lumber in the immediate vicinity, but the flames were prevented from spreading from the mill in any direction, and not a foot of stock outside the building was destroyed. The cause of the fire is not known. The mill was running during the day and when closed down was believed to be in a safe condition. It is supposed that the flames originated from a spark near the engine room, and smouldered for some hours unobserved. The mill, stock and machinery was insured for $8,500 as follows:—Western $2.125, Queen $2,125, Citizens $2,125, and Commercial Union $2,125. The loss is estimated at $15,000.

THERE are about 34,000,000 acres of forests in Germany, Prussia, containing 20,000,000 acres. The estimated value is $2,500,000,000 and they bring in an annual revenue of $50,000,000. The state forests are taken great care of in all parts of Germany; in Prussia alone $500,000 a year is spent in replanting, yet the imports exceed the exports by 2,000,000 tons. The oak and the beech are the kinds of trees which do best in Denmark, but the timber trade in that country is very small.

FOR the seven months ending July 31, 1886, the imports of sawed lumber into the United States amounted to $2,743,755, against $2,883,651, for the corresponding period in 1885. The total imports of wood amounted to $3,794,704 in 1886 against $4,122,093 in 1885. The exports of boards, deals and planks for the first seven months of 1886 were $3,995,411, against $3,995,411, against $3 651,395 in the corresponding part of 1885. The total exports of wood and articles manufactured thereof amounted to $12,967,412 in 1886, against $12,031,673 in 1885.

THE Kingston *Whig* says: There is a rumor afloat to the effect that the Caldwell's are going to stop lumber cutting and close their yard in this city. It is untrue. Lumber cutting is always stopped at this season, but only for the winter, and next summer will see the mills again in operation and doing effective service. The yard here is a success, and the citizens would be very sorry to see it closed. Mr. Frank Scantlon has made the business hum, and it cannot be said of him or the agency, "They never would be missed."

THE Cedar Mill at Deseronto, still continues very busy. Mr. Bick, of Bobcaygeon, well known throughout Canada and the United States, for his skill as a manufacturer of shingles, has taken the position of superintendent of the shingle department. The tie contracts for the several railway lines has been the most busy in the history of the mill. Some 400 pieces of excellent timber have been shipped to build piers at the Murray Canal. Several large shipments of shipbuilding material have been made to Kingston and other points and a quantity of timber is now being shipped for the Grand Trunk.

A gentleman from Tonawanda, who has been up the Huron shore, says more lumber is marked up at Alpena and Oscoda as sold than he has seen at this season of the year in the last 15 years. He said the Churchill Bros. had a quantity of fine logs and asked $24 for the lumber to be cut therefrom. They were offered $23, but declined to take it, which the gentleman regarded as a good indication of the strength of the market. It may be said that the choice grades of lumber have readily commanded a high price during the entire season, and there is a demand for more of it than the mills have manufactured. Really choice lumber is growing scarce.

AN important sale of timber limits recently took place at Ottawa. The first put up was twenty square miles north side of the Ottawa River of License No. 240 of 1885-6, Province of Quebec, the adjoining berth 16 square miles of License No. 241 of 1885-6, Province of Quebec. This was knocked down to Mr. Gormully for $30,400. The next parcel, forty-five miles on the White Pine River of License No. 242 of 1885-6, Kippawa, Province of Quebec, was sold to Mr. E. B. Eddy for $18,300. The last lot, twenty-four square miles, south side of the Ottawa River, of License No. 97, 1884-5, Province of Ontario, was sold to Mr. H. H. Dickson of Pakenham, for $7,500.

RAILWAY NOTES.

IT is reported that the Grand Trunk will commence at once the construction of the Sault Ste. Marie extension from Gravenhurst to the Sault.

A party of Canadian Pacific railway directors intend erecting a mammoth hotel at the Baniff National Park, Manitoba.

ON October 1st the Canadian Pacific railway took over from the Dominion Government the telegraph system in British Columbia, and will hereafter work it as part of the company's service.

MESSRS. Dan Mann and Tom Holt, both old contractors on the Mountain Division of the C. P. R. have secured the contract for building the first 40 miles of the Hudson Bay railway.

THE British railways only killed one passenger in each 6,000,000 carried last year. That shows careful railroading.

THERE are in the United States 340,000 miles of completed railway, not including the side tracks. Much of this vast aggregation of road was built at a cost of $6,000,000,000

Trouble in the Head.

Roaring sounds and whistling in the ears and deafness. I had been much troubled by roaring and singing in my ears and at times a whistling sound, especially when lying down, writes a correspondent of the Boston Transcript. An old and experienced physician whom I consulted told me to gargle my throat night and morning with hot and cold water. Have one tumbler of hot water, taking the water hot enough to scald the mouth, and one tumbler of cold water. Gargle first three times with the hot, then three times with the cold water. Do this three times making nine times with each. In a short time I was cured by this very simple remedy. Many times I have wished it were better understood how often deafness is caused by the hardening wax in the ear. A great number of people doubtless suffer from what they believe is incurable deafness, old persons in particular supposing it to be caused by old age, when if they would consult any good aurist they would find it was merely hardening of the secretion of wax in the ears. They can generally be removed by a very simple operation and hearing restored.

HEMLOCK BARK.

The supply of hemlock in Lower Canada will be exhausted, so far as a practical supply is concerned, much sooner than most people think.

It is a fact not known to the average reader that the supply of hemlock in the Eastern Townships, of Canada East, so-called, is practically exhausted. Notwithstanding the immense hemlock forests which existed there twenty-five years ago, the ruthless hand of the destroyer has levelled those great hemlock forests. Very little of the lumber was marketed at the time the bark was peeled, as it would not pay the transportation bills. Hence, millions upon millions of hemlock logs have rotted on the ground in Canada during the past twenty-five years.

Twenty-five years ago Mr. Cutting, of Winchester, brought in the first carloads of consequence from the Eastern Townships into Massachusetts. At that time he only paid $1.50 to $2 per cord for bark peeled, dried and hauled to the line of the railroads in Canada.

This was a very low figure, and afforded the buyer more profit to the carload then than can be made from half a dozen carloads now. It seemed at that time as though the hemlock forests of that part of Canada could never be exhausted, but to-day the great tanneries erected there twenty years ago are idle and are rotting down, merely because a supply of bark cannot be procured.

When the great tanning firm of F. Shaw & Co., established its tannery at Waterloo, Ont., they bought thousands of cords of bark delivered at their tannery at $1.25 to $1.50 per cord. This, of course, gave them a great advantage over those tanneries operated at a great distance from the base of hemlock supplies, but that advantage is fast waning, and but a limited number of tanneries can be run in Canada at the present time. Even the great hemlock extract companies, which were located in the heart of the hemlock districts, have been closed, with the single exception at Upton. Never was a great hemlock forest fooled away at no profit to any one as was the case in the Eastern Townships of Canada. The French habitant who felled his hemlock trees, who peeled his bark, who piled it to dry, and who the subsequent winter hauled it to the railroad, getting only $1.25 to $1.50 per cord, did not realize twenty-five cents per day for his own labor.

The supply of available hemlock is so small at present that the subject is really one of startling importance, both to tanners and owners of hemlock lands. A thorough investigation of the subject is necessary and important. The area of hemlock lands was never nearly so large as that of spruce or pine, and bark is an article which can only be transported by teams or railroad. It cannot be marketed as ordinary logs can, by rivers and streams.

Useful Information.

HOT AIR, drawn over steam pipes that are heated by exhaust or live steam and then blown through pipes to various points where it escapes, is a satisfactory method of heating shops.

IT is argued that pulp can be used as a substitute for lumber in articles now made exclusively of wood. By mixing the pulp with clays, steatite, asbestos, plumbago and mica, substances of every possible color and compactness may be produced.

THE *Chronique Industrielle* gives the following recipe for a paste that will remove the rust and not scratch the finest polished surface: Cyanide of potassium, 15 grams; soap, 15 grams; chalk (blanc de Meudon), 30 grams; water, sufficient to make a thick paste.

ACCORDING to the *Moniteur Industrielle*, a mixture of oil and graphite will effectually prevent screws becoming fixed, and, moreover, protect them for years against rust. The mixture facilitates tightening up, is an excellent lubricant and reduces the friction of the screw in its socket.

FOLLOWING is a comparative statement of the toughness of various woods: Ash, 100; beech, 85; cedar of Lebanon, 84; larch, 83; sycamore and common walnut, each, 68: Occidental plane, 66; oak, hornbeam and Spanish mahogany, each, 62; teak and acacia, each, 58; elm and young chestnut, 52.

THE soundness of lumber may be ascertained by placing the ear close to one end of the log, while another person delivers a succession of smart blows with a hammer or mallet upon the opposite end, when a continuance of the vibration will indicate to an experienced ear even the degree of soundness. If only a dull thud meets the ear, the listener may be certain that unsoundness exists.

REMOVING FURNITURE BRUISES.—Wet the part with warm water; double a piece of brown paper five or six times, soak it and lay it on the place; apply on that a hot flat-iron till the moisture is evaporated. If the bruise be not gone, repeat the process. After two or three applications, the dent or bruise will be raised level with the surface. Keep it continually wet, and in a few minutes the bruise will disappear.

WHEN a band saw has been dressed for the silver solder, take a clean piece of borax, wet it and rub on the parts of the saw to be joined. Then pulverize a little of the borax and sprinkle on the solder, first wetting the same; place this between the ends of the saw and sprinkle a little borax on top of the saw. Now heat the tongs to cherry red and clamp them on the saw for one minute; then pour on a little water and take the tongs off.

DYNAMITE FOR PILE-DRIVING.—An Engineer of Pesth, Mr. Pradanovic, has lately used dynamite for driving piles. A circular cast iron plate 15 inches in diameter and $3\frac{3}{4}$ inches thick is fixed on the pile to be driven in a perfectly horizontal position. A dynamite cartridge made in the form of a disk 6 inches in diameter and $\frac{3}{4}$ of an inch thick and containing $17\frac{1}{2}$ ounces of dynamite is placed upon the cast iron plate and exploded by electricity. It is stated that the depth to which the pile is driven by each explosion is equal to five blows of an ordinary pile engine weighing $14\frac{3}{4}$ Vienna cwt. falling 9 feet 10 inches. A cast iron plate on an average resists 25 explosions.

AN eminent German physician recommends for the extinguishment of fires in closed places where the use of water or other liquids would be likely to do great damage, a dry compound, which, by its burning, absorbs the oxygen and quickly renders combustion impossible. The compound is composed of powdered nitrate of potash (saltpetre), 59 parts; powdered sulphure 36 parts; powdered charcoal, 4 parts; colcotha, (brown-red oxide of iron), 1 part. This preparation is one that can be cheaply made. It is recommended that it shall be, when thoroughly dried and mixed, put up in tight pastboard boxes, holding about five pounds each, with a quick fuse in the side of the box—protruding six inches, with four inches inside—to facilitate and insure lighting it.

THE TRANSMISSION OF POWER.

Power in various forms, and multiplying as the years increase, has always existed, and been used by mankind. History, however, brings us very few facts along the line of mechanics, and it is therefore difficult to say *when*, *how* or *where*, any special form of power or method of transmission originated—at least, this statement is entirely true, if the last two centuries be not taken into account.

In his excellent work on "Hydraulics and Mechanics" Sir Thomas Ewbank remarks, "Tradition has scarcely preserved a single anecdote or circumstance relating to those meritorious men with whom any of the useful arts originated: thus nearly all knowledge of those to whom the world is under the highest obligations, has perished forever."

Probably the earliest power used—outside and apart from human and animal physical strength—was the power of the wind, followed, probably, very closely by the use of water power; and these four powers: human strength, animal strength, wind-force and water-weight, were humanity's powers for over fifty-seven centuries of this world's history. In the application of these powers, for practical, useful, or necessary purposes, transmission of power began, and from the very crudest beginnings, by slow processes of development, along the line of necessity, came the lever, the inclined plane, the wedge, the screw, the wheel and axle and the pulley, all in their place, and by a proper application and utilization of their advantages, becoming means for the transmission of power.

Let me be clearly understood here. I mean just what I say. The lever, &c., have been called from "Times dim morning" mechanical powers; but having no inherent strength or power, are they not (and can they ever be anything else, either separate or in combination) means for the transmission of force, or power in motion?

Ganot defines "power" to be that force which acts to produce motion. Power in motion, therefore, implies the use of *means*, or *matter*, and as a consequence, *results*, and I think we are safe in assuming every construction or machine, and every use of the lever, pulley, wheel and axel, wedge, &c., to be a means for the transmission of power; and whether the machine be of such a construction, (the Webb printing press for instance), as to contain within itself a combination, to a great extent, of all the mechanical forces, or a simple paddle in the hands of a conceist, the fact remains the same, that the material made use of is a means for the transmission of power. And however varied the results may be, caused by the combination of these forces in the mechanical construction made use of it, the fact remains that in all these forms, the true purpose and aim of the users in the varied combinations is the transmission of power. With the introduction of steam, about the year 1768, a new power was added, and as a result the means and constructions for the transmission of power have been broadened and widened, still along the line of the mechanical forces, however, until the methods and combinations for the transmission of power have been multiplied to such an extent that volumes might be written, if one desired to go into details along the lines used.

In the transmission of power, from the motor—or power producer—in connection with the manufacturing industries of the world, during the seventeenth, eighteenth, and the greater portion of the nineteenth centuries, gearing was used almost exclusively; and many of our present engineers can remember the time when it would be considered heretical (in a mechanical sense) to even suggest the propriety of driving a line of shafting, or the machinery connected therewith, by any other means than gearing. Younger generations, however, not bound by the prejudice that entrammelled their fathers, nor hindered by the wisdom (?) of school-made "mechanical engineers," pushed by keener competition into developing the most available out of all their resources, have not hesitated to experiment along new lines, to compare the new with the old, and to adopt the better. As a result of this investigation and comparison by practical men, instead of noisy gearing for the transmission of power, belting and pulleys are now used almost exclusively, and latterly, in a few instances, sheave pulleys and an endless rope.

Gradually, within the last few years, another power—electricity—is coming on to the scene. As yet being used, partially, as a means of transmitting power, and more particularly as a light producer, and not being self-productive, nevertheless, the indications are, that before many decades shall have passed, by the perfecting of the means of producing, controlling and conveying electricity, radical changes will be made in many of the important methods of transmitting power.—*L. A. Morrison, in Dominion M. & M. News.*

UPPER OTTAWA IMPROVEMENT COMPANY'S OPERATIONS.

The Upper Ottawa Improvement Company was incorporated in the year 1868, for the purpose of acquiring and constructing improvements on the Ottawa River to facilitate the transmission of timber and logs from the Des Joachims Rapids to Ottawa. The company proceeeded to purchase and construct booms at Fort William, Des Joachims, Allumette, Melons, Chenail, Lapasse and Onio, and also between the head of Dechenes Rapids and Ottawa and at the outlet of the Hull slide. The paid up capital stock of the company is $108,000, and the present directors are Messrs. Hiram Robinson, E B. Eddy, E. H. Bronson, C. B. Powell and James Gordon. Mr. Robinson is President of the company, Mr. J. R. Booth, Treasurer, and Alderman G. B. Greene, Secretary. The works built and acquired by the company have been enlarged and improved from time to time as the necessities of the lumber trade required. For the use of their booms between 1868 and 1876 the company charged tolls upon logs and timber. In the last mentioned year additional powers were obtained, by special Act of Parliament, to enable the company to handle and assort for the owners all logs passing down the Ottawa from Des Joachims, and for this service a special rate is charged to cover expenses. The Chenaux boom in Chats Lake was built by the Dominion Government, but is operated and kept in repair by the company—with the exception of the boat and raft trip—the Government allowing the company a percentage of the tolls collected at this boom. The lumbering community find the company's work of great utility and benefit, the cost of bringing logs and timber down the Ottawa having been reduced about fifty per cent. since 1876, when the company undertook the handling of loose logs on the river. Rafts and cribs of square timber do not pass through the company's booms. Between the different works, on the navigable stretches, the booms of logs are towed by steamers, the use of a boom being to collect and retain logs which come over rapids singly, the practice being to tow the logs in booms to the head of a rapid and allow them to drift over—to be collected below and towed to the next rapid. All the towing from Des Joachims to the head of the Chats Falls is done by the steamers of the Upper Ottawa Towing Company, seven steamers and tugs being employed in this service. From Onio to Ottawa the towing for the north side is done by the steamer Chaudiere, owned by Captain Goulet, and on the south side by the steamer Monitor, the property of the Upper Ottawa Steamboat Company. During the season of 1885, the number of pieces passing the Onio boom was 2,362,361, and it is estimated that 2,750,000 logs, yielding 392,857,000 feet of sawn lumber will be handled by the company during the present season. During the summer season the company employ between three hundred and four hundred men.—*Ottawa Free Press.*

A RAILWAY-TIE NURSERY.

Hon. R. W. Phipps, Forestry Commissioner for Ontario, has been for several months devoting his time to visiting the principal fruit trees, nurseries, and estates, where attention is given to arboriculture for timber and fuel. In a recent letter from southern Kansas to the Toronto *Globe* he writes:

"One railway board here, knowing that the growing of trees when set about in earnest is neither a slow nor difficult task, have established in Kansas the largest artificial plantation of forest trees in North America. These railway gentlemen themselves gave out the contract for planting over a square mile of land with young saplings of the catalpa and ailantus, and their president, observing the success of their experiment, and impressed with the probable excellent financial results, has had planted at his own expense as a speculation as much more. These are situated near the little town of Harlingtown, Kan. These plantations, now bare of leaves, stretch far over the undulating prairie in full view of the town. The different sections have been planted, it appears, respectively two, four, and six years ago. About one-fourth is planted with the ailantus, the rest with the catalpa, and a few—perhaps 1000 trees— of white ash. Those first planted are now about 25 feet in height, the last about 12. Some of the taller are seven inches through the stem. The first seedlings were brought from Illinois by the carload, the rest grown in seed beds here. There are in all about 3,000,000 of trees in full growing vigor on these plantations, this calculation leaving out a few on some small portions of poor land which are not flourishing so well, but will be good trees in time. All were planted four feet apart each way to shade the ground, but eight feet is the ultimate intention, which will allow three-fourths of the trees to be cut out, a thing which can well be done when they are fit for fence posts, say seven to nine inches through, or if required, they can stay even longer without injuring the plantation. When rather larger it is expected the trees will make excellent railway ties, and at their fuller growth of 15 or 20 years they will supply very valuable timber for cabinet work and house building. Those who have only seen the original forest, with its trees growing at haphazard here and there, little ones and big, have but a very vague idea of the large amount of wood the closely planted grove can spare in their process of growth. This process, partly natural, is also by the art of the planter rendered partly mechanical. Extensive masses of young trees planted in this manner are restricted to but one method of advancement—the endeavor to throw out masses of leaves to the light and air of the upper surface. The lower branches, hidden in shade, rapidly die and fall to the ground, and the plantation becomes a multitude of long, straight stems, full of life and vigor, but only spreading into branch and foliage at the summit. If a tree in youth be crooked it straightens itself, if thus surrounded, as it advances in height. One acre so growing will give of wood, which is all the better taken, quite a number of cords yearly till all the superfluous trees are gone. On each acre here there are 2000 more trees planted than will ultimately be allowed to attain full growth. There will be left perhaps 900,000 to come to maturity, and as these, as well as being very useful timber, are fast-growing trees, the profits seem likely to be very large."

NEW BRUNSWICK LUMBER TRADE.

A considerable quantity of lumber is being held at Miramichi ports for higher prices. According to a correspondent at Newcastle, N. B. it is believed that the amount shipped to Europe this season will not exceed seventy million feet, as compared with 117,149,108 and 87 millions in 1882, 3, 4 and 5 respectively. Following are the quantities rafted at the South West boom in these years:—'82, 77,740,241 ft.; '83, 71,194,651 ft.; '84, 37,049,643 ft.; '85, 37,282,825 ft.; '86, 30,806,383 ft. Charters have ranged from 40 to 45 shillings per standard this year. Snowball's deals have been shipped up to date in 34 sailing vessels. No steamers have been employed this season. Most of the deals forwarded have been to ports in France and on the Mediterranean. Nearly all the deals cut by Richards & Hickson at Newcastle are piled up on their wharf, and Burchill, of Nelson, has only shipped two cargoes this summer. Scarcely any move has been made by operators as to next winter's work and those spoken to seemed to be greatly discouraged over the continued depression in the European markets and the prospect of no decrease in the government stumpage tax.

LEISHMAN & PERRY, saw mill operators, Bracebridge, Ont., are succeeded by Leishman & Co.

WANTED.

The publisher of the CANADA LUMBERMAN desires thoroughly reliable and competent correspondents at the following named places :—

Ottawa, Ontario.
Kingston, Ontario.
Quebec City, Quebec.
St. John, New Brunswick.
Halifax, Nova Scotia.
Winnipeg, Manitoba.
Victoria, British Columbia.

The duty of each correspondent will be to give a review of his local market for the month preceding the date of issue, and the ruling quotations for different kinds of lumber, &c. For terms and any other information, address

A. G. MORTIMER,
Peterborough, Ont.

Market Reports.

MONTREAL LUMBER MARKET.

MONTREAL, Oct. 25.—During the month of October, our lumber merchants here have experienced a good trade, the early portion of it showing the greatest activity, and the amount of stock disposed of was very large, prices generally showing good profits. The provincial elections which took place in the middle of the month interfered somewhat with the wholesale business, as these events generally monopolise a goodly portion of the time of country contractors and buyers, but the retail movement at the yards for city trade remained eminently satisfactory, as was also the case with carloads. This last week has shown a resumption of the activity in the wholesale, and dealers are busy bringing down large quantities for the winter trade. Stocks, generally speaking, in Montreal are heavy, and competition is keen in all grades. The mills on the Ottawa have pretty well disposed of this seasons cut, and some will be stopping very soon.

Dimension timber is very brisk here, the Canadian Pacific Railway requiring about a million and a half for their trestlework on the south side of the new St. Lawrence bridge. The greater part of this timber is being cut by firms here, and the material is good, as in all probability this trestlework will be permanent. The mills in the west are all busy getting out stuff for the Canadian Pacific for their Smith's Falls and Montreal line.

Oak has been in good demand, both for export and local consumption ; 3rd and 4th deals have also had good good enquiry, but higher grades have not been as brisk. Among the many new buildings in course of erection in this city, is a large freight shed for the Grand Trunk railway. The new station for this company will be commenced very soon, but owing to the lateness of the season, not much more than the demolition of part of the old one, and otherwise preparing for the reception of material will be done this year. It has been decided to build the station on piles, about 2,500 of which will be required for the work, and these will have to be in readiness for the first thing in the spring.

The export movement still keeps up, and about half a dozen vessels have yet to be dispatched to South America and the United Kingdom with lumber freight. In connection with this, the value of the exports of lumber from Canada to date are nearly a million dollars in excess of the corresponding period of last year. The exports to date embrace 3,070,483 pieces deals, deal ends, boards and battens to Europe, and 17,763,015 feet of lumber to South America.

The following are the quotations at the yards :—

Pine, 1st quality, ₱ M	$00 00@40 00
Pine 2nd " "	00 00@30 00
Pine, shipping culls, ₱ M	14 00@16 00
Pine 4th quality deals ₱ M	10 00@12 00
Pine, mill culls, ₱ M	8 00@10 00
Spruce, ₱M	10 00@13 00
Hemlock, ₱ M	9 00@10 00
Ash, run of log culls out, ₱ M	20 00@25 00
Bass, " " ₱ M	18 00@20 00
Oak, ₱ M	40 00@50 00
Walnut ₱ M	60 00 100 00
Cherry, ₱ M	80 00 100 00
Butternut, ₱ M	35 00@40 00
Birch, ₱ M	20 00@25 00
Hard Maple, ₱ M	25 00@30 00
Lath, ₱ M	1 50@ 0 00
Shingles, 1st, ₱ M	2 00@ 3 00
Shingles, 2nd, ₱ M	2 50@ 0 00

TORONTO.

The following are the ruling quotations in this city at present :—

Mill cull boards and scantling	$10 00
Shipping cull boards, promiscuous widths	12 00
" stocks	13 00
Scantling and joist, up to 16 ft	13 00
" " " 18 ft	14 00
" " " 20 ft	15 00
" " " 22 ft	16 00
" " 24 ft	17 00
" " " 26 ft	18 00
" " " 28 ft	19 00
" " " 30 ft	20 00
" " " 32 ft	21 00
" " " 34 ft	22 50@22 50
" " " 36 ft	24 00
" " " 38 ft	27 00
" " 40 to 44 ft	30 00
Cutting up planks to dry	20 00@25 00
" boards "	20 00
ound dressing stocks	16 00@18 00
Picks Am. inspection	30 00
Three uppers, Am. inspection	35 00@40 00

B. M.	
1½-inch flooring, dressed	25 00@30 00
1½ " " rough	14 00@15 00
1¼ " " dressed	23 00@25 00
" " undressed	14 00
" " dressed	16 00@20 00
" " undressed	12 00@14 00
⅞ Beaded Sheeting, dressed	18 00@20 00
Clapboarding, dressed	12 50
XXX sawn shingles, ₱ M	2 75@ 2 90
Sawn Lath	2 25
Red oak	20 00@25 00
White "	25 00@30 00
Basswood, No. 1 & 2	18 00@20 00
Cherry, No. 1 & 2	50 00@60 00
White ash 1 & 2	25 00@30 00
Black ash 1 & 2	20 00@25 00

OTTAWA.

Concerning the lumber trade of the Ottawa district, the *Free Press* of that city has the following:—Much comment has been indulged in on account of the large number of lumbermen who have been sent up to the shanties this fall, and an extraordinary cut of timber has been predicted for next season. This supposition, however, has no basis in fact. A much larger number of men have been sent up from Ottawa this fall, it is true, but the aggregate number of men who have been despatched to the shanties is not much if any in excess of the number sent up last year. The cause of this misconception is attributable to the fact that the mill owners have developed a tendency to cut their own logs instead of having them cut by contract. Consequently the shantymen are engaged and sent up by the mill owners instead of by the contractors as formerly, with the result that the men must be engaged at the mills and thus all start from Ottawa, instead of going from different parts of the country as was the case when they were engaged by the contractors. It will thus be readily seen that although a much larger number go from Ottawa than formerly still the actual number sent up is not necessarily increased. Some of the lumber firms, however, contemplate making heavier cuts this year than for some years past, notably Messrs. Grear & Co. The mills owned by this firm were purchased from the Young estate about a year ago. For ten years they have not had a full supply of logs and the firm have determined to make an alteration in this respect. Messrs. Bronson & Weston are said to have a large number of logs on hand and it is reported that they may probably not cut so heavily this season in consequence. It is calculated that Mr. J. R. Booth will have about 150,000 logs on hand after the mills shut down, to open the next season with. This quantity will probably keep the mills working for one month or six weeks in the early part of next spring. An immense number of logs, however, of last winter's cut are being transferred by the firm's railroad from Lake Nipissing to the Mattawa waters and these will be ready to come down the Ottawa next spring and renew the supply which will have been left over during the winter. About 300 men have been sent up to Mr. Booth's shanties this fall and a large cut of timber will be made in the Lake Nipissing district, where Mr. Booth's limits are situated. On the whole next season will be a tolerably brisk one for the lumber trade, but judging from present appearances not much out of the ordinary line.

QUEBEC.

Four hundred and fifty eight seagoing vessels have entered at the custom house since the opening of navigation and 413 have cleared ; 1836 market steamers and schooners have also arrived. The following export freight transactions are reported : Quebec to Leith, timber, 208, deals 47s. 6d ; Quebec to Greenock, timber, 18s, deals 40s. ; Quebec to Clyde, timber 18s.

Owing to the continued rains the rivers on the South shore have at last risen sufficiently to run the logs, and in consequence Messrs. Brialley and Halls have secured the greater portion of their cut. Mr. Breakey's mills now will be run on full time to the end of the season ; he expects to cut 1,300 to 1,400 logs per day. It is also reported that the Montmorency Mills will again commence sawing night and day until end of season. Their cut will be about 3,000 logs a day. A considerable proportion of Mr. Breakey's logs are run down to Montmorency, and cut into deals etc.

MIRAMICHI.

A travelling corsespondent of the Saint John *Sun*, writing from Newcastle, N. B., furnishes the following interesting particulars of the Miramichi trade from which we gather that a considerable quantity of lumber is being held for higher prices. The quantity shipped to Europe this season will not, it is believed, exceed 70,000,000 ft. That this will be a limited export compared with recent seasons the following figures will show :—

1882 shipments	117,000,000 feet.
1883 "	149,000,000 "
1884 "	108,000,000 "
1885 "	87,000,000 "
1886 (probable) shipments	70,000,000 "

A corresponding decrease is shown in the number of feet rafted at the South-west boom during those years, viz : 77,740,000 ft. in 1882 ; 71,194,000 ft. in 1883 ; 37,049,000 ft. in 1884 ; 37,282,000 ft. in 1885, and 30,806,000 ft. in 1886.

Charters have ranged from $9.60 to $10 80 per standard this year. No steamers have been engaged this season. Snowball's deals have been shipped up to date in four sailing vessels. Most of the deals forwarded have been to ports in France and on the Mediterranean. Nearly all those cut by Richards & Hickson, at Newcastle, are piled up on their wharf, and Burchill, of Nelson, has only shipped two cargoes this summer. Scarcely any move has been made by operators as to next winter's work, and those spoken to seemed to be discouraged over the continued depression in the European market and the prospect of no decrease in the Government stumpage tax.

DETROIT, MICH.

We are having a good demand for local use, while shipping trade is fair. Prices are firm as quoted. Bennett Bros., who sell Dan McCoy's and L. S. Baker's Big Rapids lumber in Ohio and Indiana, report some very large sales, and that trade is good in that country.

Uppers, 4x4	$45 00
5" 6x4 & 8x4	45 00
3 & 4 in	50 00
Selects, 4x4	37 00
5x4, 6x4 & 8x4	38 00
Fine common, 4x4	31 00
5x4, 6x4 & 8x4	33 00
Shop, 4x4	22 00
5x4, 6x4 & 8x4	25 00
Flooring, select common	22 00
No. 1 common	18 00
No. 1 fencing	16 50
Roofing, D. & M	16 00
Siding, clear	21 00
A	19 00
B	14 00
C	14 00
Ceiling, select common	25 00
Ceiling, No. 1 common	22 00
No. 1 fencing	20 00
Stocks, 1x12 & 1x10, No 1	18 00
1x12 & 1x10, No. 2	14 00
1x12 & 1x10, No. 3	11 00
Ship culls	10 00
Mill Culls	8 00
Bill stuff ordinary sizes :	
12 to 16 ft	11 00
18 to 20 ft	12 00
22 to 24 ft	13 00
26 to 28 ft	14 00
30 to 34 ft	16 00
Shingles, clear, 18 in. Ex	3 25
10 in. clear, 18 in	2 30
6 in. clear, 18 in	2 00
6 in stocks clear, Ex	4 00
5 in. " "	4 80
Lath, per M pcs	2 50

Add for S. 1 or 2 S. $1 ₱ M

OSWEGO, N.Y.

From Our Own Correspondent.

Three uppers	$46 00@47 00
Picking	36 00@37 00
Cutting up	26 00@27 00
Fine Common	22 00@25 00
Common	14 00@18 00
Culls	13 00@15 00
Mill run lots	19 00@21 00
Sidings, selected, 1 in	28 00@36 00
" 1¼ in	30 00@38 00
Mill run, 1x10, 13 to 16 ft	19 00@21 00
Selected	24 00@26 00
Shippers	14 00@16 00
Mill run, 1¼x10	15 00@17 00
Selected	21 00@30 00
Shippers	14 00@16 00
Mill run, 1 & 1½ in, strips	19 00@21 00
Selected	32 00@34 00
Culls	12 00@15 00
1x6 selected for clapboards	32 00@34 00
Shingles, XXX, 18 in. pine	3 65@ 3 80
XXX Cedar	2 30@ 3 60
Lath 1½, No 1	1 80@ 2 00
No 2	1 60@ 1 80
Ash, 1st & 2nd 1 to 4 in	16 00@20 00
Basswood, 1st & 2nd, 1 & 1½ inch	20 00@22 00
" culls, " "	11 00@12 00
Hard Maple, ₱ M	23 00@25 00
Lath, ₱ M	1 50@ 0 00
Shingles, 1st, ₱ M	2 00@ 3 00
Shingles, 2nd, ₱ M	2 50@ 0 00

CORDWOOD.

Long Maple, per cord	$ 6 00@6 50
Long Birch "	6 00@0 00
Long Beech "	5 00@5 50
Tamarack "	5 00@0 00

ALBANY.

The Albany *Argus*, in speaking of the lumber market at that point, says : "It is very apparent even to the most casual observer, that the trade as a whole, exhibits all the signs of a very healthy improvement. Even those dealers who are among the last to recognize and admit the improved condition of things, are beginning to acknowledge that the trade is shaping itself more in conformity to the desires of the seller, and that present indications point to a much improved market in the near future. The very fair condition in which the trade stands, to-day, is too evident to be denied. Very many large orders have been sold during the past two weeks and buyers are making their appearance every day. They come not only to look around, but to purchase, and, as a rule, the sales made are at the terms of the seller rather than at those of the buyer. In fact, it is the common talk in the district of dealers refusing to budge from quoted figures, even in prospective large orders. The difficulty of getting boats still continues to such an extent that it is likely to become embarrassing."

Pine, clear, ₱ M	$55 00@60 00
Pine, fourths	50 00@57 02
Pine, selects	42 00@44 07
Pine, good box	22 00@35 00
Pine, common box	13 00@15 07
Pine, 10-in. plank, each	00 45@00 40
Pine, 10-in. plank, culls, each	00 25@00 20
Pine boards, 10-in	00 30@00 30
Pine, 10-in. boards, culls	00 16@00 25
Pine, 10-in. boards, 16 ft., ₱ M	28 00@32 00
Pine, 12-in. boards, 16 ft	28 00@30 00
Pine, 12-in. boards, 13 ft	28 00@30 00
Pine, 1¼ in. siding, select	40 00@43 00
Pine, 1¼-in. siding, common	15 00@18 00
Pine, 1-in. siding, select	40 00@42 00
Pine, inch siding, common	13 00@15 00
Spruce, boards, each	00 00@00 16
Spruce, plank, 1¼-in., each	16 00@00 00
Spruce, plank, 2-in., each	00 00@00 20
Spruce, wall strips, each	00 12@00 12
Hemlock, boards, each	00 00@00 14
Hemlock, joist, 4x6, each	00 00@00 32
Hemlock, joist, 2x4, each	00 00@00 14
Hemlock, wall strips, 2x4, each	00 00@00 11
Black walnut, good, ₱ M	100 00@120 00
Black walnut, ¾ inch	80 00@90 00
Black walnut, ¼ inch	90 00@85 00
Sycamore, 1-inch	28 00@30 00
Sycamore, ¾-inch	21 00@23 00
White wood, 1-inch and thicker	38 00@40 00
White wood, ¾-inch	28 00@30 00
Ash, good, ₱ M	40 00@43 00
Ash, second quality, ₱ M	27 00@30 00
Cherry, good, ₱ M	60 00@65 00
Cherry, common, ₱ M	25 00@30 00
Oak, good, ₱ M	40 00@45 00
Oak, second quality, ₱ M	20 00@25 00
Basswood, ₱ M	25 00@30 00
Hickory, ₱ M	40 00@50 00
Maple, Canada, ₱ M	28 00@30 00
Maple, American, per M	26 00@28 00
Chestnut, ₱ M	38 00@40 00
Shingles, shaved, pine, ₱ M	0 00@ 6 50
" 2nd quality	0 00@ 5 50
" extra, sawed, pine	4 30@ 4 00
" clear, "	0 00@ 3 00
" cedar, mixed	0 00@ 3 00
" cedar, XXX	0 00@ 0 00
" hemlock	2 25@ 2 37
Lath, hemlock, ₱ M	0 00@ 2 35
Lath, spruce, "	0 00@ 2 20

NEW YORK CITY.

Trade in this city during the past month, has, according to our exchanges been quite satisfactory. On some lines, particularly spruce, the receipts have been liberal. Trade in white pine continues good. Yard business is good. For export the movement, while not as animated as that experienced during the corresponding period in previous years, has been fair. The market for yellow pine has changed but little. Spruce has been moving rather lively.

The wholesale market developed but few features of moment. Trade both for domestic and foreign account continues fair and the general feeling is one of steadiness with prices on some descriptions showing a hardening tendency. Business at the yards has been fully up to that experienced the preceeding few weeks. Some of the yards reported a slight falling in trade with them but the increase at other points more than made up for the decrease. As regards

prices, no change was recorded, the market ruling steady in tone. Freights have undergone little or no change during the week. The weaker feeling at the Gulf noticed in our last continues, but aside from this the tone of the market is one of steadiness. The shipments of lumber from the port of New York during the week aggregated $32,291. This shows a decrease from the two preceeding weeks, the total valuation being $49,305 for week ending October 12, and $68,424 for October 5.—*Lumber Oct. 20th.*

CHICAGO.

Recent advices from this port show that there has been a drop in the prices of green stuff of 25 cents per thousand, cargo lots. The drop is the result of the extra time the stuff must be kept is stock before it is fit for market. Dealers will not speculate in green piece stuff to any extent at this season of the year. It is generally believed that the true policy would be to buy freely now as it is not probable that a better chance will offer. Some appear to think that the drop is a sharp piece of acting on the part of commission men, with the object of shaking the position of mill men. Much lumber by cargo is selling rapidly at firm prices. The offerings of piece stuff have been heavy. Local trade has been heavy and shows a steady increase. Prices continue steady and unchanged, and the prospects are that present figures will hold good for some time.

Dimension, short green	$ 9 50@ 9 75
Boards and strips, No. 2	11 00@12 00
Selected	20 00 26 00
Boards and strips, No. 1	16 00 19 00
Shingles, standard	1 75 1 90
Shingles, extra	1 95 2 10
Shingles, cedar, standard	1 70 1 80
Shingles, cedar, extra	1 95 2 10
Lath, green	1 35
Lath, dry	1 50

RECEIPTS.

	Lumber.	*Shingles.*
1886	54,985,000	18,667,000
1885	45,813,000	37,682,000

FROM JAN. 1, TO OCT. 21, INCLUSIVE.

RECEIPTS.

	Lumber.	*Shingles.*
1886	1,379,842,000	680,781,000
1885	1,416,898,000	632,170,000
Decrease	37,056,000	
Increase		48,611,000

STOCK ON HAND OCT. 1.

Lumber & timber	570,097,461
Shingles	416,309,618
Lath	44,423,562
Pickets	1,636,113
Cedar posts	272,357

EASTERN FREIGHT RATES.

FROM CHICAGO AND COMMON POINTS ON CAR LOAD LOTS OF HARD AND SOFT LUMBER.

To New York	25c.
Boston	30c.
Philadelphia	23c.
Baltimore	22c.
Washington	22c.
Albany	24c.
Troy	24c.
Buffalo and Pittsburgh	15c.
Shenectady	24c.
Wheeling	15c.
Suspension Bridge	15c.
Salamanca	15c.
Black Rock	15c.
Dunkirk	15c.
Erie	15c.
Toronto	15c.

LAKE FREIGHTS.

From Muskegon, green	1 62½
From Whitehall	1 62½
From Ludington	1 75
From Manistee	1 37½@1 87½
From Menominee, dry	2 00
From Menominee, green	2 00
From Cheboyan	2 00
From Bay City,	3 00
From Oscoda, dry	2 75
From Alpena, dry,	2 50

PHILADELPHIA.

Reports from Philadelphia are unusually encouraging. Trade is brightening up, and the "dullness of the market" which has been the cry for the last year or two, has been turned to a different tune. In the local market the distribution is heavy and prices are firm. The demand from car builders and railroads is still heavy. The shipyards are all busy and are drawing from the stocks. All the mills in the city are busy and have orders ahead. The receipts of white pine are now up to the capacity of the yards. Spruce, hemlock and inch cap pine are in active demand. At a meeting of the Board of Trade of the Lumber Exchange, Philadelphia, a committee on arrangements for the excursion to the lumber regions was appointed. The Pennsylvania Railroad have placed at the service of the Lumber Exchange a special train, free of cost, which will leave Philadelphia October 27th, at 11.30 a. m., for Williamsport, thence to Lock Haven, Tyrone and other places, returning to Philadelphia October 29th. The party will receive every attention at the several places by the representatives of the lumber trade. Valuable results are expected to accrue to the lumber trade of Philadelphia from this trip, as it will tend to place the business upon a sounder basis and slide much of the trouble experienced from imperfect classification and the like. The exchange has been greatly interested in this vital subject; each hour spent upon it will give a valuable return, as everything which tends to simplify the business, or make it more secure, is a reduction in the cost of doing the work, and accrued directly to both parties of the transaction.

BOSTON.

Reports from Boston mills are by no means satisfactory. Scarcity of water power seems to be the principal cause of the dullness of trade. This has had the effect of putting up the prices on all classes, except boards, from 60c. to $1 per 1000. In western pine the market is only fairly active, but in southern stock there has been free arrivals of late. There is an active demand for spruce lumber. There is a fair call for shingles, clapboards, laths, cherry, &c.

The lumber surveyed in Boston for the week ending October 21, was as follows: 405,795 feet pine; 1,263,551 feet spruce; 54,935 feet hemlock; 396,816 feet Southern pine floor boards; 46,415 feet Southern pine timber and plank; 150,366 feet white wood; 141,208 feet black walnut; 128,695 feet hardwood. Total, 2,587,781 feet.

BAY CITY.

Trade in the market is not overly active, there being a boom in nothing but prices, which have risen considerably. The advance in freight rates to Buffalo and Cleveland has had a tendency to check the movement of lumber, and as a consequence the piles at the mills are rapidly increasing. Some sales have been made at good prices the past week, among which are 500,000 feet good stock at $9.50, $19 and $38 by inspection; 1,500,000 feet in three lots ranging from $16 to $24 straight measure; 500,000 feet Norway bill stuff at $8 50 and $9.50; 300,000 feet coarse lumber at $15 straight, and some lots of choice lumber at $10, $20 and $40 under inspection. Hall & Buell, at Marquette, also sold 2,000,000 of stock cut at Manistique to Albany, N. Y. parties at $23. Shingles 18 inch stock have sold at $1.90 for clear butts and $2.85 @ $2.90 for XXX.

LIVERPOOL.

The *Timber Trades Journal*, Oct. 16th says: With a light import during the past week there has not been any great amount of animation displayed at the docks, either with regard to timber laden vessels discharging cargoes or in the quantity forwarded to the country. Still there is a fair consumption going on in a steady manner, which is only what could be expected from the volume of business now being done in the manufacturing districts. This, however, is principally in low-class goods, such as spruce deals and whitewood blocks, for casemaking and similar purposes.

Up to the present time there has not been any actual advance in the market rates for spruce deals, but every day must bring us nearer the time when such may be looked for if the importation continues on the same moderate scale as it is now.

This is more than probable if the information from New Brunswick and Nova Scotia be reliable, which is to the effect that we shall have a considerable shortage of supplies in the latter part of the import season.

There have not been any public sales of whitewoods during the past week, but we notice that Messrs. Farnworth & Jardine, purpose offering by auction on Wednesday next about 900 logs of St. John, N. B., birch timber, now landing on the quay of the Canada Dock, but beyond this we do not hear of any further sales being contemplated.

LONDON.

Timber, Oct. 16th.—We have no change of importance to chronicle since our last. The tone generally has continued very quiet with few signs of any improvement. The present price of good 3rd Swedish deals may be considered about £10 10s. @ £11, and 4th quality about £7 15s. Allowing, say, £2 5s. per standard for present rate of freight, insurance and charges, would leave an f. o. b. price of £8 10s. for 3rds and £5 10s. for 4ths. Few, if any, good stocks are to be brought at these prices, so the market here remains (as it has been through the season), the cheapest buying place. There is, moreover, considerable risk in importing late in the year of goods arriving out of condition, arising from the weather at the shipping ports being very uncertain. The cargoes are frequently unavoidably loaded in wet weather and on arrival here are piled away in the same wet state, and as often as not in rainy weather, thus causing considerable loss and dissappointment to importers. The buyer here who waits to see the goods before purchasing escapes these risks, with the additional advantage that he need only buy exactly what he requires, and as and when he wants it.

The arrivals from Canada have thinned off considerably, and the list for this week is a very light one.in the Surrey Docks, the Kalliope, from Quebec, discharges a cargo of deals for Messrs Price and Pierce; and the West Cumberland, from Montreal, brings 5,000 pine deals and 8,425 boards, for Messrs. Bryant, Powis and Bryant Ltd., the balance of the cargo being divided between Messrs. Churchill and Sim and R. R. Dobell and Co. In the Millwall Docks, the Grafton, from Montreal, brings a cargo of 37,539 deals and 5,967 ends; and the Thorn Holme, from the same port, with a similar cargo, both report to Messrs. Bryant, Powis and Bryant Ltd. The Cotherstone, also from Montreal, brings a mixed cargo of deals, battens and ends, part of which is for Messrs. Bryant, Powis and Bryant Ltd., and the balance for Messrs. Churchill and Sim. The Concordia, from Chatham, with a cargo of deals and ends, is discharging in the Regent's Canal Docks, while the Assyrian Monarch, from New York, brings a cargo of sundries for various consignees; the lattter is in the Millwall Docks.

LONDON, ENG.

London *Timber*, of the 9th Oct., says:—The sales during the past month have been as follows: Quebec pine, waney and square, red pine, oak, elm, ash, hickory; the arrivals have all been on merchants' account, and there are no wholesale transactions to report. Birch: By auction, St. John 14¼ inches average, at an average of 15½d. per foot; Nova Scotian, 14½ inches average, at an average os 13½d. per foot. Quebec pine deals: First quantity regulars, at from £22 10s. to £24 per standard; oddments, at from £18 to £20 per standard; second quality regulars, at from £15 10s. to £19 per standard; oddments, at from £14 to £16 per standard; third quality regulars, at from £8 10s. to £9 10s. per standard; oddments, at from £8 to to £8 5s. per standard. First quality strips, at from £16 to £16 10s. per standard; second quality, £12 to £12 10s. per stantard; third quality, £7 per standard. Spruce deals, St. John at £5 15s. per standard; lower port at from £5 5s. to £5 12s. 6p. N. B. and N. S. pine deals: No sales to report. Scantling and boards, at from £5 to £5 10s. per standard, and with the cargo at stowage rates. Palings, pine 4½ by 1 by 3, at 90s per mille. Quebec staves; merchantile pipe at £62 10s. per standard mille.

The *Timber* of the 9th October says:—The arrivals from Canada occupy a more prominent position this week. In the Surrey Docks we have the Vera, from Miramichi, with pine and spruce deals, and 644 pcs. birch timber for Messrs. Bryant, Powis & Bryant Limited; the Hebe, also from Miramichi, with pine and spruce deals and birch timber, the bulk of the cargo being for Messrs. Bryant, Powis & Bryant Limited, the balance for Messrs. R. R. Dobell & Co. and the Duisberg, from Quebec, with cargo of deals, also for Messrs. R. R. Dobell & Co., now being piled in the Albion yard, the Ashbourne, from Montreal, with cargo of deals, battens and ends for Messrs. Bryant, Powis & Bryant, Limited; the Dunholme, from Quebec, with cargo of pine deals; and the Hovding, from Quebec, also with pine and spruce deals, the three last named discharging in the Millwall Docks, and all reporting to Messrs. Bryant, Powis and Bryant, Limited.

GLASGOW

Timber Trades Journal, Oct 16th.—The past week has been a quiet one here, imports have been light, and there have been no public sales held by wood brokers. At a good many of these recently recorded transactions were comparatively light owing to a want of brisk demand or reluctance on the part of buyers to come up to prices required, and a short interval may help to improve the tone at these sales.

There are some hopeful signs of trade generally being in the way of getting better, and should these be maintained the timber trade will soon begin to feel the improvement; meantime, it is a good feature that, regarding most descriptions of wood goods, the market is not overburdened with stock.

From the statement given in last number it would be observed that there are unusually few lower port pine deals on hand, only some 12,000 pieces, being part of a cargo newly landed. The stock of Quebec 3rd and 4th pine deals, however, though not so large as that of last year at 30 h September, is still considerable.

We observe that of walnut logs in importers hands there are at present about 190, whereas at corresponding date last year the number held was 834 (at Glasgow), which was a larger quantity than usual, on account of a full cargo per sailing vessel having been landed a few weeks previously. This year the imports of walnut logs to Glasgow have been in small parcels per steam liners, except 150 logs, which form part of the stock at present held.

From the official report of building operations in the city for the past twelve months it appears that the aggregate value amounted to £394,540, an increase of £45 525 as compared with the preceeding year.

The new graving dock at Salterscroft, Govan, which has been four years in construction, was formally opened on 13th inst.

SMITH'S

Mercantile & Land Reporting Agency

BANKERS—DOMINION BANK.

General Solicitor, JNO. LEYS, ESQ., Barrister, Toronto. Secretary, JOHN SMILEY, M.A.
MANAGER—WILLIAM SMITH.

General Offices—Court St., Toronto, Ont.

Telegraph Address—Agency, Toronto.

Having for its special objects the furnishing to subscribers of reliable information on the financial standing or otherwise of tradesmen and others, the collection of outstanding accounts, and the procuring of the most reliable information from independent sources of the value and condition of landed and other properties in any part of Canada and the United States, with correspondents in Great Britain and other parts of Europe.

Our method of procuring for our subscribers the most reliable information is through solicitors of the highest standing, and from other equally reliable sources in the several localities indicated, who are under contract with us to supply the necessary information promptly.

The Landed Enquiry Department of this Agency, the only institution of this kind known, is invaluable to Solicitors, Loan, Investment, and Insurance Companies, Estate Agents, and others, preventing fraudulent land transactions resulting from misrepresentations.

The Department for the collection of outstanding accounts is conducted on an entire change of the system usually followed by Collecting Agencies, viz.:—Subscribers may have their collections paid either direct to themselves, or to the offices of the Agency, in which latter case remittances will be deposited to an account provided for that purpose, and immediately remitted to the parties to whom it is due, and will not be applied to any other purpose.

Another important feature in connection with this department is, that subscribers depositing accounts for collection will, if requested, be furnished with a Form of Script, on which will be entered the name of each debtor, the amount owing, and a full report of the prospects of collection, and providing that the receipts thereof be paid to bearer only, thus enabling subscribers to realize on their outstanding accounts.

The Agency will forward at least once in three months, or oftener if desired, a report and statement of all accounts in hand.

NOTE.—The offices of the Agency are open to the Solicitors and subscribers for reference to our numerous maps, atlasses, directories and correspondence, and for the transaction of business with their clients and customers when in Toronto.

W. SMITH, Manager.

ENGINES, SAW MILLS, SHINGLE and LATH MILLS

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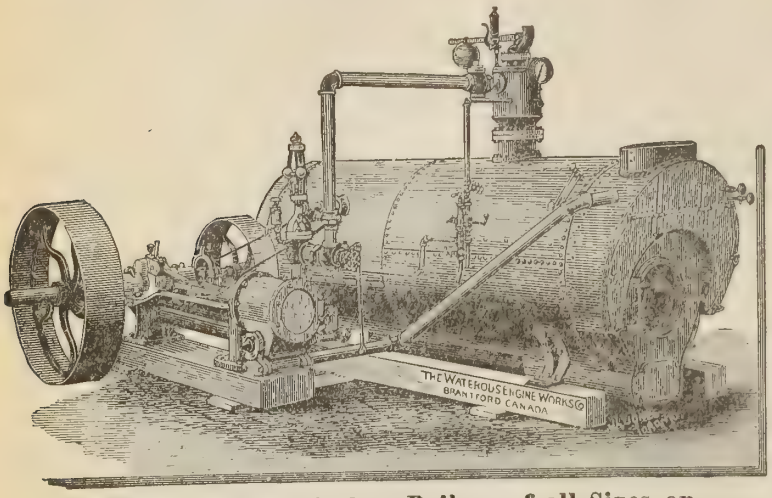

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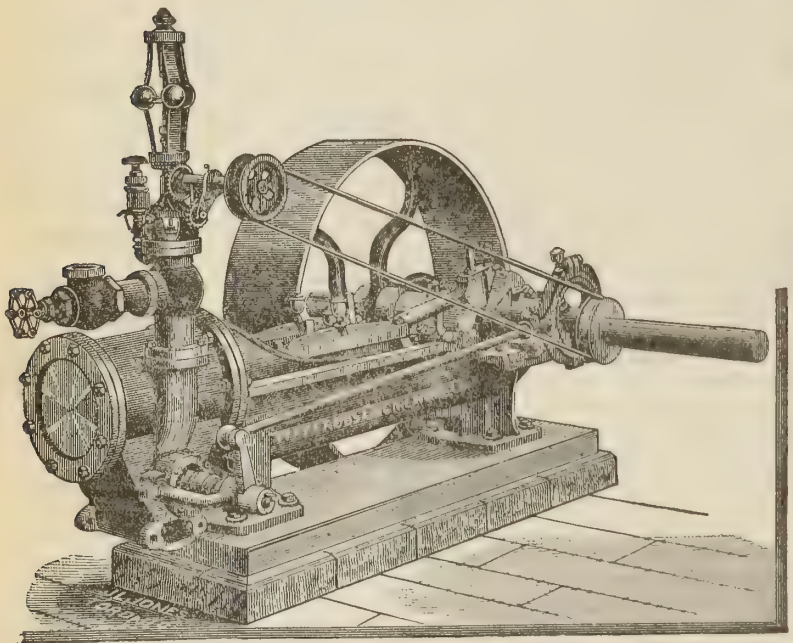

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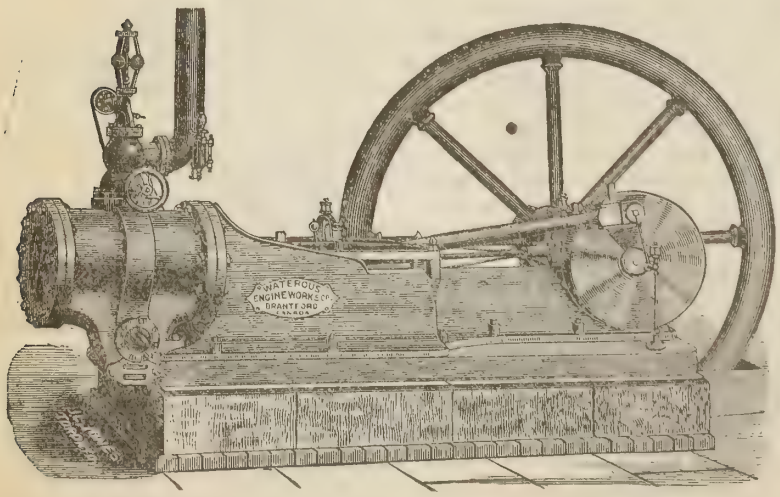

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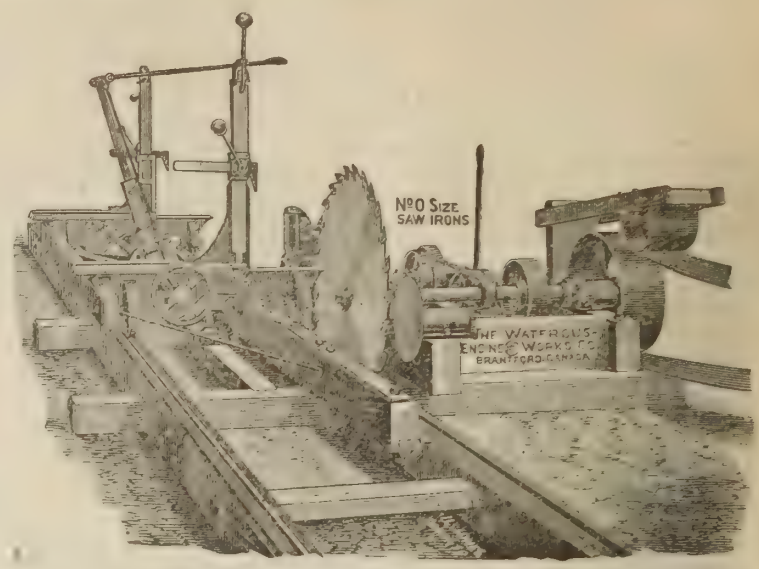

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Cutting Lumber for the CANADA PACIFIC SNOW SHEDS, at Dugan's Siding, Roger's Pass, B.C. Mill was running 28 days after it was loaded on the Cars at Brantford, and in two months run over 1,100,000 feet of 1 inch Lumber, and 3 & 4 inch Plank—all cut to widths and edged on large Saw.

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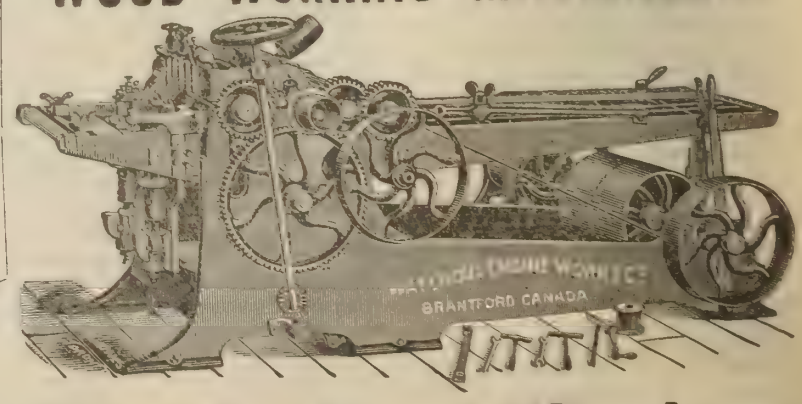

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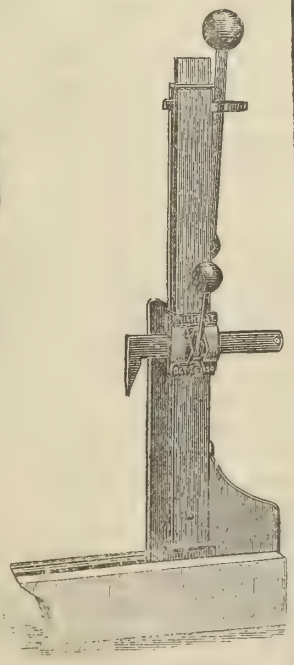

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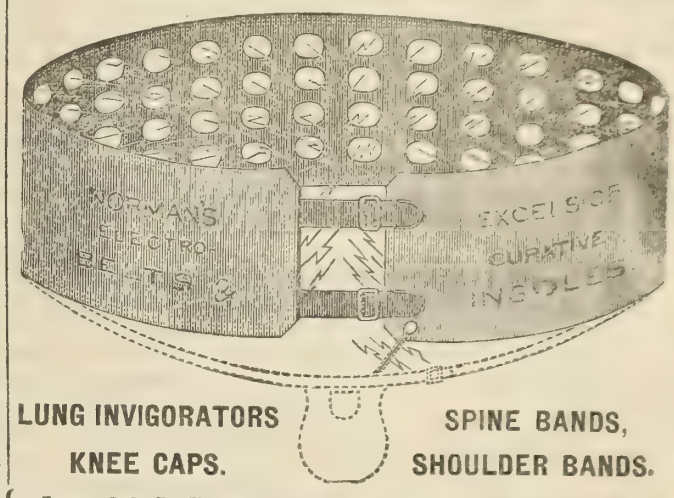

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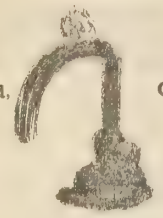
The Improved Model Washer and Bleacher



Pat. Aug 2nd, 1884.

C. W. Dennis. Toronto.

Science triumphs over labor. Thousands testify to its utility and value, weighs only FOUR POUNDS, price $3. Agents wanted in every town in Canada. Delivered to any Express Office in Ontario or Quebec, all charges paid, for $3.50. To any Express Office in Manitoba or N. W. T., B. C., N. S., N. B. for $4. If not found satisfactory money refunded in thirty days, less express charges. The clothes have that pure whiteness that no other method can produce. No rubbing required, no friction to injure the fabric. Send for circulars, address

C. W. DENNIS,
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QUESTIONS AND ANSWERS.

Q. What kind of boiler do you use?—A. Any kind of a boiler that has a bottom either concave or flat, or an old fashioned washpot. It is the only machine that will work in any kind of a boiler.

Q. How can you have a flow of water at the rate of eight or ten gallons per minute in a boiler holding eight or ten gallons?—A. The same water is used over and over again; and in order to be thus used it must pass down through and through the fabric, and this, with soap and heat, is what does the work.

Q. How can you use a large quantity of water in a boiler already full of clothes?—Fill the boiler three quarters full of water; as soon as the washer commences to work put in the clothes. They absorb it.

Q. Can you wash flannels and coloured clothes?—A. We wash anything that can be washed. Flannels and coloured clothes need but little soap, and from five to ten minutes of the full operation of the washer. Flannels should be rinsed in HOT water. It is the change from BOILING TO COLD water that contracts the fibre, causing them to shrink. Any FULLER will tell you so. Fugitive prints will part with their colours by this or any process, but fast colours will not be injured. It is not best, as every housekeeper knows, to use strong soap or alkalies in washing coloured goods. Many prints and other coloured fabrics have some kind of ACID as a base, and if alkalies are used strong enough to destroy this acid the fabric will part with its colour. This is why English Scarlets, which will not fade in the sun, or by ordinary washing, are ruined by STRONG soaps. These facts are worth remembering by the inexperienced housekeeper.

Q. Can you use the common soft soap of the farmhouse?—A. Yes, if good.

Q. Is it not better to put very dirty clothes to soak over night?—A. No.

Q. Will your washer remove the streaks from dirty wristbands and collars, such as farmers and mechanics wear, after having been worn a whole week, as they usually are? Will not those require extra care in rinsing?—A. The washer will cleanse the dirtiest clothing. Much soiled portions may require a second operation to remove the dirt entirely. Give the clothes a thorough rinsing.

Q. We sometimes find a whitish scum on the top of the washer. What is the cause of this?—A. The water is HARD. When soap is added to hard water, a chemical change takes place. Certain substances in the water having an affinity for the alkali of the soap, unite with it, thus setting FREE other substances; these are PRECIPITATED and fall to the bottom or rise to the surface in the form of a whitish scum, according as their specific gravity is greater or less than that of the water. This is why it is impossible to cleanse fabrics with hard water. It may be softened by the use of borax or sal soda. Pure rain water is the best of ANY method of washing. When the scum referred to above is found on the washer after using, clean with a little coal oil.

Q. How can it be possible for so simple a thing to cleanse fabrics?—A. If you will study the PHILOSOPHY of the Washer carefully and intelligently for a few moments, and consider what is required to remove dirt from clothing, you will ask "How is it possible for it NOT to cleanse fabrics?" A gentleman writing upon this principle, says:—"I must own that when I saw the Washer I was utterly incredulous as to its cleansing powers. My family were still more so. In fact, they had no faith in washers of any kind; but being strongly urged by a friend who had used the machine successfully, I concluded to try one. We made the first trial with a good many misgivings. In fact, I could not see how so simple a thing COULD wash clothing. But when I saw the water pouring out from the discharge pipe at the rate of 8 or 10 gallons per minute, and when I reflected that this amount of water must pass through the clothes twenty or thirty times in the course of an ordinary wash, my doubts began to give way. I saw that there was both philosophy and common sense in the process, and it was impossible that it should NOT prove effective. I am now a firm believer in the Washer, and trust it will find a place, as it deserves, in every household."

The foregoing treatise sets forth as explicitly as possible the merits of the Improved Model Washer and the mode of operating it.

OPINIONS OF THE PRESS.

NEW YORK TRIBUNE: "We are often asked our opinion as to the best Washing Machine in the market, as there are a great many kinds. We do not hesitate to say that the cheapest, most durable, and best washer in the world, is the Model Washer."

THE CANADIAN BAPTIST: "From personal examination of its construction and experience in its use we commend it as a simple, sensible, scientific and successful machine, which succeeds in doing its work admirably. The price, $2.50, places it within the reach of all. It is a time and labor-saving machine, is substantial and enduring, and is cheap. From trial in the household we can testify to it excellence."

CANADA PRESBYTERIAN: "The Model Washer and Bleacher which Mr. C. W. Dennis offers to the public has many valuable advantages. It is a time and labor saving machine, is substantial and enduring, and is cheap. From trial in the household we can testify to its excellence."

DOMINION CHURCHMAN: "Having tested the Model Washer and Bleacher, sold by Mr. Dennis, 213 Yonge Street, Toronto, we can heartily recommend it. Its work is performed thoroughly, and the saving in labor is so great that, combined with its cheapness and simplicity, should bring it into use in every household."

EVANGELICAL CHURCHMAN: "We desire to direct the attention of our readers to the advertisement of Mr. C. W. Dennis, which will be found in our advertising columns. The Model Washer and Bleacher has many and valuable advantages, and from personal trial in the household we commend it as a simple and most successful machine."

TORONTO TRUTH: One of the horrors of everyday life is "washing day," which comes with such persistent regularity week after week. A dreaded necessity, men have turned their attention to mitigating its miseries by the introduction of machinery which will lighten the labor, and make it less slavish. Among the many machines brought before the public with this end in view, the Model Washer and Bleacher, patented by C. W. Dennis, 213 Yonge St., Toronto, is certainly one of the very best. It is constructed strictly on scientific principles, and does all, and more than all, that is claimed for it. Washing is made light and easy, and the labor becomes almost a pleasure. It saves time and labor, is substantial and cheap, and very enduring. No rubbing is required, and the clothes are not therefore, worn out "in less than no time," as is the case in the ordinary method adopted. Its price is placed at the low figure of $2.50, and if not found to be all that is claimed for it the money is refunded.

TORONTO TRIBUNE: "In the olden times and in semi-barbarous countries to the present day, apparel was cleansed by beating it between two flat stones. The modern wash-boards and the numerous washing machines operated on the same principle are only in a degree less destructive to clothing than the former process. The idea that hard rubbing is necessary to get the dirt out of articles is entirely erroneous and the only reason why hard rubbing does take the dirt out is that the water and soap used are forced through the texture with considerable force and carry the dirt along with them. Now if this can be accomplished by a process that saves the great wear and tear of rubbing, a very important point is gained. Clothing will wear ever so much longer, buttons will stay in their places, and the discomforts of "washing day" be greatly ameliorated, to say nothing of the saving of labor. With this end in view the Model Washer was invented and there is no gainsaying the fact that it does its work effectively. To those ladies especially who are in the habit of doing their own washing, the Model Washer is a boon for which they may well be thankful while the price is so low that none need be without one.

What people think of it, a few of the thousands of testimonials and orders which may be seen at my office.

Dear Sir,—The Model Washer and Bleacher I purchased from you three months ago, is all that is claimed for it by the inventor. We are well satisfied with it, and would not part with it for five times its cost, No family should be without it, as it reduces the labor of washing, which is the most laborious and fatiguing of household duties, to a work of comfort and pleasure.

R. S. RENDALL, Simcoe Street.

Victoria, B.C., March 13th, 1886.

Dear Sir,—Having used the Model Washer and Bleacher for three months. I have much pleasure in recommending it as it makes the labor of washing easy and expeditious; it also makes the clothes beautifully white. S. J. H. SHERRING, Spring Ridge.

Victoria, B.C., March 12th, 1886.

Dear Sir,—I have given the Improved Model Washer and Bleacher a fair trial, and do not hesitate in saying it does all and everything that is claimed for it. It gives full satisfaction and does its work well.

C. H. HARRIS.

Victoria, B.C., March 13th, 1886.

Dear Sir,—Having used the Model Washer and Bleacher, I have much pleasure in recommending it. It makes the labor of washing easy and gives the clothes a good color.

MRS. C. S. JOSLYN, Chatham Street.

Victoria, B.C., March 11th, 1886.

Dear Sir,—Having used the Model Washer and Bleacher for three months, and believe it to be the best machine ever invented, and take pleasure in recommending it to the public. It does all you claim for it, and does it well. A. VYR, Spring Ridge.

Victoria, B.C., March 11th, 1886.

Dear Sir,—The Model Washer and Bleacher I purchased from you gives perfect satisfaction. It is the first self operating Washer I ever seen, and does just as represented. MRS. H. SPAFFORD, Cormorant St.

Victoria, B.C., March 13th, 1886.

Dear Sir,—The Model Washer and Bleacher has been in use in my family for the past five months, and it has been found to be all that the inventor claims for it. The washing is now done without the aid of that "Rack of Torture,"—the washboard, and where nine hours were required with the old plan, it only requires four hours now to do a larger washing with the Model. The clothes have a better color, and, from the absence of all friction, last far longer. I can heartily recommend the "Model" to all requiring such an article.

Yours respectfully,
JOHN H. LAND, Grand Secretary R. T. of T.

Rev. John Kay, Pastor of the First Methodist Church, writes as follows:—

Hamilton, December 23rd, 1885.

Dear Sir,—Mrs. Kay says the Improved Model Washer I purchased from you some months ago, has given satisfaction. Truly yours,

JOHN KAY.

Hamilton, December 31st, 1885.

My Dear Sir,—The Model Washer and Bleacher you placed in my house some five months ago, has done all the inventor claims for it,—making the washing both easy and quick. It is an article which we consider indispensable in a house and something we would not like to be without. Yours very truly,

J. B. BROWNE, 46 Herkimer Street.

Hamilton, January 9th, 1886.

I have had the Model Washer, which you sold me, in use about six months and it has given perfect satisfaction. It is a great saving in time and labor.

MRS. MARTIN, 13 John St. North.

Battleford, N.W.T., 3rd January, 1886.

Dear Sir,—Enclosed please find four dollars, for which send me one Improved Model Washer and Bleacher. I saw your advertisement in Toronto *Truth*, and wishing to make a lady a present, thought that nothing could make life easier for a Northwest housekeeper than an easy method of washing. The nearest express office is Swift Current, send *via.* that place,

Yours, etc.,
Sgt.-Major, J. H. LAKE,
N. W. M. Police, Batttleford.

Huntly, March 13th, 1886.

DEAR SIR,—I write you to-day to ask you if you have any agents appointed for the Township of Huntly. I have purchased from John Vance, agent of Fitzroy, five of your Model Washers and Bleachers for myself and friends. I never saw such a success or labor saving machine ; they are giving the best of satisfaction so far. We have not heard or seen any agent for Huntly. Therefore I want you to oblige me by giving me the Agency for the Township of Huntly. Also I want you to send me the wholesale prices by the dozen by return of mail. On receiving your answer I will send for two dozen to start with. I mean to buy for cash on delivery. I can dispose of them almost in almost every house, I think.

Yours respectfully,
THOMAS H. ARMSTRONGG.
Kinburn.

Oromocto, N. B., March 16th, 1886.

Dear Sir,—After using your Improved Washer for nearly a year and found it to give satisfaction, I have decided to canvas for it. I wrote you for agent's terms some time ago. Please mail me 25 of your circulars, which you supply to agents for house distribution, at $2.50 per thousand copies.

And oblige, yours &c.,
L. MCLEAN, P.M.

Trowbridge, March 30th, 1886.

Dear Sir,—The reason I did not write you last month was partly on account of the severe weather and the bad state of the roads, and partly from a scarcity of money with the farmers. This is a new country, and with poor crops and low prices this year, we feel the hard times. So you see it is hard to drive a bargain with the men, but the women are bound to have the machine, so I have about four dozen orders to be delivered the latter part of May and June. So you see if I can't send you an order every month, I feel satisfied I can more than average it the year round. I can send you a number of testimonials from our most influential citizens if they would do you any service.

Yours truly,
FLETCHER COZENS.

Trowbridge, June 5th, 1886.

Sir,—Will you please send one half dozen machines to Mr. J. Borter, Atwood Station. He is selling for me. Send them at once and oblige, Yours truly,
FLETCHER COSENS.

St. Marys, April 1st, 1886.

Dear Sir,—I am in a hurry for four more Washers. The people are beginning to find out they are a good thing, and by proper handling and showing the people how to successfully operate it, it can't fail to become increasingly popular. I will send for larger numbers as soon as money becomes a little more plentiful. A good number have been enquiring for wringers and I shall be able to dispose of a good number as soon as farmers begin to spend a little money for these necessaries, but shall as far as possible sell them both together. You will please send me four more Washers, C.O.D., by express, to Shakespeare. Yours truly,
H. BRINSMEAD.

St. Marys, April 20th, 1886.

Dear Sir,—I am still pushing the sale of the Washer. The more I sell the more there are that wants them. I take pains to show people how to work them satisfactorily, and the people here are more than ever delighted with them. I don't know when I shall be through with Shakespeare, but shall try and supply every family with a Washer. You will please send me six more Washers C.O.D,, to Shakespeare, and things look as though I should sell five or six dozen more. Hoping to be able to do so, I remain, yours truly,
H. BRINSMEAD.

Paris, April 9th, 1886.

Dear Sir.—I wrote you some time ago about your terms for selling your Washer, and got two of them. People objected to them upon the ground that they had not been tried here, so I thought it better to give mine a thorough trial. I have done so and can recommend them. I would like therefore if you will send me the remainder of the dozen and give me the agency of the town of Paris and vicinity.

Yours truly,
MRS. DADSON.

Saint John, N.B., April 13th, 1886.

Dear Sir,—I have seen your Improved Model Washer and Bleacher and consider it the best washer in every respect I have ever seen. Now what I want to know is have you any agent for New Brunswick and if not do you wish one. What are your best terms to agents.

I do not wish the agency for myself, as I am working at bookkeeping for the firm, but wish to procure it for my brother, who, if the terms are satisfactory, I am sure will make a first class man in every respect to handle your patent. Kindly answer by return mail all particulars and oblige, yours truly,

SAM. RICHEY.

St. Mary's, April 29th, 1886.

Sir.—We like the washing machine as well as ever. It is worth its weight in gold. Yours truly,
D. C. BROWN.

Mosside, April 26th, 1886.

Dear Sir,—To-day we have given your washer a trial. My wife and daughter are well pleased with it. There is no doubt it requires a good brisk fire to make it work. My daughter has washed a very large washing and did not commence until after nine o'clock and had it all done and dinner ready at noon, which is a very unusual thing for as large a family as we have. They think it is just the thing for every family to have. If you choose I will endeavor to act as your agent for this township. My wife has just come into my office to tell me that this is two weeks washing for the trial on account of lack of soft water. She thinks for an ordinary washing it can be done in two hours, you may expect to hear soon from me. Yours truly,
JAMES MCCABE.

Mosside, June 11th, 1886.

Dear Sir,—I have been trying to introduce your washer in a few places. Was out to-day and had my wife with me and gave a trial washing at an Hotel which gave perfect satisfaction. I called in several times to see it at work. They all appear to be well pleased with it. I think there will be no trouble in selling six of them in that place, you can send me up next week half a dozen of them for a trial. My next order will be large. It takes some little while to introduce them. The article looks so small people think it is nothing but a humbug. Only I am so well acquainted, they would set the dogs on me. It is very amusing to hear the various opinions given on it. One man said it was an oil lamp ; another would say it was a play toy for the children. So you see the only sure way is to give a trial washing in various parts of the Township which I intend to do next week. Hoping you will send them at your earliest convenience. Direct to Newbury station as before.

Yours truly,
JAMES MCCABE.

Belleville, May 1st, 1886.

Dear Sir.—I am pegging away with the washer. Have sold some which have given excellent satisfaction, and I have many out and still leaving more to-day. I soon expect to send you another order. I have come to Belleville to live, and have taken a little store on the front street and quite near the market. Have filled my window with the washers, and intend painting several signs for it for my front. Yours, with kind regards.

RAYMOND C. ROLPH.

Amubee, May 5th, 1886.

I have see your new Improved Washing machine, and I would like to know whether I could get the agency for the State of Michigan. I have come over for a visit and seen your machine work, I never saw one like it in Michigan, and I would like to know whether you could send them over, or get the agency for four or five counties, but I would like to get the agency for the State of Michigan. Please let me know what you can do with me as I will be going back as soon as I hear from you. JOHN C. BECKER.

Corbetton, May 8th, 1886.

Dear Sir,—My wife, a week ago, bought a Model Washer and Bleacher from you and likes it very well. I should like to know your terms to agents, and if your terms are favourable I will take an agency for Melancthon and Proton, and give it a thorough trial. Please let me know right away, as I should like to start at once. Yours truly,
MARK WILLIAMS.

Belriel, Que., May 14th, 1886.

Dear Sir.—I have just commenced to sell the Washer, people would not trust at first in its good qualities, but now I think I will place the washer more easily, I did not dare to send the money right away, because you might have changed your address. If you trust me send at once half a dozen of the washers, they are anxious to get them. I will send the money for the half dozen as soon as arrived, or, if you don't like to send them write as soon as possible, and I will send the money right away. I would take a dozen of the washers if I could spare the money now, and I know you don't give credit. In three weeks you would get the payment for the dozen. If there is any change in the method of washing please inform me. Yours truly,
SEREINNE CHAGNOW,

Kinmount, May 10th, 1886.

Dear Sir,—Allow me to write you a few lines in reference to your improved Model Washer and Bleacher. My wife can do good washing with it, and says she would not be without it for twice the sum we paid for it. The people here maintain it would not do its work satisfactorily and consequently would not buy, although I have done trial washing to our satisfaction. Some say it takes too hot a fire and too much water. We have lent our washer to the neighbors around here, and they say they like it very much, and intend buying, but money is hard to get around here, and that has all to do with it. I feel quite sure they will sell if times gets little better. If you wish I will act as agent for you in this vicinity. I here inclose three dollars to pay for washers and bleachers. Please forward by return of mail,

Yours very respectfully,
JAMES DAWSON.

Fallbrook, Ont., June 14th, 1886.

Dear Sir,—Enclosed please find forty dollars and fifty cents, for which you will please send to me at once one dozen of your Improved Model Washers and Bleachers, and also a half dozen Clothes Wringers. Please pack them carefully so they will not get damaged in shipping. Send them so I will get them not later than June 21st as I have to deliver them at that date. Send five Washers and two Wringers to Archibald E. Bain, Snow Road Station, on the line of the K. & P. R. R., and send seven Washers and four Wringers to Archibald E. Bain, Flower Station, on the line of the K. & P. R. R. Send me half a dozen Yankee Dish Cloths to Flower Station, on the K. & P. R. R. If you would furnish me with Washers and Wringers and wait until I sold them for your pay, I would devote all my time in selling you Washer and Wringer. I have not got money enough to run the business to good advantage, and if you would let me have them until such time as I would get money out of them to pay for them I could do pretty well. I remain yours with respect,
ARCHIBALD E. BAIN.

Fallbrook, May 7th, 1886.

Dear Sir,—Enclosed please find three dollars, for which please send me one of your Improved Model Washers and Bleachers. You can send it to Fallbrook, Ont., and I will pay the expenses of shipping. If your Washer sells well I intend making a business of it. Please let me know what township I shall have, or if I can have two. Please send immediately.

I remain yours with respect,
ARCHIBALD E. BAIN.

Fallbrook, April 24th, 1886.

Dear Sir,—As I have been hearing something about your Improved Model Washer and Bleacher. I was just thinking that perhaps I might take an agency from you. I would like to take this county for my territory. Please send me your best terms to agents, and oblige,

Yours very respectfully, ARCHIBALD E. BAIN.

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STROUDSBURG.

MONROE COUNTY, PENNSYLVANIA, U. S.

MANUFACTURERS OF

Solid EMERY WHEELS

AND SHARPENING MACHINERY.

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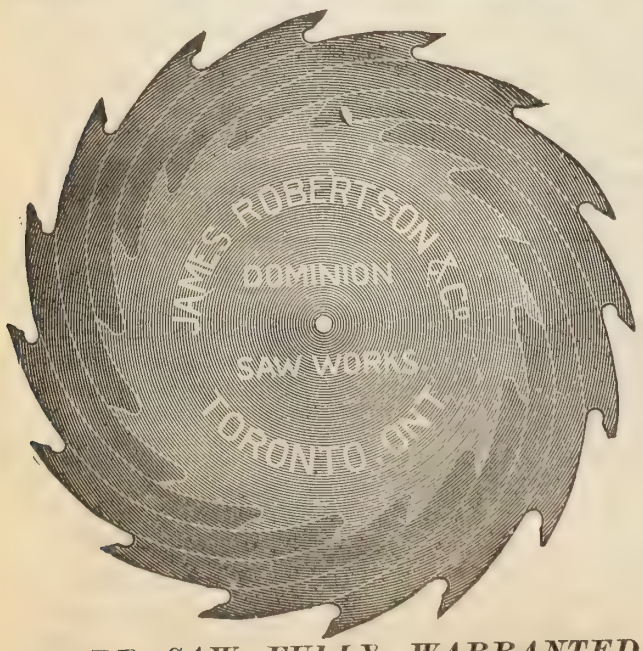

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PUBLISHED MONTHLY By A. G. MORTIMER.

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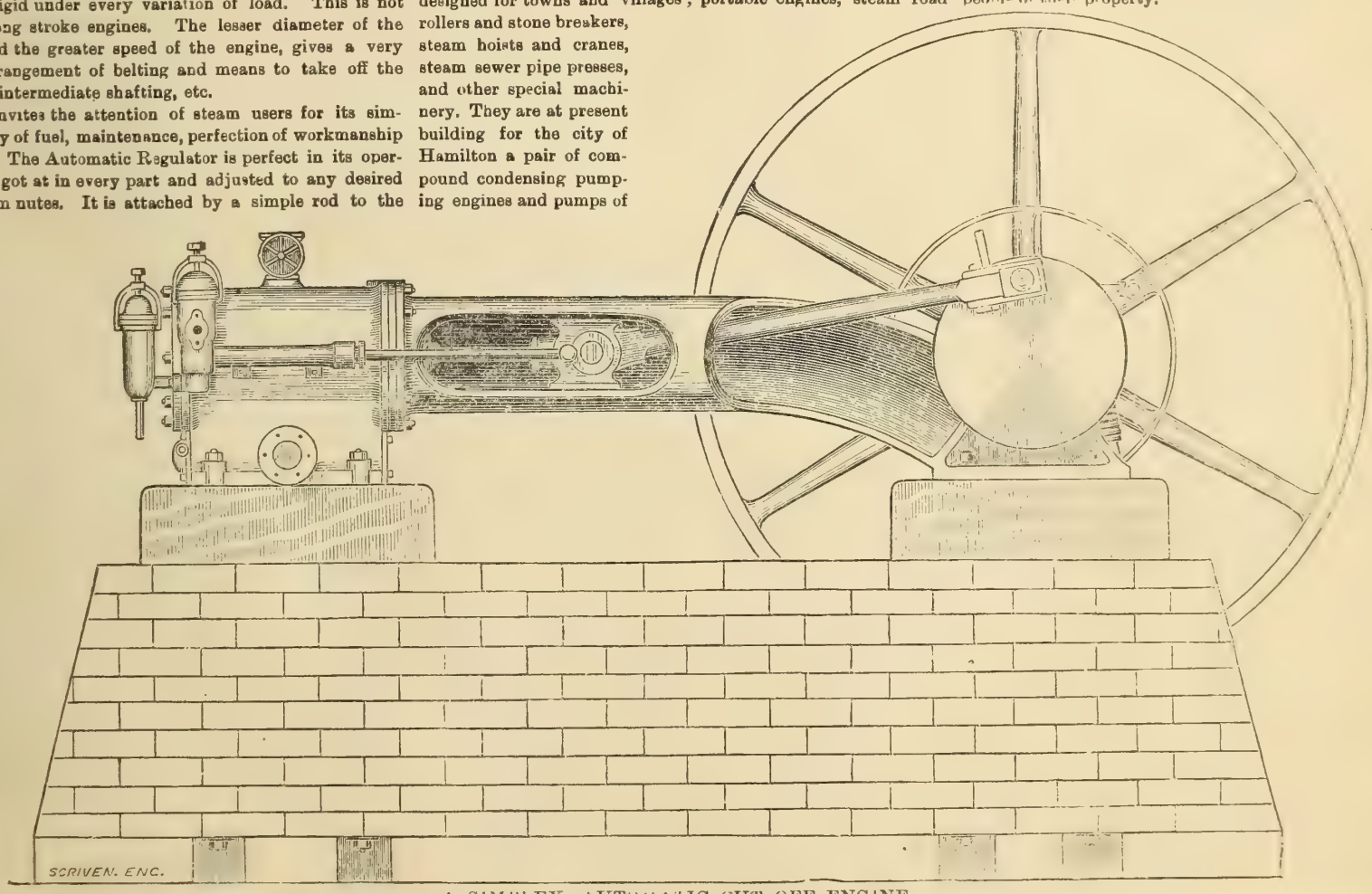
A SIMPLEX AUTOMATIC CUT-OFF ENGINE.

THE accompanying engraving illustrates the leading engine manufactured by the Osborne-Killey, Mfg. Co., of Hamilton, Ont. The advantages claimed for it are extreme simplicity, there being no part of the engine that requires frequent adjustment. The manufacturers claim that the cost is smaller for equal power derived from the fuel burned than that of any other engine running automatically. The engine takes up less space and does not require expensive foundations; the form of engine is such that it is perfectly rigid under every variation of load. This is not the case with long stroke engines. The lesser diameter of the band wheel, and the greater speed of the engine, gives a very much better arrangement of belting and means to take off the power without intermediate shafting, etc.

This engine invites the attention of steam users for its simplicity, economy of fuel, maintenance, perfection of workmanship and materials. The Automatic Regulator is perfect in its operations; can be got at in every part and adjusted to any desired speed in a few minutes. It is attached by a simple rod to the valve spindle, and adjust the cut-off to the power required in a range varying from ⅞ stroke to zero. It acts with great promptness; no perceptible variation taking place in the engine under every variety of load. The cut of valve runs nearly in perfect balance, the governor having complete command of it.

The wide reputation of the manufacturers of this engine, for furnishing only the best of work and materials, render it almost unnecessary to say a word upon this subject, they having sent their engines into almost every corner of the Dominion, but attention might be called to the following important points: best Babbit, main journal linings, and gun metal connecting rod boxes; steel crank and cross-head pins; steel piston and valve rods. To prevent all wear of valves semi-balance valves are used, while the positive cut-off gear enables the engine to run at any speed desired. Another important advantage to be found in this class of engine is the solid forged connecting rods and shafts, and the principle of strict duplication of parts by special machinery, a feature which has just begun to be appreciated by steam users as it should be.

In addition to the manufacture of the engine briefly described above, this firm also manufacture steam fire engines, especially designed for towns and villages; portable engines, steam road rollers and stone breakers, steam hoists and cranes, steam sewer pipe presses, and other special machinery. They are at present building for the city of Hamilton a pair of compound condensing pumping engines and pumps of ten million gallons capacity per day. Full information regarding any of these machines will be furnished by the manufacturers.



A SIMPLEX AUTOMATIC CUT-OFF ENGINE.

STOLEN TREES.

A CONSIDERABLE portion of the last annual report of the Commissioner of the General Land Office is devoted to a description of the methods employed by unscrupulous men to rob the people of this country of their forest possessions. Long practice, often encouraged by official speculation, has reduced the stealing of Government timber to a fine art. It has been going on practically unchecked for years. Wherever trees have grown upon the public domain, among the turpentine producing pines of Florida and Louisiana, in the great white-pine forests of northern Minnesota, in the red-wood forests of the California coast ranges, in the vast fir forests of Oregon and Washington, and in all the Rocky Mountain region from New Mexico to Montana, organized and systematic plunder has for years been practised upon the people of this country. Powerful corporations backed by unlimited capital and immense personal and political influence, wealthy mill owners, rich lumber companies, and unscrupulous individuals have long been banded together to rob the people of their property.

The officers of the General Land Office have certainly not failed during the last year in honest endeavor, at least, to check the numerous frauds which have gradually become a necessary feature in the administration of the public domain. Not less than twelve hundred and nineteen cases of depredation or timber trespass have been reported during the year, involving forest products valued at nearly nine millions and a half of dollars stolen from the people of the United States. Only two hundred thousand dollars, nevertheless, have been recovered by the Government on this account, while the public plunderers have been able to escape with over nine millions worth of timber and other forest products; a sum one-third greater than the gross value of the annual product

of the Government forests of all Germany, or nearly double the the annual net yield of the public forests of France. All depredations have not been reported, and American values for forest products are much lower than German or French values for similar articles, so it is safe to assume that in the last year more timber, bark and turpentine have been stolen from the national forests of the United States than were produced by the public forests of Germany and France, although in these countries forest production under scientific management is now very great.

Such a monstrous condition of affairs should not be allowed any longer. No Government has the right to open such easy paths to fraud and corruption as now cross the public domain in every direction; and no forest, however productive or extensive, can long withstand the inroads which we are making upon our forest supplies.

It is for the best interests of the nation that some portions of the national domain should be permanently covered with a forest growth and retained under Government control; other portions of the forest-clad public domain could, perhaps, be more wisely disposed of than retained. But with exciting information in regard to the public forests it will be highly unwise to make any division of our forest lands into necessary and superfluous before the proper limits of forest reservations are fixed by scientific investigation, and a proper system of forest administration can be developed for their management and control Congress should take prompt action therefore upon the sensible recommendations now urged for the second time by the present Commissioner of the Land Office, that all public forests and all lands valuable chiefly for timber should be immediately withdrawn from sale or disposal, "subject to future legislation for permanent reservation of designated areas and a more economically governed disposal of such timber lands or timber as may not be necessary indefinitely to reserve."

Such legislation would meet with the most vigerous opposition, but unless the Timber Rings can be defeated, the extermination of all the Government forests is merely a question of time, and with the forests agriculture and prosperity will disappear from the western half of North America.—*New York Sun.*

CANADA RAILROADS AND LUMBERMEN.

SOME of the Canadian lumbermen are complaining bitterly, and with no small reason, of the treatment which is accorded them by their railway companies in the matter of lumber freights. A correspondent of the Toronto *Globe* writes at length of the matter, setting forth the grievance of the trade with great clearness and force. The present system is a curious one. Each car has marked upon it its capacity in pounds, the minimum being 24,000 pounds, ranging from that up to 40,000, and the freight is charged on the basis of so much a hundred for the marked limit of the car, unless it should happen to overweigh, when the excess is also added. If the car happens to contain less than the weight it is rated to carry, no corresponding deduction is made, and as many cars, labelled to hold 30,000 pounds, cannot be loaded with some kinds of dry lumber even up to 24,000, the railway companies exact pay for a large amount of freight which they do not carry. If the lumber happens to get rained on in transit, and absorbed a few hundred pounds of water, it is said the companies re-weigh the car, and charge the difference to the shipper. The lumbermen are trying to induce the railway people to make them rates per thousand feet, their experience with the plan of charging by weight not having given them a favourable impression of that method. But the trouble seems to be not so much with the principle, as with the manner of applying it. In the United States, freight rates are made on the basis of weight, but only the actual weight of the stuff carried is charged for, the same as other merchandise. It makes no difference to the railway company here whether the cars are loaded with lumber that has been cut six months or six days; it gets paid for the number of pounds in the car, and it is the concern of the party who pays the charges whether the shipment is heavy or light in proportion to its bulk. It is comparatively easy for a lumberman to ascertain the average weight of stock, and to make his calculations of the cost of transportation with confidence in their substantial correctness. Indeed, so closely can dealers figure the cost of moving lumber, that it has come to be the common practice to quote prices on stock delivered at the buyer's railway station. The basis upon which these delivered prices are made up is an agreed schedule of weights, which though arbitrary, comes so near to the average of dry stock, that neither buyers nor sellers find it objectionable or inconvenient. It would seem the part of wisdom for the Canadian trade to direct its efforts toward introducing the plan, at once rational and fair, of charging shipments at a certain rate for each hundred pounds carried, rather than to attempt the probably impossible undertaking to get the railway people to go back to the scheme of hauling at so much a thousand which is as unfair and unsatisfactory on one side, as the present plan is on the other.

The C. P. R. Telegraph Company are steadily extending their system. They have begun the construction of a branch line from Medicine Hat to Fort Benton, Montana, and it will be in working operation in a few weeks. The cattle business of the railway made this line a necessity. They are also steadily putting up heavy wires throughout the mountains, replacing the poorer ones erected in the "construction" period of the road, and hope to have these wires through to the coast ere long.

General News Notes.

A meeting was held in Cincinnati recently for the purpose of organizing a lumber exchange.

The loss by fire of J. A. Duval's saw mill at Grimsby, Ont., amounts to $2,000; no insurance.

Pine deal mills are now coming to a close, several of them having finished sawing for the season.

It is said that a Canadian lumber syndicate has acquired title to 500,000 000 acres of land in Minnesota.

It is stated that upwards of 100,000,000 feet of logs have already been skidded on the Menominee River, Mich., but the report is not generally credited.

The men are at work closing up Eddy's mills for the winter. The saws are being taken out and everything is being prepared for the closing in of the sides.

The large lumber firm of W. J. Trounce & Co., Port Perry, has assigned. Their bankers have a claim of $100,000; other liabilities it is said, will not exceed $5,000.

Mr. J. R. Booth has purchased the entire timber limits, six limits in all, of Messrs. Barrett & Mackey, in the Nipissing district. The price paid was $270,000.

The firm of Ross & Little, sash, door and blind manufacturers, of Midland, Ont., has been dissolved. Hereafter the business will be carried on by Messrs. Ross & Davenport.

Mr. Nagle, of Ottawa, has sold a timber limit of 36 miles on the Georgian Bay, to Mr. Burtin, of Barrie, for $35,000. Mr. Burtin bought another limit adjourning the former one, of 36 miles for $25,000.

Mr. J. R. Booth has laid up three large rafts to winter over at Mulloch's boom, Arnprior, having decided not to put them on the Quebec market this year. There is said to be more timber being sent to Quebec this year than there has been for several seasons.

A correspondent of the Minden *Echo*, writting from Mr. John Dwyer's shanty, Anson, gives the following:—"On Saturday of last week Mr. George Long, of Peterborough, skidded 431 logs in eight hours. This is considered the biggest days skidding ever done in this country, and if it can be beat the boys would like to hear from the champion."

The square timber market in Quebec is getting brisk. The Messrs. Hurdman, of Ottawa, and McLachlan Bros., of Arnprior, will shortly open shanties to supply the demand. Orders have been left with Mr. B. Renaud to procure gangs at once for both these firms so that operations may be begun without loss of time. Mr. Renaud shipped a gang recently to Sturgeon Falls, for Mr. J. R. Booth's new limit.

The Section north of Harvey, Ont., is alive with men busy at felling the lofty pines. The Gilmour firm has over 50 men employed at the depot, and more are arriving continually. This season will be unusually lively, as Mr. Biglow and Mr. Davis will have men employed in the vicinity of the Gilmour camps. Life in the lumber camp as pictured in "Picturesque Canada" presents an interesting scene, but the original only can give a true picture.

The *Jane Woodruff* loaded with 150,000 feet of lumber for Midland ran on the Watchers last week during the gale. She was trying to make a short cut and finding herself among the rocks cast both anchors when the cables parted and she drifted on in spite of all effort. The *Shawanaga* went to her rescue, but could not get near enough to throw a line, on account of the heavy sea, and was obliged to return without rendering any assistance. A part of the cargo will have to be transferred before she can float.

Nearly all the logs on the Chaudiere have been secured, Mr. John Breakey's railway from his mills to the Chaudiere Basin is now being worked day and night, carrying logs from the mill dam to the mouth of the Chaudiere, where they are rafted and towed to the Montmorency Mills, part of these logs being a portion of the logs cut by Messrs. Hall Bros. during last winter, balance being Breakey's, which, owing to the large number of logs that have come down at once, he is having sawn into deals at the Montmorency Mills, which are being run night and day.

Ottawa millowners were not so busy last fall, nor are they this, as they were in previous years, this they attribute to the increase of railway facilities. In old days people had to obtain the whole of their winter stock before the end of the fall, but now with the increased powers of transit they can receive lumber by rail at any time. This means increased employment at the lumber yards during the winter. The trade is steady at unchanged prices. But little lumber is obtained in Ottawa, the output having been principally disposed of for the American market. The local demand is moderate.

The lumber season now opening in Manitoba promises to be a most active one, says the *Free Press*, and lumbermen are consequently in good spirits. Gangs of men are already being sent to Lake Winnipeg and the Lake of the Woods districts, and a week or two will see operations in full swing. A good many lumbermen did not get all their last winter's cut down to the mills last summer, the drives sticking, owing to the lowness of the water. There are several millions of feet at present on the rivers waiting for the spring freshets to bring them to the mills. A heavy demand for good lumber for railway bridges existed last season. From Winnipeg and all points of the Northwest there has been a demand for lumber, which indicates that building operations have been heavily carried on during the past summer. The mills have been rushed to their greatest capacity. Prices are stiffening and are now from $14 to $15 per thousand feet f.o.b. at Keewatin, and from $17.50 to $18 50 at Winnipeg. They are expected to keep up if the market is not glutted by too heavy an output.

Up to the present time there have been cut and shipped at the Rathbun Co's mill in Campbellford, about 75,000 railway ties, and nearly 25,000 remain to be cut before the work will be completed. Besides this large cut there have been turned out 500,000 feet of lumber, and 12,000 bundles of lath, together with an enormous quantity of shingles, barrel heads, pickets, and several thousand feet of two foot wood. The shipment of ties recently amounted to two train loads daily. A pier is being built at the rear of the Company's premises to prevent the place from being flooded by the river. This will be extended from the mills along the river edge to the southern limit of their property, and the grounds will be filled in and made level. The work is being done now, and will be completed sometime next summer. This mill, we are informed, is one of the best paying of its kind in the country, a tribute to the ability of Mr. Joseph Clairmont, the manager. Work will be continued till about the first of February next, but the staff of hands during all that time will not be as large as it is at present.

Messrs. Grier & Co., are builing a large new mill which is situated between their old mill and McKay & Co's. flour mill. Operations commenced a few days ago, and are at work on the foundation, which is of stone five feet in thickness. The mill is to be fifty feet wide by one hundred and fifty long. There will be placed in the mill one gang-saw of the lat st style, two slabbing gang-saws and one stop gang saw, all of American make. A large dam will be built in front of the mill to keep the water back while operations are going on. The foundation will be finished in about three weeks, when three large stone piers, measuring twenty feet in diameter, will be built in the bottom of the mill, to hold the gang saws. The new machinery for cutting up the refuse will cost about $12,500. The waterwheels will cost something over $3 000, while the edger and other small-mens will cost about $12,000; the whole estimate cost is about $50,000. The top part of the mill will be of wood, and resemble very much in shape Eddy's large mill. It will be painted and decorated, and it is said it will be one of the finest mills in Canada. The building will extend 12 feet nearer the bridge than the old one, and 37 feet farther back. The mill will employ 30 men inside, and be finished about the 1st of May next. Owing to the prospective increased mill being built, Messrs. Grier & Co. will have to double the capacity of their sorting and piling grounds, thus giving employment to a very large number of hands.—*Ottawa Evening Journal.*

A wedding took place last night in the long drawing room of the Queen's hotel, the contracting parties being Mr. William C. B. Rathbun, youngest son of the late H. B. Rathbun, of Deseronto, and Miss Jean Blakie, eldest daughter of J.L. Blakie, late of Hollydean, Rosedale. Owing to the recent death of the groom's father the wedding was comparatively quiet. The bride was attired in a dress of lesse, lace front, with long court train and waist of ivory moire, a long spray of myrtle and white lilac looping up one side; bouquet of loose white roses, held together with white ribbons; ornaments, diamonds. The bridesmaids, Miss Alexander and Miss M. Blakie, wore dresses of coffee-colored Indian muslin and lace with crimson velvet sashes, bouquets of loose Marechal Neil roses held with crimson ribbon, diamond ornaments given by the groom. The bride's train was carried by Miss Florence Blakie and Miss Edna Hindhaugh. The floral decorations were most abundant, the string band being completely hidden by a bank of foliage and flowering plants. The presents were exceedingly handsome, the groome being a set of jewellery composed of moonstones and diamonds, with a diamond crescent brooch, having ten large diamonds. The groom was attended by Dr. A.J. Johnson and Mr. E.W. Rathbun. After the ceremony the band played the Wedding March and the company repaired to the dining room to enjoy a sumptuous dejeuner. The happy couple left by the 11.15 train for California where they will spend some months on their honeymoon.—*Toronto Mail, Nov. 4th.*

The Montreal Press.

There has been a remarkable newspaper development in Montreal during the last few years. It is not long since there were only a couple of French Canadian daily papers in that city, and now there are five live daily journals in that language. It is probable that a great deal of this development is due to the success of *the Montreal Star*, on which nearly all the French papers are modelled. *The Star* rose very rapidly and very remarkably through its enterprise and independence to its present position as the best and most widely circulated daily newspaper in Canada, and as it has always been widely read among the French Canadian business and professional classes, its success stimulated the development of French papers. It is rather a curious fact, however, and a remarable compliment to the *Star* that neither its independence of opinion nor the growing competition to which it is subjected checks its progress as a favorite paper with French-Canadians.

Useful Information.

A rubber cushion under the legs of a work bench will deaden the sound of hammering so completely that it will not disturb the inmates of adjoining rooms.

In putting up your screen doors and windows be very particular to have a little hole in one corner so that the flies can go out doors when they get tired of being inside.

To remove iron taste from new kettles, boil a handful of hay in them and repeat the process if necessary. Hay water is a great sweetner of tin, wooden and ironware. In Irish dairies everything used for milk is scalded with hay water.

A government inspector of timber in France recommends for timber used in ship building one year's immersion in river waters two years in fresh, or three in brackish water, constantly being changed, to be followed by two years of air seasoning.

A Filler for Oak, Maple and Cherry Wood.—Whiting 6 ounces, japan ½ pint, boiled linseed oil ¾ pint, turpentine ½ pint, corn starch 1 ounce; mix well together and apply by continuous rubbing in. On cheery wood add a little Venetian red to the above mixture. A cheaper and for most uses a better filler than this can be bought already prepared.

Wood may acquire an oak, walnut or cherry color by staining it with ordinary tincture of iodine diluted with spirit until the exact shade is obtained. White shellac must be added to the iodined solution if the stain is to be made permanent, or the wood after the stain is applied may be French polished. The iodine may be laid on with a rag or a brush.

A german chemist has discovered that the strength of glue is very greatly increased by the addition of one-fourth as much glycerine as glue. Glycerine has many other uses, among which one of the least known is its property of removing pencil marks from paper in a very perfect manner. It may also be combined with starch and plaster of Paris, to form one of the most durable cements for various kinds of apparatus.

When opening correspondence with advertisers always mention that you saw their advertisement in the "Canada Lumberman."

What is claimed to be a valuable rust preventive is a recent German invention. It consists of ordinary oil paint mixed with 10 per cent. of burned magnesia, baryta or strontia, as well as mineral oil. This neutralizes the free acid of the paint, and the alkaline reaction protects the iron from rust. As a preventive of iron from rusting in the ground, the metal is painted over with a mixture of 100 parts of resin and 25 parts of magnesia, besides mineral oil. A temporary paint for the movable portions of machinery contains some 20 or 30 per cent. of magnesia or burnt dolomite, with some vaseline added to prevent drying.

The following is a good recipe for waxing floors, and the method of application. Stir twenty-five parts of shredded yellow wax into a hot solution of twelve parts of pearl ash in soft water. Keep the mixture well stirred until the effervescence ceases, then remove it from the fire and stir in twelve parts of finely-ground yellow ocher. It may now be poured into cans to cool. When wanted for use one part of it is dissolved in five parts of boiling water. Apply warm with a paint brush. It dries in a few hours, when the floor is polished with a floor brush and afterward wiped with a woolen cloth. It is said this wax coating will tal, for six months with ordinary use.

The *National Druggist* gives this form of an absolutely clear solution of shellac:—Prepare first an alcoholic solution of shellac in the usual way; a little benzole is then added, and the mixture well shaken. In the course of twenty-four or forty-eight hours the fluid will have separated into two distinct layers, an upper alcoholic stratum perfectly clear, and of dark red color, and under it a turbid mixture containing impurities. The clear solution may be decanted or drawn off.

The following is a good receipe for waxing floors, and the method of application. Stir twenty-five parts of shredded yellow wax into a hot solution of twelve parts of pearl-ash in soft water. Keep the mixture well stirred until the effervescence ceases, then remove it from the fire and stir in twelve parts of finely ground yellow ocher. It may now be poured into cans to cool. When wanted for use one part of it is dissolved in five parts of boiling water. Apply warm with a paint brush. It dries in a few hours, when the floor is polished with a floor brush and afterward wiped with a woolen cloth. It is said this wax coating will last for six months with ordinary use.

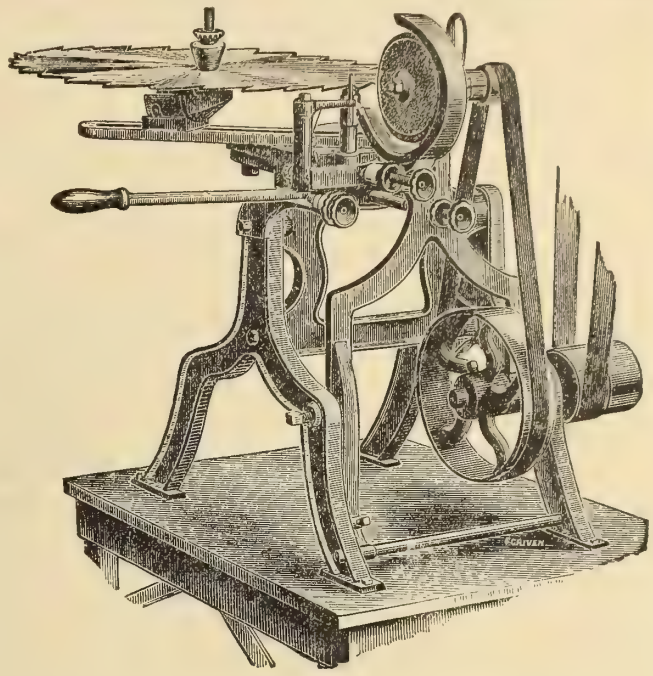
Sand paper is at present made with powdered glass instead of sand. Glass is readily pulverized by heating it red hot and throwing it into water, and finishing in an iron mortar. By the use of sives of different sizes of mesh the powder can be separated into various grades, from the finest dust to very coarse, and these should be kept separate. A strong paper is tacked down and covered with a strong size of glue, and the surface covered with powdered glass of the desired fineness; when the glue is dry the surplus glass is shaken or brushed off. Muslin is better than paper, and lasts much longer in use.

SOMETHING NEW IN SAW FILERS.

Emery wheels are playing an important part in many lines of manufacture, and the ingenuity of inventors has been directed towards providing suitable devices to run them, and enable them to do their work in the most effective manner.

The Hart Emery Wheel Co., of Hamilton, have by no means been neglecting the interests of their customers in this respect, for they have at least contributed their share of improved devices for running emery wheels.

Not the least ingenious of their emery wheel machines is the Rogers' Saw Filer, herewith illustrated, the invention of Mr. S. C. Rogers, one of the Company. This little tool has been patented in Canada, the United States and England, where



several of them are used. They found their way as far as India, and there is no doubt that every woodworking establishment will have one or more of them as soon as they become known and appreciated. The Hart Emery Wheel Co. have placed them in nearly seventy establishments in Canada, every one of which is a reference as to its usefulness.

The machine is almost automatic. The operator has only to move the lever back and forth. The saw revolves and the wheel moves out and in, in perfect time. Any one part of a tooth can be filed lightly or heavily without touching any other part. For instance, the operator can go all round the saw, filing on the throat only, or along the breast or back, and what is done on one tooth can be repeated on all the others, for perfect roundness is the result of using this machine.

Firms who are using the Rogers Saw Filer assert that they find their saws do better work; they keep sharp longer and do not wear away so fast.

See the Hart Emery Wheel Co.'s advertisement on outside of back cover.

Our Readers who write to advertisers in this Journal, will oblige both the advertiser and publisher by mentioning the "Canada Lumberman."

WOOD-WORKING PATENTS.

The following list of patents relating to the wood-working interests, granted by the U. S. Patent Office, up to Nov. 25th, is specially reported by Franklin H. Hough, Solicitor of American and Foreign Patents, 925 F. street N. W., Washington, D. C., who will furnish copies of patents for 25 cents each.

350,352—Plane, Rounder—J. L. DeHuff, Reading, Mass.
350,190—Planing and Matching Machine.—W. H. Doane, Cincinnati, Ohio.
350,193—Saw, Hand—W. H. Fritts, Plano, Illinois.
350 409—Saw, T. Van Hand—Ostrand, Kinsley, Kansas.
350 179—Stump Extractor.—W. H. Wright, Laconia, N.H.
350,657—Auger.—S. Bard, Bradenville, Pa.
350,613—Plane, Bench—F. M. Bailey, Pittsburg, Pa.
350,555—Planer, table cushioning device—F. Phillips, Newark, N. J.
350 892—Planing Machine.—G. S. Myrick, Philadelphia, Pa.
350 482—Saw mill attachment.—W. H. Roberts, Cheboygan, Mich.
350,742—Saw mill carriage.—E. Hyde, East Saginaw, Mich.
350 853—Saw swagging device.—P. R Ward, Quincy, Ill.
350 894—Sawing machine.—G. Puhl and A. Mertes, Allegheny, Pa.
350 872—Tenoning machine.—A. L. Cushman, Concord, N. H.
350,520—Wood-working machinery knife.—J. B. Wood, Chicago, Ill.
351 303—Planing and matching.—S. A. Woods, Boston, Mass.
351 165—Saw mill carriages. Feed machanism for—C. E. Clark, Belmont, N. Y.
351 202—Saw mill carriages. Feed mechanism for—G. M. Pelton, Belmont, N. Y.
351,144—Saw mills. Log hook for—P. B. Williams, Butler, Indiana.
351 106—Saw set.—H. A Hanser, Christiana, N rway.
351,286—Saws. Device for jointing and setting the teeth of—R. M Sandford, Hobart, N.Y.
351,277—Stump extractor.—E S. Moore, Coleman, Mich.
352 307—Planing machine.—W. H. Doane, Cincinnati, Ohio.
352,352—Saw-filing implement.—P. A. Potter, Wellsborough, Pa.
352 269—Saw, drag.—B. F Shinn, New Iberia, La.
353,207—Saw-setting device.—J. B. Sylvester, Blue Hill Falls, Me.
352 370—Stump-extractor.—F R. Smith, Tomah, Wis.
352 216—Timber, preserving.—A Aiken, Darroch, Scotland.
352,901—Lathe for turning spinas—G. Wood, Philadelphia, Pa.
352 867—Saw—C. W. Goerts, Newark, N. J.
352 624—Saw.—T. O. Laughlar, Shannah River, Canada
352 550—Saw gummer.—T. S. Maxwell, Albaretta, Ga.
352 838—Saw-mill set-works.—W. F. Parish, Minneapolis, Minn.
352,802—Saw sharpening machine.—A. Blackmer, Minneapolis, Minn.
352,670—Saw-swage.—C. Ward, Hering, Mich.
352,769—Stump-puller.—W. M. McKay, Wilmot, Mich.
352,004—Saw.—F. H Richards, Springfield, Mass.
352,050—Saw-jointing device.—J. W. Edmonson, Mendon, Ohio.
351 974—Saw-mill set works.—F. J. Grease, Van Wert, Ohio.
351 815—Wood-bending and drying machine.—S. Swartzo, Buffalo, N.Y.
352,003—Wooden-plates. Apparatus for cutting circular.—I. M. Rhodes, Hancock, Mich.

THE ACTION OF FORESTS ON AGRICULTURE.

To the Editor of the Canada Lumberman:

Sir,—I have been asked to state concisely, with a view to its publication through the press, thus reaching a larger circle of readers than will peruse blue books or reports, the reason for maintaining forests among agricultural lands, and the best method of doing so, without asking too much expense from any individual proprietor. I have stated a few here, and should be glad if, in the interest of the forestry movement (which is, in view of the great harm over-clearing is doing our agriculture, the cheif need of Ontario) you will give it a place in your columns.

The reasons for maintaining forests are:—That they hold the rain in their beds, which are formed of a deep mass of leaves, and decayed forest refuse (this is so long as the forest is kept free from grass. If cattle be let in to tramp it hard, and grass over-spread it, it will not retain nearly so much, and will be to that extent inferior in value as a reservoir of moisture to the farm lands around) This water so held, filters off slowly through the surrounding land, and keeps creeks, rivers, and the numerous underground channels of the earth supplied with water, which furnishes moisture thus to the whole country. If there be no woods, rain flows off at once to the river, washing away much good earth in its progress, and being of very slight beneficial effect compared to what it is in the former case.

That they in the season of growth, when showers of rain are needed, being then possessed of vast quantities of leaves, which throw out much moisture daily, and this moisture being the lightest of all vapors, send large quantities of it upward to the higher atmosphere. Being cooler than the air current above, when it meets one sufficiently damp, the juncture of the warm and cooler bodies immediately must produce precipitation, and rain must fall at some point, either nearer or further, depending on the speed of the wind then existing. That woods, or even single lines of evergreens, exert a powerful influence by way of shelter, thus, that when a shower of rain has moistened the ground, that land will aid vegetation rapidly so long as the moisture is evaporating from the surface, for all that time the land will be neither too wet nor too dry, and the moisture will not be stagnant, which is injurous, but in motion, when it is beneficial. When there is no shelter, the drying winds pass over too rapidly, and the benefit of the shower does not remain in the land for half the time it beneficially might.

That the shelter of trees in lines or blocks is very valuable to winter crops, in preventing the uneven drifting of snow, and otherwise; and this is very important with reference to the growth of clover, which is the principle means of keeping in good tilth many of our Ontario soils.

These are but a few of the reasons, the cheapest methods of obtaining these advantages are first to preserve a piece of the original forest on each farm, which I have known done effectually simple by fencing the piece desired to preserve, and keeping cattle out; and next by planting long lines of evergreens as windbreakes. If the latter be tried, the way to success is to plant about the first of June, and keep the roots quite damp and covered from sun and wind till planted.

Yours truly,

M. W. PHIPPS.

Toronto, Nov. 9th, 1886

When opening correspondence with advertisers always mention that you saw their advertisement in the "Canada Lumberman."

SOMETHING ABOUT SHRINKAGE.

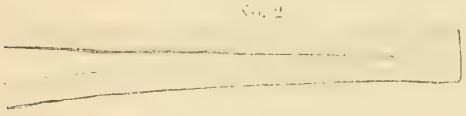
BY E. H. DAVIES,

There s but very little material that keeps the same size under all circumstances. Metals shrink and expand—some very much more than others—according to change of temperature. I don't wish to treat of the shrinkage of metals in this article, but wholly upon the shrinkage of woods. Like metals different woods vary much in shrinkage. But all woods of the same variety will shrink in size, in proportion to the amount of water or sap contained in the wood. One variety of wood may contain four times the quantity of sap, and still not shrink near as much as others, Lumber sawed from trees growing on a side, hill, or near the water, or on the south side of a grove, will shrink very irregularly. Some parts will shrink very much more than others, more particularly endways. The same is true with a tree that grows very much out of perpendicular. Suppose a tall tree was growing at an angle of 45 deg. the tree itself being perfectly straight, as soon as the tree was cut down, it would partially assume the shape of a rainbow.

Nearly all the lumber shrinks, more or less, endways. Some lumber will shrink on one side and expand on the other the moment it is sawed. This is very noticeable in sawing lumber for logs. For instance, the first board sawed from a log may be longer than the log, or *vice virsa*, according to which side the sawing was commenced. It is also very noticeable in ripping up lumber; sometimes when the saw gets well into the board, it begins to pinch, and has to be wedged, but after the saw gets

No. 1

No. 2



nearly through, the cut begins to open, as illustrated in cut No. 1.

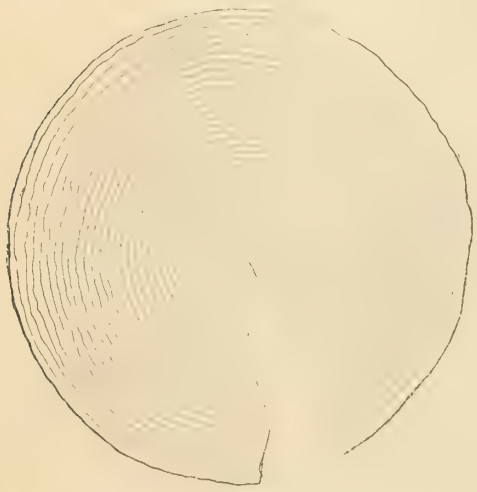
Or it may open instead of pinch, as shown in cut No. 2.

This is all done by shrinkage and expansion. In No. 1 the inside shrinks while the outside expands; and in No. 2 exactly the reverse. We will suppose that No. 1 and No. 2 each represents a board 12 or 14 ft. long, 1 inch thick and 12 inches wide. Now if a piece one inch wide is sawn out of the centre of No. 1 the piece would be shorter than either side; and if the same had been done to No. 2 the piece would be longer. Straight edges can never be made of such lumber.

It is doubtful if there is any lumber known that shrinks as much endways as redwood. The wood shrinks on an average ¼ of an inch in 12 feet; but there are cases when it is four time that amount. When window casings are nailed to green rustic, oftentimes the latter in shrinking will pull the frames open and let the sash out.

I wish to show now why lumber checks in seasoning. Nine-tenths of all the cracking or checking in seasoning lumber is caused entirely by light and not by heat. Lumber can be seasoned very rapidly by intense heat, without even a check, provided not one ray of light is allowed to reach the lumber

No. 3



during the process of seasoning. I also wish to show why a log will split while seasoning. For example, let me take a section of a green log of madrone, blue gum, or any other of that class of woods (which comprise at least one-half of the woods known); we will take a log of 18 inches in diameter and saw off a section 6 inches long, and let it season (in the dark if you please).

Here we have it at cut No. 3, thoroughly seasoned and find it about the same diameter and circumference that it was before seasoning; we find that the depreciation in size lies in the V-shaped cleft; and this cleft is caused by the wood shrinking very much in circumference, and in diameter hardly perceptible, consequently the fibre must be torn asunder. To illustrate this more fully we will take another section of the same log and cut three pieces out as shown in No. 4, two pieces being 4 inches square, and 1 piece round and 4 inches in diameter.

No. 4

We find them as shown after seasoning to be in the shape as shown in cut No. 5.

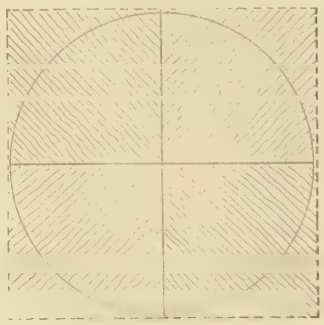
We find that A has shrunk in width at the top ½ inch, and at the bottom 5-16 inch, while from top to bottom it has only

No. 5

shrunk 1 32 inch. B we find has shrunk from right to left § inch, while from top to bottom it has only shrunk 1-16 inch, which leaves it in the shape of a diamond. C we find to be egg-shaped; the longest way has shrunk 1-32 inch, while the shortest has shrunk ¼ inch. "Well," says one, "what are we to do about this shrinkage, we can't help it, can we?" That is very true you can't stop the wood from shrinking, but you can help using that shrinkage in the wrong direction.

Suppose you have a solid cylinder to make, say, 12 inch diameter and 3 feet long, to be and keep perfectly round. This cannot be made of one piece (even if you had it), neither can it be made of several pieces, unless glued up in the right manner, and with the right kind of lumber, or with lumber having the grain the right way, which should be an angle of 45 deg. It makes no difference how many pieces are used, provided there is no less than four.

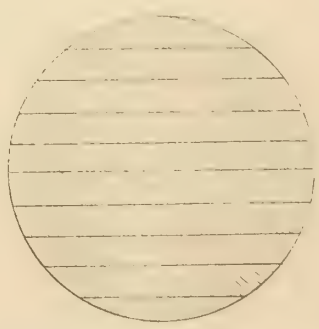
No. 6



Cut 6 is a section glued up of 6 inch square timber.

Cut 7 is formed of 1½ inch plank, glued together with the grain running like either No. 6 or 7; once made it will always keep round; whereas, if the timber is put together with the grain

No. 7



running as it did in the log, it will not make so good a job as if made of only one piece.

The reason that articles made of pieces glued together will not warp and twist as much as if made of one piece, is owing to the mixing of the grains, which generally gets mixed more or less, but without any regard to it on the part of the workman. Woodworkers, bear this in mind—wood shrinks in circumference of the grain, but comparatively nothing in diameter.

THE COST OF THE BIG RAFT.

All efforts to launch the big raft at the Joggins has hitherto failed. The Telegraph says: "Since the raft has been upon the waves it has altered in shape considerably. It was originally 55 feet broad and 36 feet high. It is now 62 feet broad and 31 feet in height. At high tide the water at the lower end of the raft is 19 feet in depth, and causes the structure to lift a trifle. A number of hydraulic jacks have arrived from New York, and the work of pushing the raft to deep water will be proceeded with at once. Mr. Robertson has obtained some eye bolts which will be placed in the rocks on the ledges on either side of the passage way through which the raft has to go. Hawsers will be attached to these, and the raft will be kept there in position until the tugs arrive to take her in tow. It may interest the public to know how much this great raft cost and how much would have been saved if it had been launched when the first attempt was made. A reporter of the *Sun* interviewed several of the principal business men in the vicinity of the Joggins, most extensively engaged in the piling business. The result of the interview was about as follows: There are in the raft about 2 225,000 feet of lumber, which could not be carried from the Finger Board to New York in less than fifty schooners. The average price of piling cut conveyed to the shore ready for shipment is 1¼ cents per foot. There are required to place it on board the vessel 2½, which includes the freight and the cost of discharging. This brings the cost of the piling delivered in New York, up to 3¾ cents per foot. and in addition the port charges and commission will bring the costs up to 4⅛ cents these charges averaging about § of a cent per foot. An ordinary schooner will carry about 20,000 feet, and her cargo landed in New York will cost the shipper $825. As there are about fifty such cargoes in the raft, the cost of the lumber, if it had been carried in vessels would have been about $40,000. The raft, as it stood in August last, when it was first in readiness for launching, was in the vicinity of $13 000. it is perhaps not out of the way to mention that the builder B. B. Barnhill, lost something like $5,000. Already about $10 000 have been expended in attempts to launch it, which brings the cost up to $23,000. From this it will be seen that the owners can afford to expend some thousands of dollars yet to launch the raft and land it in New York with a lesser outlay than would have been required had the lumber been shipped in vessels.

FREIGHT RATES ON LUMBER.

The Orillia *Packet* of a late date contained the following, which will, doubtless, be of interest to readers of the LUMBERMAN:

Before the Railway Commission, sitting last week at Toronto, Mr. J. S. Peckham favored the regulation of freight rates by the railway companies rather than by a court, constituted for that purpose. In the matter of special rates he had been treated impartially. He was of the opinion that the small lumber shippers, whose business was purely local, should not get the same rates as the larger dealers. He had not experienced any local discrimination, that is, between two towns. From navigable points the rates were lower in summer than in winter. That was owing to competition during the navigation season. The question of transhipment was one which a court might deal with advantageously. Mr. James Scott, Waubaushene, said that special rates were a necessity owing to the keen competition between railway companies, The establishment of a railway court would be of immense advantage in settling disputes which from time to time arise between railway companies and individuals. It would expedite a settlement at a small cost, and consequently would be of great service to the community. At the present time it was almost impossible to obtain justice, unless at considerable cost and delay. He preferred a railway court to the common law courts. The question of rates should be determined by the companies themselves. Mr. Thomas Long, Collingwood, said the rates were lower from competing points than from points where there was no competition. He understood there were special rates, but he had never got any. He had applied for special rates but was not successful in obtaining them. He complained of the discriminating rates on the Northern railway. He had been obliged to close up his flour mill two years ago and had not since opened it, owing to this system of discrimination. The proposed court, if established with full powers to deal with railway matters, would be a great benefit to the Dominion. Merchants were not permitted to ship mixed cargoes of a similar classification and if a carload consisting of one half sugar and the other half rice were shipped the company would charge what was called tariff rates, whereas if the load was entirely made up of either commodity the carload rates would be charged, which were considerably lower, notwithstanding that the carload rates were the same in both instances. Again, the railway companies do not hold themselves responsible for loss in transit of wheat through defective cars. Sometimes half of the carload fell through the cracks and openinings of old cars, which was a dead loss to the consignor. The terms of the contract were generally for four hundred bushels, more or less, but often they only delivered one hundred bushels and refused any compensation for the loss sustained by leakage. In fact the merchants were entirely in the hands of the companies.

A gang of shanty men arrived from the Nipissing district on Saturday last. They were employed on Mr. J. R. Booth's tow boats on Lake Nipissing forwarding logs to his new saw mill, which was constructed last summer on the edge of that lake. The winters cut on that limit has been secured in a boom, and the mill will run for about two weeks more.—*Ottawa Evening Journal.*

General News Notes.

Mr. McLaren will open a lumber yard in Kingston.

Two mills have been erected at Housey's Rapids this summer.

A shingle mill belonging to Mr. Love, at Port Sandfield, was recently destroyed by fire.

Joseph Ball, of Bracebridge, has invented a bow-facing-oar, which promises to be a success.

Mr. John Knight, of Elsie, is going to put a million feet or more of saw logs into his saw mill.

The bark Yuba with lumber for Buenos Ayres, after leaving Montreal grounded at Longue Point.

A large number of vessels were loaded with lumber at the Parry Sound docks during the past week.

The last lumber tows to leave Ottawa for the United States ports this season will start early this month.

James Davenport, of Midland, has the contract for building the new mill for the Victoria Harbor Company.

Mr. Bothwell is getting out a stock of pine and hemlock logs and shingle bolts for his mill at Cooper's Falls.

Several of the saw-mills at the Chaudiere have shut down owing to the coldness of the weather, and dearth of logs.

The average weight of 1000 superficial feet of Douglas fir lumber is from 3300 to 3500 pounds, and is worth from $9 to $25.

Several of Mr. Ullyott's shanty teams have passed through Peterborough for the north, giving quite a flavor of old times.

There has been an increase in the traffic of the Rideau canal. The lockages have been :—Steamers, 576; barges, 934 ; rafts, 35.

Mr. B. Adam, proprietor of the new shingle mill at Gatineau Point, went up the Gatineau recently in search of a timber limit.

The Rathbun company are setting out five or six hundred shade trees in the streets of Deseronto. Mr. Hopkins, Oswego, has the work in hand.

Two hundred feet of the Waubaushene dock was washed away by the big storm. About 20,000 feet of lumber was also washed from the dock.

The Waubaushene mills closed down a few days ago and all the men had a chance given them to go at once to the shanties so as not to lose any time.

The steam barge Nile and two barges are going to Kingston from Ottawa with 340,000 ft. of lumber. The steamer Reliance has been chartered to load lumber for Oswego.

Messrs. Gilmour & Co. have made an exchange of limits with the Messrs. Bronson, the former giving 170 square miles on the Kippewa for some 900 odd miles on the Gatineau.

Mr. J. G. Oliver, of Battleford, whose saw mill was burned down a few days ago, estimates his loss at $10,000 and does not possess a single cent of insurance. There is now only one mill in the district.

For the week ending October 23rd last, the Chicago building department issued 63 permits for 80 new buildings to cost $386,880, against 67 permits for 83 new buildings to cost $571,650 for the preceding week.

The Rathbun company has purchased from Folger Bros. the charcoal works at Sharbot Lake. The machinery, retorts, etc. will be removed to Deseronto where the experiment of charcoal making will be tried.

On the 19th Oct., at Carswell & Co's mill, Calabogie, there was cut 100,000 feet of lumber. This is pretty good work when it is considered that the gang only carries twenty-one saws thirty-four inches long, with a stroke of twelve inches.

In Wapella, Man., the firm of Logan & Howell, lumber dealers, have assigned. They were formerly farmers, and it is said possessed little means beyond their farms, which are heavily encumbered. They commenced in March last.

Messrs. G. Benedict & Son's law suit in connection with the Scott timber limits has been decided in their favor after lengthy litigation. This decision will have an important and beneficial effect upon the future prosperity of Deseronto.

Mr. Wm. Richards, the superintendent of the Upper Ottawa Driving Company, has commenced the construction of two new driving scows, those now in use being found too small for the large gang of men employed driving during the summer.

The tug Col. By and barges took their last load of the season at Burritt's Rapids on Nov. 4th for Cape Vincent. The tow has been freighting ties and posts for Mr. Hebron Harris all summer, who has an extensive contract with American railroads.

An epidemic of some kind has broken out in Booth's shanty on the Mississippi. Five men arrived at Dacre last Thursday, complaining of chilliness, prostration, vomiting, headache, and pain in the back. One was so low that a clergyman from here was telegraphed for.

The number of pieces of timber which passed through the Government works, on the Madawaska River, during the current season of 1886, was 811 880. This amount was composed of 20,011 pieces of square timber, 20,326 pieces of dimension timber, 761,805 saw-logs, and 9,738 cedars.

The Chatham Manufacturing Company received from the vicinity of Kent Bridge, the other day, an oak log measuring 73 feet in length and 30 inches in diameter, which would contain over 3,000 feet board measure.

A Minneapolis despatch says a synditate of Canadian lumbermeu, with partners in Minnesota, have acquired 500,000 000 feet of pine timber in that state, and will gobble up about one-half the state in timber limits. Treaties with the Indians on these reserves were, it is said, made in the interests of this syndicate.

An immense dry lumber shed is now being erected at Deseronto. It will be arched over and its dimensions will be 600 feet long and 40 wide. The whole work is under the supervision of Mr. E. H. Cooke who has been longing for such a shed for some time. He will surely be content with such a mammoth structure.

Ottawa lumber merchants cannot find sufficient railway cars, or boats for the transport of their lumber, and consequently shipments are largely hindered. Rail shipments will likely double this winter, which will be a great benefit to the city, affording a large amount of employment to laborers, and men having teams for hire.

A young man from Irwin's shanty had a portion of his foot almost completely cut off with an axe. He was brought down to this village on Sunday and had a portion of the injured foot amputated by Dr. Giles, who performed the operation with great skill and success. The young man is progressing favorably.—*Minden Echo.*

Messrs. Gilmour & Co., of Chelsea Village, closed their mills for the season a few days ago. They are getting out timber for the construction of a new saw mill at the Peche. The frame work and the foundation will probably be completed this fall, and the new mill will be in operation by the time the midsummer drives arrive next year.

There is quite a large fleet of vessels in the harbor loading lumber and a large number of vessels are expected before the close of navigation. We understand that several million feet of lumber which has been sold this fall will have to remain here all winter owing to the difficulty of chartering vessels on which to ship it.—*Parry Sound North Star.*

Mr. Robert Bick, of Bobcaygeon, has accepted a responsible and lucrative position in the Rathbun Co., at Desoronto, as manager of their shingle mill. Mr. Bick's skill as a shingle maker is such that the value of their shingles made has been considerably enhanced, and though he gets a good salary the Rathbun Co. will make a good thing out of it.

The Whitby *Chronicle* says that the failure of Messrs. Trounce & Co., lumbermen and millers, is the talk of the town this week. It is stated the liabilities of the firm amount to $100,000, the nominal value of the assets being put at a good deal less. The Ontario Bank is the heaviest creditor and is said to possess the only security held by anyone.

The Board of Trade has taken up in earnest the question of the graving dock advocated for Montreal by the *Witness*, and has addressed a letter to the Harbor Commissioners, stating that the immediate construction of the dock is necessary, and urging the Harbor Board to commence to agitate at once for the scheme, as well as to open negotiations with the Government.

A cablegram to the Halifax *Herald* from St. Pierre, Miq., says a large barque, laden with timber, was on fire nine miles south-west of St. Pierre on the 9th Nov, drifting east. She was ablaze from stem to stern. Her name was obliterated, but the word "Swansea" was visible. A tug went to the scene. The fate of the crew is unknown.

Mr. Allan McPherson's saw mill has been shut down, after a satisfactory season. The shingle mill will run all winter. Mr. McPherson has done a very good business this year, in lime and building stone. He has purchased the limits in the South Western corner of Oakley, and their farms, from Mr. R. C. Strickland & Co. ; also a limit in Ryde, from the Georgian Bay Lumber Co. He will get out a large stock for the mills for next year. His shanties are in full operation.

The "big trees" of California will soon be extinct. Seventeen lumber companies, owning from 3000 to 25,000 acres of redwood forest each, are waging a war of extermination with all the weapons known to the modern logging camp. The demand for the wood is unlimited and all the mills are kept at work to the limit of their capacity. The forests are large, but the forces employed against them are swift and irresistible.

The receipts of Southern yellow pine at New York from points in the Carolinas, Georgia and Florida, within eighteen days last month, exceeded eight million feet sawn. Savannah furnished the largest quantity, 1,452,000 feet. Brunswick nearly as much, then Jacksonville and Fernandina, both Florida ports. Wilmington and Georgetown and Norfolk sent the least. Darien furnishes in that period 500,000 feet hewn and 440,000 feet re-sawn.

About 100 lumbermen, engaged last week, have just left to work for the winter in the lumber business at Port Arthur. No little difficulty was experienced in securing the right kind of men. Many refused twenty-four dollars per month and "all found"; and several who have signed the contract, and left their valises and watches with the employing agent, failed to put in an appearance. Good men were guaranteed from twenty-four to twenty-eight dollars per month, all found.

Messrs. Thompson & Son, lumbermen of Peterborough, have commenced operations for the season of 1886-7. A gang of men have been at work in the township of Manvers for the last month or more, and when the winter sets in two more gangs will be dispatched to the Georgian Bay district and Ottawa River district respectively. Messrs. Thompson & Son confine themselves to the square timber branch of the business. Last year they got out a large quantity of white pine masts and other kinds of square timber. This year they will take out a considerable quantity of ash square timber for export to Europe.

The firm of Gilmour & Co. state that they have no camp known as Gilmour's Camp, and that the reported murder and outrage there is probably a fabrication. They have inquired of their agent at the the Desert, and he reports that nothing is known there of the alleged tragedy. The woman and her daughter said to have been the victims of the outrage were not living in the neighborhood, having removed to Mattawa some time ago. These statements pretty well discredit the original story as published in these columns, but it seems hard to believe that anybody would deliberately concoct such a horrible yarn, either for profit or amusement.

Several accidents have occurred in Mr. Jos. Gaudette's shanty at Barry's Bay, on the Madawaska river, during the past few days, one of which is of a serious nature. Peter Kelly, near Mount St. Patrick, was drawing logs through the bush at this shanty, when one of them swung round and struck a dry tree which broke off and struck Kelly on the back of the head, knocking him senseless. He was carried to the shanty and cared for by his fellow workmen. Two days after he took sick fits, and Dr. Kinder was called in, who administered to the sufferers wants as best he could. We understand that Kelly's mind is deranged through the effects of the blow. There are six men laid up in this shanty with cuts, bruises, etc.

A few days ago the additional applications made for timber berths at the New Brunswick Crown Lands office, were disposed of by auction, all the applicants obtaining the lands at the upset price, without competition. The licenses issued were as follows : Mr. Henry O'Leary obtained lot No. 47, Upsalquitch River, 2 square miles, and No. 48 Upsalquitch River, 2 square miles ; Mr. Charles Tracey obtained No. 49 N. E. branch, Yoho stream, Sunbury, 2 square miles, and No. 50, head of Little River, Sunbury, 2 square miles ; 2 square miles in the same locality went to Mr. George Hunter ; No. 51, Nepisiguit River, 3 square miles to K. F. Burns. Further applications have been made for twenty-one miles of timber berths, which according to the *Gleaner*, are to be sold this week.

A couple of months ago a raft of 3,000,000 feet of logs was made up at the mouth of French river, Georgian Bay, to be towed to East Tawas for the Emery Lumber Company by the tug Mocking Bird, the contract guaranteeing the safe delivery of the logs. The tug pulled on the raft eight days in bad weather and then abandoned the job temporarily, engaging in wrecking expeditions. Two weeks ago she went back and took hold of the raft, and got out into Lake Huron, when a big blow came on and she was obliged to go back under the lee of the islands at the mouth of the bay where the raft lay at last advices, and as the weather has been unsettled since it is uncertain when the raft will be delivered. The Kate Williams brought over the log barge Wahpoerotie to Tawas with a cargo of logs last week.

The steam barge Nile with her consorts, the Isis and Bedford, have finished their season's work on the Rideau Canal. They have not met with an accident, a fact much to the credit of the Captain and Engineer. The Dominion Government should deepen and improve the Rideau canal without delay. It is becoming more and more prominent as a factor for the economic movement of lumber and farm products. Many steamers are plying on that route, on which are many flourishing towns, such as Smith's Falls, Merrickville, Westport, &c. It is an exceedingly pretty route for tourists to Ottawa and other points, and with deeper water an increased army of American tourists from the Thousand Islands would patronize the route. Members from Central Ontario should press upon the Government the importance of improving the canal and that without delay.—*Deseronto Tribune.*

The fire at Conroy's Mill, Deschenes Lake, was confined to the lumber yard where it originated, although for a time it appeared as if it might make a clean sweep of the mills and village. Three acres of piling grounds were burnt over and the fire continued to smoulder all night but was carefully watched lest it should be communicated to the other property. It is supposed to have originated from the pipe of some smoker, although smoking is strictly prohibited on the grounds. The mills had not been in operation for two years, consequently the docks were clear of lumber. Mr. N. E. Cormier, M.P.P., of Aylmer, on hearing of the fire, immediately closed down his mill and sent his men to assist in putting it out, while the C. P. Railroad generously put an engine and train at the disposal of such Aylmerites as desired to go to the fire. The two companies worked away with a will, but, notwithstanding their efforts to extinguish it, the yard burned with great fierceness all the afternoon, being filled with comparatively dry material. The fire was conquered at about eight o'clock in the evening. The main property, the saw mill, grain elevator, and grist mill were not damaged in the least as well as the numerous other buildings on the premises. The whole property was insured for $80,000, but the damage sustained is comparatively light.—*Ottawa Evening Journal.*

THE CANADA LUMBERMAN

DEVOTED TO THE LUMBER AND WOOD WORKING INTERESTS OF THE DOMINION.

PUBLISHED MONTHLY BY

A. G. MORTIMER, PETERBOROUGH, ONT.

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Advertisements intended for insertion in any particular issue should reach the office of publication at least six clear days before the day of publication, to insure insertion.

The CANADA LUMBERMAN is filed at the Offices of MASSRS SAMUEL DEACON & Co., 154 Leadenhall Street, London, England, who also receive advertisements and subscriptions for this paper.

Our Readers who write to Advertisers in this Journal, will oblige both the advertiser and Publisher by mentioning the 'Canada Lumberman."

PETERBOROUGH, ONT, DECEMBER, 1886

A LARGE amount of interesting editorial and news items has been laid over until next issue, owing to a too great demand on our space.

THE area of timber limits under license on the Ottawa, in the province of Quebec, is 9,732 square miles; in Ontario, 7,153 miles.

AN International Exhibition of a peculiarly interesting character—that of Railway appliances and Industries—is to be held in Paris from May to October, 1887.

THE death is reported of William Sharples, head of the lumber exporting house of Sharples & Co., Quebec, which occurred Nov. 10 He was a very prominent and highly esteemed member of the trade in that city.

W. G PERLEY, lumberman, Ottawa, is in the field as a candidate for election to the House of Commons. Mr. Perley runs as an avowed supporter of the conservative party. C. H. Mackintosh may be thrown aside.

THERE seems to be a big trade doing between the "Flowery Land" and British Columbia, as we learn by latest from Vancouver that the ship *Beaconsfield* was loading with 1,020 000 ft. of lumber, value 11,800 dols., for Peru, and the barque *Nanaimo* was taking 45,000 ft. to Tientsin, China.

THE Export Lumber company of Montreal and New York report the total shipments of lumber from the river St. Lawrence to the river Plate during the season of 1886 as 29,088,204 feet, of which 21,782 604 feet was pine and 7 305,600 feet spruce. The total shipment in 1885 was 31,344,543 feet and in 1884, 36,938,548.

THE quantity of square timber, dimension timber, saw logs, and cedars which passed through the Government works on the Madawaska River during the summer of 1886, is as follows:—Square timber, 20,011 pieces; dimensions and boom timber, 20,326 pieces; saw logs, 761,805; cedars, 9,738. Total number, 811,880.

WE have received Vol. 1, No. 2, of the *Kansas City Architect and Builder*, a neat 16-page monthly. It is carefully edited, and the engravings and general typographical make-up are first-class in every particular. Publications of this nature are plentiful across the lines, but the new aspirant looks healty enough to live to a good old age.

MAKERS of wood-working machinery, both in Canada and the United States, have done an unusually large trade during the past year. The extensive improvements which are from time to time being introduced in this class of machinery has extended the field of usefulness, and almost entirely done away with manual labor in wood establishments.

IT is evident that throughout the United States and Canada, hemlock is gradually gaining ground, and the prejudice which has existed in the past regarding this wood is slowly but surely disappearing. The already rapid decrease in the volume of white pine will of itself have the effect of bringing hemlock in more general use for dimension and bill stuff.

"THE FOREST AND FARM LANDS OF NEW BRUNSWICK" was the title of a paper read at the Colonial and Indian Exhibition recently by Mr. W. F. Best, analytical chemist, of St. John, N. B. A number of limelight views of scenery, &c., specially prepared to illustrate the paper, were exhibited, together with samples of forest and farm products.

MESSRS. MCCOOL, DORAN & Co. have received at Quebec a raft of square white pine timber, containing about 100,000 ft. square and 60,000 waney, with an average for the latter of about 54 ft. 18½ in. girth. This has been taken. we are informed, from Lake Esperance, on the Ottawa River, about 45 miles further up than any yet taken from the Ottawa district.

AMONG the many new advertisements constantly appearing in this paper, we have pleasure this month in calling attention to that of Messrs. Northey & Co., Toronto, manufacturers of steam pumps. Many of our readers are already familar with this firm, but since there last announcement in the LUMBERMAN, extensive improvements have been made in their celebrated pumps, which entitle them to rank second to none in the market.

ONCE more we would make a strong appeal to our readers who are in want of machinery, and who write to our advertisers, to be always particular to mention the LUMBERMAN in every case. The favor we ask incurs no extra work on the part of the correspondent, but always helps the paper. Will our friends kindly bear this in mind, and we shall endeavor to reciprocate the favor by supplying the LUMBERMAN in the most entertaining shape possible.

A FEW days ago we took a jaunt over the Northern and Northwestern Railway from Toronto, and were particularly struck with the new and elegant coaches which have recently been introduced on the main line. With the opening up of the Calender branch of the C. P. R. the Northern railway is likely to become a first-class line. Manager Barker and the officials of the Northern deserve credit for the extensive improvement now being made.

FOR the first time the LUMBERMAN takes pleasure in introducing to its readers the well known firm of Cowan & Co., of Galt, Ont., manufacturers of all kinds of wood-working machinery. From our personal knowledge of this firm's manufacture, we have no hesitation in saying that their machinery stands second to none manufactured either in Canada or the United States. All interested in this class of machinery should send for catalogue, and read the announcement in this issue.

THE tests of Colonial woods recently made in England, an abbreviated report of which appears on another page of the LUMBERMAN, certainly did much to bring the superior qualities of some of the timbers of Canada before the notice of those in the old land interested in their employment. Among the Canadian specimens submitted to this practical test were the Douglas fir, and swamp or black ash, butternut, white fir, and iron wood, all suitable for various forms of joiners' work.

THE English Commissioners of Forests are planting extensively on the Crown property in the Isle of Man. About four millions of trees have been planted on mountain land during the last three years, and the work has proved so successful that it has been decided to extend the number of trees annually. The planting is done almost entirely by native labor, under the superintendence of a competent forester. What a grand area there is in the great Northwest of Canada to carry out a similar project.

MICHIGAN and Canadian lumberman will be interested in the fact that plans are being made for the deepening of the channel of Niagara river from Buffalo to Tonawanda to 18 feet. There is barely 14 feet at present and the channel is so circuitous that the passage of vessels heavily laden is attended with much difficulty and danger. Though it has often been desirable to load boats bound for Tonawanda more deeply than is the present custom, the narrowness and shallowness of the course has deterred owners and shippers.

MR. A. W. WRIGHT, commercial agent for Canada at the Colonial and Indian Exhibition, who has just returned to Canada, during the course of his remarks to an Ottawa reporter said:—"There is also a fine demand for Canadian timber, not, however, the timber which grows in the forest and which is the only kind manufactured here but the second growth which grows in the clearing. I found out that if this second growth timber which is now considered by lumbermen as useless, on account of its small size, was manufactured and sent to England it would meet with ready and good sale. There is also a fine market for Canadian hard woods, but they must be carefully manufactured and selected in order to meet with ready sale.

AN order in Council has been passed amending the present regulations relating to railway lands in British Columbia along the route of the Vancouver Island Railway. The amended section reads. "No timber shall be granted for a larger area than 2,000 acres of land for each 25 000 feet board measure of lumber that the mill operated in connection therewith is capable of cutting in twelve hours, nor shall the license be granted for a longer period than five years. The license shall not be transferable and may be surrendered at any time.

THE secretary of the Lumberman's Exchange, of Chicago, has been granted a 30 days leave of absence, and in company with another well known lumberman, started *via* Canadian Pacific railway, a few days ago, for Victoria, British Columbia. The party intend visiting the newly discovered anthracite coal mines at Bauff, in the Rocky Mountains, and propose spending a week camping in the forests of the Pacific slope. We shall endeavor to obtain from Mr. Hotchkiss his views concerning the great timber resources of the Pacific province of the Dominion on his return.

AT last, after months of discussion, the question of a lumber exchange for New York, has assumed practical shape. Consignors of hardwood lumber to that city have been considerably inconvenienced in the past by the faulty inspection methods which have afflicted that center of trade, and it is conceded that the present organization will do away with all difficulties as well as many others. The new institution already appears to be in good working shape, with abundance of officers and committeemen. The reports give promise of something new and possibly definite in regard to the inspection there.

THE current issue of *The Office*, published monthly in New York, a copy of which has been sent us, contains much that is of interest to business men and accountants. In the first place, as an enterprise it is unique. It is the only paper appealing to office men and devoted to the advocacy of better methods in office work. Of the contents of the November number we were particularly pleased with the articles entitled: "Wanted—a book-keeper;" "The Calender—old and new styles;" and "A system of cost records for foundry work." The cost of this publication is only $1 per annum, and it should succeed.

VERY little, if any change has taken taken place in the English lumber market since our last issue. The same dull and depressing influences which have been at work for many months past still exist, the demand remaining restricted and the imports in excess of the requirements. One or two important failures have been chronicled, the principal one being a large builder and contractor at Chelsea, with liabilities of about £220 000. Each recurrence of such events further weakens the already instable condition of the trade, and it is generally thought that the next few months will be an anxious time in more quarters that one.

THE sixth volume of the LUMBERMAN is brought to a close this month, and a new volume will commence with the January number. Improvements will further be made in several important mechanical details, and the best possible attention will be exercised in the editorial conduct of the paper. The editor feels that in some degree he has now learned the wants of his constituency of readers, and that he is therefore better prepared for the future than in the past to serve them acceptably. The policy of the paper will be the same as in the past, namely, serviceable and instructive to all engaged in the branches of trade which the LUMBERMAN claims to represent.

IT is of service to observe what sort of wood is exported to foreign markets by our American neighbors. We find, for example, that the shipments of wood from the port of New York from October 13th to 30th last, included cedar to Belgium; cedar, oak and walnut to France; cedar mahogany, pearwood, walnut and white-wood to Germany; white-wood to Holland; pine lumber and shingles to Hayti, Porto Rico and the British West Indies; hemlock, maple, cedar, persimmon wood, oak, mahogany, walnut and pine to Great Britain; pine (315,000 feet), besides ash, oak, poplar and walnut to the Argentine Republic; pine (222,000 feet) and planks to New South Wales.

A PACIFIC cable company, which proposes to make telegraphic connection between England and Australia, *via* Canada, is about to appeal to the public with a prospectus asking a capital of £2,000,000 stg. An Imperial and Colonial guarantee of £100,000 is said to be looked for: Canada being set down for £12 000, Australia for £38,000 and the Imperial government for £50 000. Hawaii has promised £4,000 a year, and it is admitted that this is the only promise so far obtained. It is very doubtful whether the £100,000 subsidy will be got. A six-penny Atlantic rate; five cents across Canada; four shillings a word from Canada to Australia, are said to form part of the scheme. There is and indisposition on the part of the British public to believe that all this will be accomplished; and the details may very likely be modified before the propectus, of which a draft has been made, is finally decided upon.

WE have pleasure in again calling attention to the advertisement of the William Hamilton Manufacturing Co., of Peterborough, which appears on second page of cover. We shall refer to this firm at further length next issue.

FOREST LEGISLATON IN CANADA AND THE UNITED STATES.

The course pursued by the Dominion Government in placing an export duty of two dollars per thousand feet upon spruce and pine logs, has aroused the American press and public to a sense of their true position regarding the forests of that country. After many years of unnecessary slaughter, Americans find that their timber resources are rapidly giving out, and for this reason the lumbermen of Michigan and Wisconsin, in particular, have, during the past year or two, turned their attention to the forests of Canada. They quietly bought up the right to cut over extensive tracks with the intention of having the logs towed across the lakes and cut up in their own mills. There would have been a double advantage in this operation; material would have been supplied to feed established mills, and the manufacturers would have escaped the import duty of $2 per thousand feet of manufactured lumber, imposed by the Government of the United States on all foreign white pine and spruce entering that country.

The Dominion Government very wisely does not sell its forest lands, but only the right to cut timber on them under certain restrictions, and has failed to see the advantage of such operations, taking the ground that as long as the market for Canadian lumber in the United States is restricted by an import duty, American citizens, if they want to manufacture Canadian lumber, must do it in Canada, or pay a good round price for the privilege of sawing it at home. No unprejudiced person would attempt to deny that this is the only wise course to pursue. This is not the opinion, however, of the owners of saw mills situated on the shores of the great lakes within United States territory. They are loud in their denunciations of the short-sightedness of the Canadian policy, and foremost among these critics we find certain class and other journals of the Northwest, which, strange to say, in the past upheld with the greatest persistence the wisdom and necessity of collecting an import duty upon lumber manufactured in Canada, "Consistency thou art a jewel!"

The New York *Sun* in treating upon this question has the following to say:—

"There should, of course, be free trade, or, at least, reciprocity in lumber. It is monstrous that things should be allowed to go on any longer as they are. It is an outrage upon American prosperity; it is a disgrace to American intelligence that we should continue to shut out Canadian lumber from the markets of the United States. The whole country is made to suffer in order that a handful of pine land owners and manufacturers may become inordinately wealthy. Every building erected in the Northern States is made more expensive, every Northern farm is made less valuable in the increased cost of fencing by this duty. It causes an unnecessary and inexcusable exhaustion of our northern forests. It is a shame and an outrage which the American people cannot longer afford to submit to."

With the already heavy export duty, and the possibility of this being increased at the forthcoming session of the Dominion Government, it is evident that the Americans will have to adopt some policy calculated to better their condition. Our contemporary above quoted seems to think that it has found a way to get out of the difficulty, by doing away with the protective duty on Canadian lumber and placing it on the free list.

But the question of duty alone is not the only consideration with Canadians. Every one is familiar with the fact that in Canada we have an almost unlimited supply of all kinds of timber, but the country is still in its infancy, and with the great influx of population which is sure to come to a country boasting of the natural advantages of which we are the possessors, the fact is apparent that we cannot afford to slaughter our forests to any great extent for foreign export. While, as we have said, we have immense timber resources, it is also a fact that we also have a great track of prairie country, the demand from which will be great a few years hence. Foreign export would, of course, temporarily enrich our lumber manufacturers and dealers and the public at large, but this should be a secondary consideration, when future requirements are taken into account. If this matter was more fully taken into consideration more drastic and comprehensive measures to prevent exportation would be resorted to.

THE BOUNDARY QUESTION AGAIN.

The famous appeal of the St. Catharines Milling and Lumber Company, appellants, and the Queen, on the information of the Attorney-General of Ontario, involving once more the much disputed boundary question, was argued before the full bench of Supreme Court, at Ottawa, on Saturday, Nov, 27th. Mr. Dalton McCarthy, Q C., appeared for the appellants, and Hon. David Mills, Q C, for the Ontario Government.

The case is an appeal from the judgment of the Court of Appeal of the Province of Ontario, delivered in April last affirming the judgment of the Chancellor of Ontario, declaring that the appellants had no right to cut timber on certain lands mentioned in the Statement of Claim, restraining them from trespassing thereon, or from removing any timber standing or already cut. The land on which the lumber company operated, according to the assertions of the respondents, lies in the Western part of Ontario, north of the height of land, and is a portion of the territory, which at the time of Confederation, was claimed by Canada as part of Upper Canada, but the right to which was disputed by the Hudson Bay Company. The right of Upper Canada to this territory had been asserted and insisted upon by the successive governments of the Province of Canada for many years before Confederation, and continued to be insisted upon by the Dominion Government until 1870. The Federal authorities in that year effected a compromise with the Hudson's Bay Company, the latter surrendering all claims to Her Majesty. By an Order-in-Council passed in June 1870, the Dominion was given Rupert's Land and the North-West Territory, not theretofore belonging to any province. However, the Territory which includes the land involved in this suit belongs to the Ontario Government.

The St. Catharines Milling and Lumber Company on the other hand, maintain that the lands upon which they operated belong to the Dominion; that $4,125 was paid for the privilege of cutting the timber. The grounds upon which the appellants based their contention that the lands and timber in question are the property of the Federal Government are several in number. One was that the land in question was until recently claimed by the tribes of Indians who inhabited that portion of the Dominion, and the claims of these tribes have always been recognized and admitted by the various Governments and by the Crown, and such Indian claims are and always have been, paramount to the claims of the Province of Ontario. The appellants also hold that the Federal authorities in consideration of a large expenditure of money made for the benefit of the Indians of the Lake Superior district, have acquired by purchase the Indian title to the land and the timber located thereon and by reason of the acquisition of this title as well as by reason of the inherent right of the Crown, the Dominion and not the Province of Ontario, has the right to these limits.

The respondents assert that the defence is made and carried on at the expense of the Dominion Government. The case in the courts below has so far gone in favor of Ontario. Mr. Walter Cassels, of Toronto, as well as Hon. Mr. Mills are watching the proceedings on behalf of Premier Mowat.

EXCHANGE ECHOES.

Contemporary Opinion on the Various Matters of Interest to the Trade.

Monetary Times.

The statement is made without qualification, though it appears to lack confirmation, that the Grand Trunk railway is to form a connection with the Northern Pacific, and that an arrangement to that effect has been made. A road is being built on the south side of Lake Superior, which will connect with the Northern Pacific, at Duluth, and with the Grand Trunk at Sault Ste. Marie; the latter company extending its line from the Midland, near Atherley, to Sault Ste. Marie, crossing the French river on its way, near the mouth, where a series of islands will make the bridging easy. The capital necessary to carry out this project, it is added, is at the disposal of the Grand Trunk. The expectation is that a large traffic will be drawn by this road from Oregon, Wyoming, Dakota and Minnesota, and part of Wisconsin.

Boston Journal of Commerce.

Cold weather is coming on where there will be an increased demand upon the boilers to supply the steam for heating, new risks to incur new points to look out for, and more work for the engineer. Don't let it come upon you all at once but get ready for it. Give your plant a thorough overhauling and get it into the best possible condition. See that there is no possible place where freezing can cause you trouble. The feed and water pipes, especially those which convey hot water, are apt to become choked by corrosion in a year's use. Now is a good time to clean or replace them. See that the valve stems and joints about the mill are tight so that you will not be called in twenty directions at once to stop leaks the first time steam is let on. An engineer can make his own situation a great deal more comfortable, and give a great deal more satisfaction to his employers by exercising a little forethought in such matters.

The Timberman, Chicago.

It is gratifying to note that the observer who has been so long in the work of investigating northwestern market conditions that not long since he fell into the error of gravely asserting that there was "no pronounced scarcity of stock anywhere," is beginning to realize what has been plain enough to most members of the trade for weeks back—that there is less lumber in sight than there has been at this season of the year for a long time. That "the trade will go into winter quarters with certainly no more lumber than will be required for an ordinary spring demand," is surely putting it very mildly. More than this is really true. As a matter of fact the supply of dry lumber—which in these days of pound freights is all that can be regarded as entering into consideration—is so much less than an average demand warrants the trade in carrying over, that there is every reason to look for much difficulty in filling orders. The lack of assortments is already sufficiently "pronounced" to make it evident, and it is due to the welfare of the business and of its members that the fact should not be ignored or its importance underrated.

Timber Trades Journal, London, Eng.

The comparative state of the dock deliveries is generally the first thing the trade turn to in the hope of finding some signs of improvement, but latterly we have been unable to say that things in this respect were any better. Last year's consumption compared with the present is decidedly unfavourable, and leaves us to make up a shortage of over 23,000 standards. The present season is fast approaching its conclusion with something like half a million pieces of deals and battens less than the stocks a year since exhibited. This considerably helps the market, and affords some grounds for prices advancing with the spring, before there is time for the new season's goods to put in an appearance. With regard to flooring boards, these depend entirely on the consumption, which, fortunately for them, has kept fairly good all through, and had the market not been so overborne with battens this year the probability is that prices would not have gone below last year's. Shippers made a great reduction in cargo quotations some three years ago stocks being heavy and the markets here dull. The unwisdom of this policy has been observable in the difficulty that has since been experienced in getting back to their former value. Shippers on the Baltic side at one period in the history of the trade used to regulate the markets here, but since the production has so enormously increased there is always sufficient stock carried forward to prevent any scarcity.

Northwestern Lumberman.

The lumber trade has reached such an over-zealous state that there is an actual competition between buyers to see who shall get the better cuts of the mills. This strife is most active between eastern and western buyers at lake points. Throughout the present season, until recently, competition among buyers at manufacturing points has been so sharp that much of the profit of this year's business has been lost to the dealers simply because values of bulk lumber have been forced a little higher than was warranted by the distributive demand. As a matter of fact nothing has been developed this year to give lumber at the mills any basis for higher prices than prevailed last year. The consumptive demand, while this year greater in some directions than it was in 1885, has not, on the whole, shown any appreciable gain. It has lately been observed that buyers at the mills have not been plenty. The trade has about all the lumber it wants until a more urgent consumptive demand is developed. This shows that the excitement in the lumber trade has, the present season, been at manufacturing points. Eastern buyers have been plentier than usual at western points, so that western dealers had to go into competition, with them in securing stocks; but all the time the latter have known that they were running some risk in doing so. The present dilemma does not necessitate loss on stock in yard, however. The promise of a good trade next February, March and April is encouraging, while stocks are scarcely ample for an urgent requirement. A lively spring trade would take the dealers out on to solid ground again.

The Timberman, (Chicago.)

Paper by the ream, lead pencils by the dozen, and printers' ink by the ton, have been used up in years past to urge upon lumbermakers the necessity of economy in all their works. And in particular has it again and again been set forth with all the vigor and eloquence that is inseparable from editorial utterances, that they should study and plan—even if it should be necessary for them to lie awake nights to do it—to the end that every portion of the mill product should be made to bring in something, be it little or much, in the way of hard coin or crisp paper that will serve to make a balance in the bank. Possibly it is because such advice fell into fruitful soil, but the chances are more probably because the natural tendency of the business has long been in this direction, that so little of the contents of the log as it floats down the stream, fails to reach a market and transform itself into cash. Even the saw-dust sells at some mill points, and the edgings and refuse are made to serve a profitable purpose. The short lumber and ends which were once piled up in the water to make docks, now find a market, when the mill man is enterprising enough to seek it out. Not all mill men or lumber dealers may know that lumber has been sold on Lake Michigan this season only eighteen inches long, and from that up, in lengths increasing by six inches, but it is nevertheless true, and true also that good prices were obtained for it. One mill owner sold a quantity under ten feet long—stock which was formerly considered not worth shipping. For lengths of eighteen inches and up to forty-two, $3 50 was obtained for the culls, and $5 for the common and better, delivered in Chicago. For four and five feet the price was $4 25 for culls, and $12.50 for the good stock, while for lengths over five feet $18.50 was realized, the stock running in quality equal to about A select. The average on about 1 500 000 feet of such lumber sold, reached $11.70, which it must be admitted is better than using the stuff to make new docks. The lumber was bought and used for manufacturing purposes, and doubtless answered the buyer's end nearly as well as if it had been of the lengths recognized as standard by the trade. The demand for such odd stock will unquestionably become a feature of the trade and lumber makers will be doing themselves good service to cultivate it.

Steam Engines.

A young man in the interior of Iowa has invented a change in the construction of engines. He dispenses with the steam chest and the governor-balls, and in place of the latter he employs a pendulum which permits the outflow of steam at an unvarying speed, but the slightest increase of velocity in the engine lessens the time that the steam has to escape into the cylinder. The apparatus thus effects an instantaneous check upon its own irregularities, which are comparatively slow when the governor is used, and it has the additional advantage of using less steam while it largely simplifies the working gear. A trial engine has been constructed, and is said to work well.

EXTRA HEAVY PLANER AND MATCHER.

WE illustrate on this page an Extra Heavy Planer and Matcher, manufactured by the Egan Company, Cincinnati, Ohio. It is one of the best and most improved machines of its kind made, and the detail of i s construction for strength, strain and convenience, is of the most improved and advanced ideas for building first-class machines. All the latest points are embodied, and many new advantages specially peculiar to our machine, and covered by our exclusive patents.

The Frame is cast plain, and is thoroughly braced and ribbed on the inside, giving great strength and presenting a very smooth and even face on the outside. The edges are gracefully curved so as to nearly double the strength of the castings.

The Head is of cast steel and slotted on all four sides, and the cylinder is double belted. Any kind of a knife can be placed on this head, as the double pressure bars on each side of knife are adjustable to or from the knife. Mouldings, patent siding, cove siding, ship lap, beading, and work of that clsss can be done on it to the best advantage.

The Patent Adjustable Pressure Bars are placed on each side of knife and inside the feeding rolls, holding the lumber firmly as it is being planed. These bars are adjustable at will of operator, so as to accommodate irregular knives and allow a full clearance.

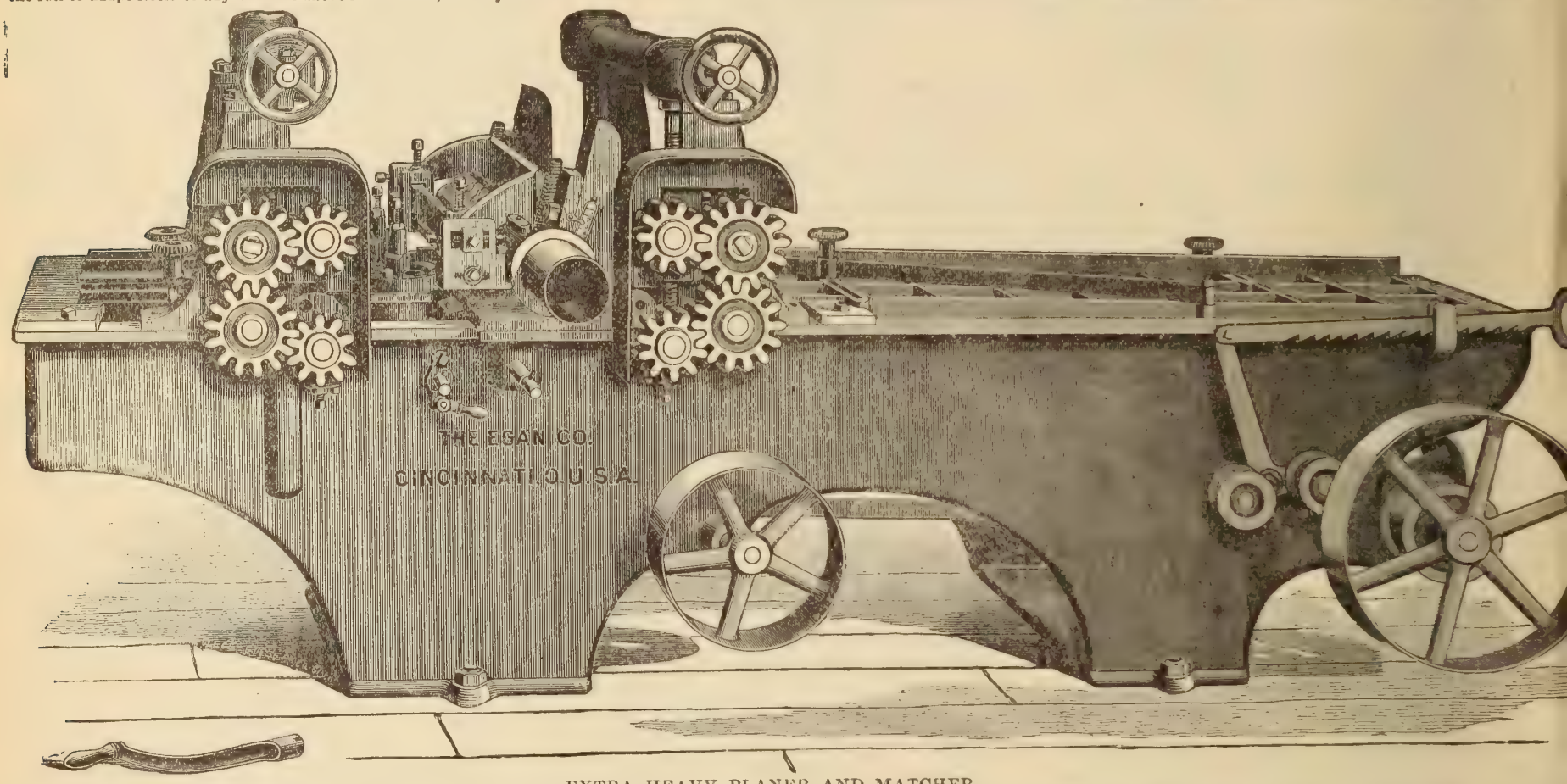
The Feed is powerful and consists of four 6 inch feed rolls, geared in a superior manner; there are two changes of speed, viz: 45 and 65 feet per minute. The machine is of large range, planing 24 inches wide, 6 inches thick and matching 14 inches wide. Our patent adjustable box is a very ingenious contrivance, allowing the roll to adapt itself to any board of uneven thickness, thereby preventing any undue strain to gearing and giving equal pressure to each side of board.

The Patent Side Heads, with their spindles, are adjustable horizontally or vertically from the working side of machine. When side heads are set for a certain width, a hand nut locks it and no slipping can take place. The machine can be changed from a planer to a matcher and vice-versa in one minute, and the mechanism for changing heads out of the way so as to surface full 24 in. wide is the most perfect and reliable yet put on any machine. The back feeding rolls are weighted and the front ones have springs and we think experts will appreciate the change.

This machine will stand up to any kind of heavy or light work ash, oak, yellow pine, white pine or hard wood, and is specially adapted to large mills requiring a variety of work in both planing 24 in. wide and 6 in. thick, also for flooring, ceiling, patent siding, moulding, &c., &c., and we can recommend it in every way to be well bui t, and the material the best adapted for the purpose.

The L. and T. pulleys are 14x8½ and should run 960 revolutions per minute.

For cuts and prices of this or any other Improved Wood-Working Machinery, address the manufacturers, the Egan Company, 165 to 185 West Front St., Cincinnatti, Ohio, U.S.A.



EXTRA HEAVY PLANER AND MATCHER.

CANADIAN TIMBER.

At a largely attended meeting of the members of the Institute of British Carriage Manufacturers, held in the Westminster Town Hall, London, Eng., Professor John Macoun, F. L. S., Botanist to the Canadian Government, read a paper on "Canadian Timbers suitable for Carriage Building," in the course of which he suggested that if a timber bureau or exchange were organized in connection with the contemplated Imperial Institute, dealers might be made aware of the anticipated wants of consumers, and producers could be instructed accordingly. The following is a summary of Professor Macoun's paper:—

"Commencing with a sketch of the lumbering centres of New Brunswick, Quebec, Ontario, and British Columbia, the Professor showed that there need be no uncertainty about the supply. Were there (he suggested), a timber bureau or exchange organized in connection with the contemplated Imperial Institute, dealers might be made aware of the anticipated wants of consumers, and producers could be instructed accordingly. There need be no fear of the supply of spruce and larch, and of the coarser kinds of pine lumber, giving out, as Canada had immense tracts, unfitted for agriculture, covered with this class of timber. It was true that fires did great damage every year, but that applied more particularly to pine forests, as these grew on dry and generally sandy soil. Fire passing through a Canadian forest simply means the re-covering of the land with a different variety of tree, as pine lands, if the soil be fairly good, seldom become covered with pines again. Proceeding then to speak of the suggested School of Forestry for England, Professor Macoun went on to treat the real object of his lecture. The elastic woods valuable for carriage building included the shell bark hickory, bitter nut hickory, white-heart hickory, pig-nut hickory, white ash, black ash, rim or red ash, chestnut, cherry or black birch. Elasticity he considered to be a property of young wood, and the greater the exposure the more it is produced. Should this be a fact, there was no reason why Canada could not produce all the ash and hickory for every variety of agricultural implement and vehicle required in England. Canada had millions of acres of waste lands growing up with young wood, which to-day were of no value, but which in twenty years, if merely let alone, would fully supply the English market as well as the Canadian. The Canadian woods noted for toughness were basswood, common or white elm, rock elm, slippery elm, beech, hornbeam, ironwood, walnut, bitter-nut, white oak, blue oak, pin oak, grey oak, scyamore, red maple, whitewood, cottonwood. Toughness, the professor showed, was found at all ages of the wood. The three Canadian elms, common or swamp elm, rock elm, and slippery elm, are in their young state so tough that in many cases it was impossible to split them. He had seen thousands of young elms ranging from six inches to eighteen inches cut down close to Canadian railways and burnt upon the ground because they were so tough that they were almost useless for firewood, and not worth the labor of converting into firewood. Did English purchasers and Canadian producers understand their business better, these small trees would be cut up in Canada of the required size, or merely cut into plank and shipped to England when partly dried. Or, better still, English capital, managed by competent men in the interest of the manufacturer or dealers in England, could produce just what was wanted and forward direct, so that the heavy charges now paid to middlemen could be dispensed with. There was now in Canada, around the old settlements, in fence corners and in the forest, cut many years ago, an enormous quantity of young wood ranging from twenty to sixty years of age which is considered of no value, as there is no demand for it. This is the class of wood they want but cannot get in England, because their own country does not produce enough of it. British dealers rejected Canadian forest-grown wood and say it is of second-class quality, and that Canadian woods are far inferior to British. Yet they could get the wood they desire by changing their mode of purchase. Let any competent man go out to Canada and have a lot of young oak, ash, elm, and hickory sawed up into plank of the size wanted, let it be partly seasoned, and then shipped direct to the manufacturer. Then they would get good cheap raw material, and with machinery and skilled workmen there was no reason why they could not build carriages of better quality and more cheaply than they did at present. The Professor then went on to treat of the need of Canada for a Forest Department, and spoke of their hardness, resistance to wet the beauty of many Canadian woods for cabinet making and furniture, as well as their uses for cooperage and the possibilities of the import of wood pulp. The paper indeed dealt exhaustively with the whole subject and was well received throughout.

LUMBERING IN MANITOBA.

This winter promises to be a brisk one in lumbering circles, the past season having been a very good one. "We could easily have handled 2,000,000 more feet than we did," said a member of a well known lumber firm. "During the past summer the cut of last year has been all sawn and disposed of and the stocks of sawn lumber and logs on hand have had large inroads made into them. If the demand next summer is to be met, there will have to be a much larger cut than last season; we as only one of many firms, will increase our cut by three millions of feet."

Other lumbermen spoken to corroborated this view of the case. During the past season there has been a heavy demand for good lumber for railway bridge purposes, and three times as great a quantity was used for this work as there was in 1885. From Winnipeg and all points of the Northwest there has been a demand for lumber, which indicates that building operations have been heavily carried on during the past summer. All the mills have been rushed to their greatest capacity. Prices are stiffening and are now from $14 to $15 per thousand feet f. o. b. at Keewatin, and from $17.50 to $18.60 at Winnipeg. They are expected to range still higher next summer if the market is not gutted by too heavy an output. One dealer estimated that there was yet 30,000 feet of sawn lumber remaining over from past years when the output was far in advance of the demand; if this winters cut was not so large, next season would relieve the dealers of the stocks on their hands, and place the business on a firm foundation again.

A good many lumbermen did not get all their last winter's cut down to the mills last summer, the drives sticking owing to the lowness of the water. There are probably three or four million of feet at present on the rivers waiting for the spring freshets to bring them to mills.

The season now opening promises to be a most active one; and lumbermen are consequently in good spirits. Gangs of men are already being sent to Lake Winnipeg and the Lake of the Woods districts, and a week or two will see operations in full swing.—*Free Press.*

COLONIAL TIMBER.

The last issue of the LUMBERMAN contained a brief notice of a meeting held in London (Eng.,) for the purpose of testing the various kinds and qualities of colonial timber. We are indebted to London *Timber* for a full report of the proceedings, but as our space is limited we have summarized the report, and only report that portion of the speeches referring more particularly to Canadian woods. The meeting was made up of a large number of colonial visitors, together with some of the leading civil engineers, builders, timber merchants, and others interested in the employment of timber, and was held, by special invitation at the Chelsea works of Messrs. A. Ransome & Co., in order to witness a series of practical experiments with different kinds of colonial timbers at present commercially unknown in England, but to the peculiar qualities and advantages of which it was desired to draw attention.

The experiments, which were conducted with more than 40 different varieties of timber from India and the colonies, comprise tree felling, cross cutting, sawing, planing, moulding, mortising, tenoning, and boring; while the manufacture of such things as casks, doors, pick handles, carriage spokes and railway sleepers was carried to its completion and the articles exhibited to the assembled guests.

Mr. Woods, the chairman, on rising, said that it was a great satisfaction to him to see so many distinguished representatives of the colonies present on this occasion. The object of this opportunity that Mr. Ransome has given us is, as I understand, to bring the woods which are the growth of the colonies to the notice of civil engineers, contractors, and others interested in the use of timber in the various branches of trade, and to give the colonists themselves an opportunity of showing what their respective countries will produce. We have had before us splendid samples of wood from various colonies, and we have seen how readily they can be operated upon, and brought into various forms by the machinery in these works. It would be interesting, I am sure, to the gentlemen present if we could have the views of our experienced colonial friends here with regard to the various qualities of the wood, and the uses to which they can be applied. It would also be interesting if we could hear from Mr. Ransome what is the result of his observations and experiments upon these woods, and if he would state in what respect and to what extent he thinks they would be suited for practical use in England, or the colonies, as many of our profession are engaged in the carrying out of important engineering works in the colonies, to whom many of these woods, if they were thoroughly known, would be of use. I would therefore ask Mr. Ransome, in the first place, to favour us with some observations on the results of his experiments with these woods.

Mr. Ransome said:—I am very sorry that I cannot give you much information as to the most important point of all with regard to the woods you have seen operated upon:—viz., the price at which the various discriptions of timber can be delivered in London. There is no doubt that a great many of the woods which have been submitted are very fine indeed for a variety of purposes, and although our space was very cramped, you must all have seen enough to know that there are many woods of excellent quality, which would be of great use in this country. The question, however, is whether these woode can be imported into this country cheap enough to take the place of other woods now answering the purpose. As regards this, however, I think we may have the advantage of some information on the subject from the representatives of the different colonies present here to-day. It appears, perhaps, invidious to select certain woods, but at the same time we are here for practical purposes, and I think it only useful and right to mention that there are certain woods which we have tried (for we have been experimenting during the last fortnight upon them), which stand out as pre-eminently good woods. If you will allow me, I will just mention them, and then the representatives of the different colonies who follow me will, perhaps, give you some information as to the cost at which they can be imported.

The speaker then referred in turn to the principal woods to be found in New South Wales, Victoria, Western Australia. New Zealand, Canada, the Cape, India, &c.

Referring to Canada the speaker said:—From the Canadian Commission we received some excellent samples of woods, the Douglas fir and black ash demanding special notice. It is only quite recently that the district in which the Douglas fir is found in the greatest abundance has been opened up by the Pacific Railway, and I cannot help thinking that ere long it will be imported in large quantities into this country. It is a specially fine wood for joiners' work, runs to a very large size, is mild to work, and is suitable for the same purposes as yellow pine. We also find a matter which touches us nearly) that it is thoroughly well suited for engineers' patterns, and when soaked in water it swells considerably less than any other wood at present employed for that purpose. As regards black ash it is difficult to understand why it has not more largely found its way into this country, as it is cheap, and in all its qualities resembles very much the better known and popular American white ash. You have seen to-day this wood converted into casks, joiners' work, and spokes, for all of which purposes it is well adapted. The American hop-hornbeam is a very close grained wood which is largely used in Canada for making hammer handles and similar work, for which it appears to me to be well suited.

Professor Macoum (Canada) being called upon, said:—I will not detain the meeting very long, but after hearing the other gentlemen speak I feel there are one or two remarks that I should make in connection with Canadian woods. Before I speak of those immediately before us I would say that the reason you know so few of the Canadian woods is simply this, that we are English over there as much as you are here, and our prejudices are the same, and therefore it is hard for us to get out of the beaten track. We know that you will take certain woods, and we know how difficult it is to get you to take any others, and therefore we have not tried to introduce a great many of our woods, because it will be hard to bring them into the market. Many of our men say that the white pine, known as the yellow pine here, is getting scarce, but we think the Douglas pine, which is not confined to British Columbia, will take its place. It is found all through the Rocky and Selkirk mountains, right down to the Pacific Coast; and I know that it grows five degrees to the north, as I myself found it from latitude 49° to latitude 55°; so that you see the supply is not limited, and when our yellow pine gets so scarce that it becomes dear, you will have to take this in its place. The trees will produce a great quantity of timber, and one tree that was cut down was 90ft. long, the large end being just 13in. across, and the small 7in.; so that in 90ft. the taper was precisely 6in. Some gentlemen may say, I do not believe it; but it can be proved, as I myself saw it in the Selkirks last year. When I tell you the tree tapers so little, you naturally ask, what sort of a forest is it? and I would say, it is a forest of mighty trunks, and these little trees have to run away up to get a little of the fresh air of heaven. I mention this to show that what Mr. Ransome said about this wood is correct, and I would add that it is useful for all purposes. As regards our black ash, I am astonished at its not being in use. But what is the good of sending it when Englishmen believe the white ash better, although at the same time I have not the slightest hesitation in saying that some of the white ash that is sold here (you see the prejudice of the Englishmen), is nothing, more or less, than black ash. Mr. Ransome has shown you that black ash is useful for almost every purpose, and as to quantity, I have to say that all through Quebec and Northern Ontario our swamps are filled with this wood, where it is of no value but to make firewood or split into rails for our fences. And when I mention it is so plentiful it is for you who know what you give for elm and white ash to say whether it would answer your purpose to take it. This and the Douglas fir we could deliver on the English market for about £5 per ton. The day is coming when this black ash will be used almost exclusively, although until the last two years it was scarcely known to exist at all. When we Canadians talk about supplying wood, we are prepared to supply any quantity, not for a few years only but for years and years. I meet gentlemen who tell me, "We do not want Canadian pine, we want Archangel pine;" and I say, "God help you, that is not pine at all; it is spruce." (Laughter). We have spruce very nearly the same but better wood, that grows from the Atlantic to the Pacific. We have immense rivers that will float it down, and if the Hudson's Bay route is opened up, and some of the men who now carry grain were to carry northern pine, it would answer their purpose much better. We have this in such quantities that I can look for hundreds and thousands of miles and see nothing but vast trees; I can look from Halifax to Victoria and see nothing but great forests of pine. You need not go to other colonies and hunt for pine. There is the wood, and you can stain it to anything. You can make mahogany of it, if you like, or anything else nowadays. (Laughter). The hickory extends from Halifax to our Western port of Victoria, and our people do not use its because it is so plentiful. Here you see an axe handle made of it. Before I sit down I have one more word. As representing Canada, I say that we feel extremely grateful to Messrs. Ransome and Co. for the privilege of having our woods brought before you here. We have tried to bring them before you in the exhibition, but we could not do it, and I thank them for the privilege of showing it here. I see the value of the machinery. It is suitable for cutting up all our woods, and by its adoption, instead of having the woods simply squared for export, with the aid of the machinery we could cut them up in any way, and send them over here in any useful sizes that may be wanted.

After speeches from several other Colonial visitors, representing the countries above referred to, and the customery votes of thanks being tendered Sir Philip Cunliffe Owen said:—Before the meeting breaks up I have a request to make on behalf of His Royal Highness the Prince of Wales, and that is, that Mr. Ransome will favour the Royal Commission with a report of the proceedings during this day in order that it may embodied in the official report on the exhibition. I think it is perfectly worthy of being recorded in the report of the Royal Commission. We have heard so many interesting speeches, and so many interesting experiments have taken place, that I think it only right and fair to all parties that they should be recorded for the benefit of everybody and the developement of the trade. I therefore propose that Mr. Ransome will favour us with a report at his convenience.

Mr. Ransome was understood to acquiesce in this proposition.

The statement is made that all the varied machinery of Great Britain, now operated by steam power, is capable of performing more work, and hence producing more products, than could be produced by the labor of 400,000,000 able-bodied men, a greater number than all the able-bodied men on earth.

ANARCHISM AND THE LABOR MOVEMENT.

Hitherto the Labor Movement has been merely industrial; it is now becoming political, and combining with the other revolutionary elements in what threatens to develop into a general attack upon existing civilization. The motives of the leaders we understand; they may expect to gain by a reign of havoc; and what they mean by anarchy is a destruction of all existing authority, and the erection of their own despotism in its place. Like the French Jacobins, their precursors and their models, they would exercise in the name of liberty a tyranny more sanguinary and more grinding than ever was the tyranny of kings. But a prosperous and respectable workingman ought surely to think twice before he lends himself to an attempt to convulse and wreck society. He is not without the teaching of experience to guide him as to the probable results. In the French Revolution the Destructives had it all their own way; they did without restraint everything that the Anarchists and the fanatical enemies of Capital in the present day burn to do; they pillaged and butchered the rich to their hearts content, and broke up the whole framework of society. What followed? Universal misery and famine, after which natural laws prevailed, and society fell back into its old course, so that the Parisian workingman now, particularly if he drinks absinthe, is as discontented and querulous as ever. We are all members of a complex and graded civilization which, whatever its faults, cannot be torn to pieces without causing so much confusion and suffering that it may safely be said that there is no living man, the buccaneers who organize revolution alone excepted, who would not personally lose more than he would gain by the process. To take the calling most nearly connected with our own, what would a printer who is receiving good wages gain by throwing society into convulsions? Literature is one of the refinements rather than of the necessaries of life; it is taken most largely by the wealthy and highly educated; it is notoriously the first thing given up in times of distress it can hardly flourish except it quiet times. An anarchist or revolutionary printer may perhaps glory in the hope that printers a century hence will set their feet upon the necks of kings; but he will himself run no small risk of being deprived of bread.—*The Week, Toronto.*

TIMBER IN BRITAIN.

In nine months ending with September last, Great Britain received, through one hundred and twenty ports, no less than 2 638 808 loads of sawn and 1,219,125 of hewn timber, in all 3,857,938 loads, which was less than the imports of the same time in 1885 by 785,480 loads or sixteen per cent. The comparative quantities which entered the ports are given in an elaborate list, compiled by the *Timber Trades Journal* of October 23rd. From this we take the following figures of imports:

Port.	Loads. 9 mos., '86.	Loads. 9 mos., '85.
London	802,904	972 156
Liverpool	350,222	433 856
Hull	302,619	331 456
Cardiff	260,183	233,134
Grimsby	148 183	275,465
Hartlepool W	177,714	226,598
Newport	103 511	184,975
Grangeport	82 224	145,950
Newcastle	78,093	105,208
Bristol	69 589	100,578
Greenock	77,185	85,579
Leith	74,286	66,856
Dublin	54,530	65,793
Belfast	46,909	58,917
Glasgow	44,556	45,890

It will be observed the Leith is the only one, of all the ports named above, which received a greater quantity this year than last. Ayr, Aberdeen and Bo'ness are other Scotch ports of which the same may be said, but they are exceptions to the rule, which is that wood imports are reduced.

A SHIP ON FIRE.

The burning bark noticed off St. Pierre has been towed into that port and the crew safely landed on Langley's Island. The bark was found to be the Caspar, 806 tons, of Swansea, from Miramichi, October 29, for Liverpool, with a cargo of timber. Captain Roberts reports that everything went well until Sunday morning when fire was discovered under the forward house. There was a stiff breeze blowing at the time. The crew made strenuous but unavailing efforts to get the fire under control, but fanned by the increasing gale, the flames spread rapidly, while the heat and smoke were something terrible. At half past ten o'clock on Sunday night the crew, unable to stand it any longer, abandoned the ill-fated ship. At that hour the flames had burst through the forward house and blown up the forehatch. The crew of twelve men left her in the long boat and headed for Langley's Island, twenty-five miles distant, which they reached at eleven o'clock on Monday all well. Captain Roberts says it was a grand sight to see the ship all ablase on the ocean at night, with the flames fanned by the gale of wind. The sky and sea were illuminated for miles around. The tug Progress managed to get the burning hull in tow, and got into St. Pierre on November 9th. It had been burned to the water's edge, and was still burning inside below the water line. The crew give no explanation of the origin of the fire.

WANTED.

The publisher of the CANADA LUMBERMAN desires thoroughly reliable and competent correspondents at the fol owing named places :—

Kingston, Ontario.
Quebec City, Quebec.
St. John, New Brunswick.
Halifax, Nova Scotia.
Winnipeg, Manitoba.
Victoria, British Columbia.

The duty of each correspondent will be to give a review of his local market for the month preceding the date of issue, and the ruling quotations for different kinds of lumber, &c. For terms and any other information, address

A. G. MORTIMER,
Peterborough, Ont.

Market Reports.

TORONTO.

From Our Own Correspondent.

Our local market continues brisk, and although all kinds of bill lumber in pine is decidedly scarce; strange to say, prices do not advance. Holders, however, are firm on present figures, and before spring arrives prices must advance. One reason for pine bills not advancing may be found in the fact that hemlock is now being largely used for framing timber. There is fully treble the quantity of hemlock being used here as compared with even last season, and the total amount of all kinds consumed in this city this season will nearly double that of former yeare.

Shipments from our docks may now be said to be fairly closed. Two or three more cargoes may get off, that will be the outside quantity, and the bulk of the last month's shipments have been nearly green from the saw, in fact there is not any very large amount of dry lumber to come forward, although with the opening of navigation next spring, a considerable quantity will be available from the other side of the Georgian Bay. Figures for all grades of lumber remain about the same as during the earlier part of the season, No noticeable advance has taken place on any lines since the opening of the season.

The following are the ruling quotations in this city at present :—

Mill cull boards and scantling	$10 00
Shipping cull boards, promiscuous widths	12 00
" stocks	13 00
Scantling and joist, up to 16 ft	13 00
" " " 18 ft	14 00
" " " 20 ft	15 00
" " " 22 ft	16 00
" " " 24 ft	17 00
" " " 26 ft	18 00
" " " 28 ft	19 00
" " " 30 ft	20 00
" " " 32 ft	21 00
" " " 34 ft	22 50@22 50
" " " 36 ft	24 00
" " " 38 ft	27 00
" " " 40 to 44 ft	30 00
Cutting up planks to dry	20 00@25 00
" boards "	20 00
ound dressing stocks	16 00@18 00
Picks Am. inspection	30 00
Three uppers, Am. inspection	35 00@40 00
B. M.	
1½-inch flooring, dressed	25 00@30 00
1½ " " rough	14 00@15 00
1½ " " dressed	23 00@25 00
1½ " " undressed	14 00
" " dressed	16 00@20 00
" " undressed	12 00@14 00
¾ Beaded Sheeting, dressed	18 00@20 00
Clapboarding, dressed	12 50
XXX sawn shingles, ℔ M	2 75@ 2 90
Sawn Lath	2 25
Red oak	20 00@25 00
White "	25 00@30 00
Basswood, No. 1 & 2	18 00@20 00
Cherry, No. 1 & 2	50 00@60 00
White ash 1 & 2	25 00@30 00
Black ash 1 & 2	20 00@25 00

MONTREAL LUMBER MARKET.

From Our Own Correspondent.

MONTREAL, Nov. 25.—During the month of November, the lumber trade in Montreal has been of a very satisfactory nature, in fact there has been a continuance of the activity which, generally speaking, has characterized this line of business throughout the greater part of the year. Dealers here in looking over the transactions for this year to date, report an increase of nearly 50 per cent, over the corresponding portion of 1885, and there is an encouraging outlook for the winter trade, as there is yet quite a large amount of building under way. Some of our merchants here say that building operations have not been conducted on such an extensive scale for twelve years. Yard business continues brisk, there being a good local demand, but the bad roads usual at this time of the year, have militated somewhat agains country business, as farmers and others, have not been able to draw their supplies. The stocks in dealers' hands are fairly large for the season of the year; prices continue firm and unchanged, although there is nothing of a very special nature to excite the market.

Navigation being now closed, some idea of the export business from Montreal may be gleaned from the shipments by the Montreal Export Company to the River Plate during the season of 1886. Of the 29,088 204 feet of pine and spruce so shipped, 21 384 160 feet, all pine, was despatched from Montreal. The total pine so shipped was 21 782 604 feet, and spruce 7,305,060 feet. The detailed shipment is as follows :—

Shipments of lumber from the River St. Lawrence to the River Plate, during the season of 1886 :—

FROM MONTREAL.

DATE.		VESSELS.	PINE.	SMALL STOWAGE.	LOADED BY.
June	11	Cambridge	910 566		Export Lumber Company, Limited.
	25	Aladdin	445 030		
July	6	M. & E. Cann	783 654		
	10	Carl Haasted	667 906		
	20	Palermo	664 419		
	25	William	579 080	50,000	
	28	Veritas	853 445		
August	4	Arklow	613 817		
	9	Amicus	431 083	50,000	
	13	Venezuala	667,255		
	16	Asia	1,186 390		
	21	Arlington	651,604		
	21	Alice Roy	535,020		
	23	Our Annie	338 451		
	23	Alabama	800 925		
	25	Journal	294 368		
	27	Lillie Swallard	817,176		
September	13	Hectanooga	850 521		
	15	Lima	741 901		
	28	Lizzie C. Troop	1,180 740		
October	4	Cathella	313 577		
	9	Darta	344 482		
	11	Romanoff	854,510		
	12	Algeria	496,094		
	15	Geo. B. Doane	758 513	54 144	
	20	Carmel	648 947	29,312	
	22	Wylo	670 432		
	23	Sigrid	924,319	12,480	
November	1	Reynard	793,137		
	4	Gaspee	799 864		
	10	Yuba	736 904		
			21.384 160	195,936	

FROM OTHER PORTS IN THE ST. LAWRENCE.

DATE.		VESSELS.	PINE.	SPRUCE.	TOTAL.	PAILINGS.
June	19	Mary K. Campbell	9,444	380 000	389 444	10,720
	22	Kamschatka		380 000	380 000	43,573
July	7	Cytie		780,000	780 000	
	31	Telemanque		330,000	330,000	
	31	Hector		465,000	465,000	
August	4	Kate C. Maguire		953 000	953 000	55 128
	6	Kate Harding		450 000	450 000	24.355
	17	Oneata		442,000	442,000	5,628
	17	Annie C Maguire		800 000	800 000	41 320
September	4	Golden Rule	140,000	700 000	840 000	51,120
	4	Glengarry		445,000	445 000	34 360
October	19	Peacemaker	131 000	520 000	651,000	28,000
	26	Lake Leman	118,000	595 000	713 000	57,340
November	14	*Jeannette		65,600	65,600	1,400
			398 444	7 305,600	7 704 044	352,944

*Also has 150 spars.

TOTAL SHIPMENTS FROM THE ST. LAWRENCE IN 1886.

Pine	21,782,604
Spruce	7.305,600
	29,088 204 feet.
Small Stowage	548 880 pieces.

PREVIOUS SHIPMENTS.

1885	31.344.543 feet.	1877	8 787.928 feet.
1884	36,938 548 "	1876	3,437 000 "
1883	18,768 652 "	1875	10.123,000 "
1882	24,419 827 "	1874	16 262 293 "
1881	16 147.941 "	1873	36 073 919 "
1880	10,420,080 "	1872	28,234,968 "
1879	12,476,150 "	1871	16,005,935 "
1878	10,855,246 "	1870	25,145,183 "

The Montreal *Witness* says :—About 100 lumbermen engaged here a fortnight ago have left to work for the winter in the lumber business at Port Arthur. No little difficulty was experienced in securing the right kind of men. Many refused twenty-four dollars per month and "all found"; and several who have signed the contract, and left their valises and watches with the employing agent, failed to put in an appearance. Good men were guaranteed from twenty-four to twenty-eight dollars per month, all found.

The following are the lumber quotations at the yards here :—

Pine, 1st quality, ℔ M	$00 00@40 00
Pine 2nd " "	00 00@30 00
Pine, shipping culls, ℔ M	14 00@16 00
Pine 4th quality deals ℔ M	10 00@12 00
Pine, mill culls, ℔ M	8 00@10 00
Spruce, ℔M	10 00@13 00
Hemlock, ℔ M	9 00@10 00
Ash, run of log culls out, ℔ M	20 00@25 00
Base, " " ℔ M	18 00@20 00
Oak, ℔ M	40 00@50 00
Walnut ℔ M	60 00 100 00
Cherry, ℔ M	80 00 100 00
Butternut, ℔ M	35 00@40 00
Birch, ℔ M	20 00@25 00
Hard Maple, ℔ M	25 00@30 00
Lath, ℔ M	1 50@ 0 00
Shingles, 1st, ℔ M	2 00@ 3 00
Shingles, 2nd, ℔ M	2 50@ 0 00

QUEBEC.

The timber market here has been quite lively of late, and several rafts of square and waney pine have changed hands. A slight advance in

at the rate of about 4,000 logs during the 24 hours, the result of which will be but comparatively few logs will remain over the winter unsawn.

It is reported a sale of pine deals has taken place in Ottawa, being produce of logs to be cut this winter. Prices not transpired, but understood to be about same as last years.

It is reported two lumber companies have been incorporated lately, namely :—The Ottawa Lumber Company with a capital stock of $150,000 in shares of $100 each, the incorporators being Messrs. Alexander Baptist, J. Dean, L. A. Dean, R. C. Blair and Alex. Houliston, of Three Rivers. They intend cutting lumber for United States market, and possibly a small quantity of deals for the English market.

Messrs. R. Reford, J. Dillon, of Montreal, D. W. Ross, of Cote St. Antoine, A. McLaudin, of East Templeton and W. Ross, of London, England; have been incorporated to carry on the lumber and manufacturing business under the name of The Charlemagne and Lake Ouarean Lumber Company, with a capital stock of $200,000 of $100 shares.

PHILADELPHIA.

There has been no perceptible falling off in this market since last report. Prices are still firm and a satisfactory condition of affairs exists all around. Yellow pine sells rapidly at good round figures, and the demand is greater than the imports. Sap pine is also in good demand, and a scarcity of this class of wood exists, which has tended to raise the price considerably. White pine is rather inactive, while a large trade is being done in yellow pine. Hemlock is in good demand, and is selling at about the usual figure. Spruce is in moderate supply, but prices are somewhat irregular, some dealers asking a slight advance. Interior finishers are running more into hardwoods; and the poorer grades of walnut are wanted, and the whole hardwood market shows strength and life.

SAGINAW VALLEY.

The *Lumberman's Gazette* of Bay City, in its issue of the 25th November, says:—The lumber business, so far as manufacturing and water shipments may be announced as practically closed and the few mills still running will cease operations in a few days at the farthest.

The mill owners who have timber of their own are busily engaged in the preparatory work of securing their supply of logs for next season's operations—some of them indeed being already at work in the pineries, and having a considerable quantity of logs on the skids. It may be stated in this connection also, that it is a fair presumption that the stock of logs for the Saginaw river mills will show a slight diminution at least, as compared with former years; but probably not so great as the prediction of some of the more skeptical would seem to indicate. It is a fact, however, which cannot be ignored that the lumbering business in the greatest manufacturing centre in the world in the past; is gradually but certainly concentrating into fewer hands, and that those men who have shrewdly made as extensive provision as possible in the past, for the demands of the future, by investing heavily in pine stumpage, are destined to reap rich rewards and abundant returns for their foresight and sagacity; and that mills with no pine timber possessions back of them, must gradually but surely succumb to the inevitable, and submit to removal; or suffer loss in their continued attempted operation with nothing but a precarious sawhill for maintenance, while their locations must be occupied by other and permanent industries, or suffer depreciation in value. Indeed the past season has been one of financial misfortune to several mills for the reasons stated, hereabouts as well as elsewhere, and failures and assignments have resulted.

The past season however, may be set down as financially successful for manufacturers in fact, who have been marketing their own timber. Prices have ruled satisfactorily high, and profits have been exceedingly gratifying, as they must inevitably be in the future in the absence of any unforseen financial crisis, business depression or extensive labor troubles.

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A. G. MORTIMER, Publisher,
Peterborough, Ont.

CHICAGO.

The *Northwestern Lumberman* says:—The prospect is that shipment from the mills will cease this year earlier than usual. On the great lakes freight rates are so high that it is preferable to let lumber remain on dock until next spring. On Saginaw river heavy purchases are being made of lumber that will not be shipped until next season. In the Chicago district the late drop in the price of short dimension, combined with high freight rates, has tended to discourage the mill men about shipping much more lumber this fall. From east shore points comes reports of a general determination to forward but little product to market this season but to pile the cut of the mills till they are shut down. The opinion appears to prevail among the manufactures that lumber is a good enough property to hold until conditions of sale are more favorable than now.

On the other hand, the merchants have reached the conclusion that they will offer no inducements to prolong the stocking up season. The trade does not regard the situation so good, or the prospect so bright, that it can afford to offer higher prices as an inducement for bringing forward the green lumber that the saws are turning out.

Thus it will be seen that the business of the country is in a rather peculiar position. It is far from the boom that characterized it in the fall of 1881, for then it seemed as if the jobbers could not buy enough to satisfy them. Now there is a degree of indifference about making purchases, unless the terms are satisfactory. The reason for this is not because the distributive demand has not been fairly satisfactory this season, but because prices still hang at a level not much above those that prevailed a year ago. In this market if it were not for the fact that long dimension is worth this year relatively more than it was last at a corresponding date, there would have been no gain in the value of Lake Michigan product. Short dimension is worth in this market no more to-day than it was last year at a like time, while the supply at the mills seems to be accumulating. Stocks in the yards are probably less than they were at this date last year and in the matter of dimension, they are more broken and equally sorted.

There is no burdensome surplus of lumber in the yards, but there has been no such cleaning off of mill stocks as has been predicted. But the supply of logs has been closer sawed up this season than last. The lumber business in the lake region, and in fact in all the white pine districts, is simply in a state of good health, but it is neither flashy nor robust. All have been counting on a boom during the year that has not come, and all are looking up expectantly, like young robins, with their mouth open, for the cherries of profit to drop into them. The fruit would fall in the right place if a little increased stimulus could be given to the demand. That stimulus would be given by a rise in the prices of farm products. Until there be such a rise, it is idle to expect a marked increase in the demand for lumber, or a material advance in its selling value.

At the yards business was not quite so active as has attained during the past month but there was a steady movement all the time. The out-of-town demand is quite heavy. Collections continue rather poor and some difficulty is experienced in that way. The Southwestern railroad freight cut has not come in to assist this market by opening Kansas City as better depot for sales. The demand between yards is good as sorting continues with unabated fury:—

Piece Stuff, short green	$ 9 25@ 9 50
Piece stuff, short dry	10 50 11 00
Piece stuff, long	11 00 14 00
Boards and strips, No. 2	11 00@13 00
Boards and strips, medium	12 00 15 00
Boards and strips, No. 1	15 00 20 00
Shingles, standard	1 75 1 80
Shingles, extra	1 90 2 00
Shingles, cedar, standard	1 65 1 75
Shingles, cedar, extra	1 90 1 95
Lath, white pine	1 50 1 60
Lath, Norway	1 40 1 50

RECEIPTS FOR WEEK ENDING NOV. 18.

	Lumber.	*Shingles.*
1886	47,050,000	16,172,000
1885	46,471,000	22,346,000

FROM JAN. 1, TO NOV. 18, INCLUSIVE.

	Lumber.	*Shingles.*
1886	1,566,158,000	746,254,000
1885	1,609,978,000	728,217,000

STOCK ON HAND NOV. 1.

	1886.	1885.	1884.
Lumber	599,877,647	665,050,130	688,057,336
Shingles	48,705,988	386,319,180	321,961,925
Lath	57,297,956	75,214,168	70,742,042
Pickets	1,613,099	2,789 250	1,830,118
Cedar posts	262,150	537,435	400,805

EASTERN FREIGHT RATES.

FROM CHICAGO AND COMMON POINTS ON CAR LOAD LOTS OF HARD AND SOFT LUMBER.

To New York	25c.
Boston	30c.
Philadelphia	23c.
Baltimore	22c.
Washington	22c.
Albany	24c.
Troy	24c.
Buffalo and Pittsburgh	15c.
Shenectady	24c.
Wheeling	15c.
Suspension Bridge	15c.
Salamanca	15c.
Black Rock	15c.
Dunkirk	15c.
Erie	15c.
Toronto	15c.

LAKE FREIGHTS.

From Muskegon, green	1 62½
From Whitehall	1 62½
From Ludington	1 75
From Manistee	1 37½@1 87½
From Menominee, dry	2 00
From Menominee, green	2 00
From Cheboyan	2 00
From Bay City,	3 00
From Oscoda, dry	2 75
From Alpena, dry	2 50

NEW YORK CITY.

Reports from this city show that as a rule the lumber trade has been moderately brisk during the past month. The demand for all descriptions has been quite active and the volume of business has been fully up to that of the past few months. The demand from the yards is unusually brisk, owing, principally, to the large amount of building at present going on. This state of affairs in the yards is likely to exist for a few months at least. The export movement, while in some respects showing a slight decrease, keeps up very well, and the business completed, is, on a whole, encouraging. The market for yellow pine and spruce has ruled very firm. In white pine very little change has occurred. Trade all around has been quite active, and a cheerful feeling characterizes the market generally.

OSWEGO, N.Y.

From Our Own Correspondent.

Three uppers	$46 00@47 00
Picking	36 00@37 00
Cutting up	26 00@27 00
Fine Common	22 00@25 00
Common	14 00@18 00
Culls	13 00@15 00
Mill run lots	19 00@21 00
Sidings, selected, 1 in	28 00@36 00
" 1½ in	30 00@38 00
Mill run, 1x10, 13 to 16 ft	19 00@21 00
Selected	24 00@26 00
Shippers	14 00@16 00
Mill run 1½x10	15 00@17 00
Selected	21 00@30 00
Shippers	14 00@16 00
Mill run, 1 & 1½ in, strips	19 00@21 00
Selected	32 00@34 00
Culls	12 00@15 00
1x6 selected for clapboards	32 00@34 00
Shingles, XXX, 18 in. pine	3 65@ 3 80
XXX Cedar	2 30@ 3 60
Lath 1½, No 1	1 80@ 2 00
No 2	1 60@ 1 80
Ash, 1st & 2nd 1 to 4 in	16 00@20 00
Basswood, 1st & 2nd, 1 & 1½ inch	20 00@22 00
" culls, " "	11 00@12 00
Hard Maple, ₩ M	23 00@25 00
Lath, ₩ M	1 50@ 0 00
Shingles, 1st, ₩ M	2 00@ 3 00
Shingles, 2nd, ₩ M	2 50@ 0 00

CORDWOOD.

Long Maple, per cord	$ 6 00@6 50
Long Birch "	6 00@0 00
Long Beech "	5 00@5 50
Tamarack "	5 00@0 00

DETROIT, MICH.

Uppers, 4x4	$48 00
5" 6x4 & 8x4	50 00
3 & 4 in	50 00
Selects, 4x4	42 00
5x4, 6x4 & 8x4	45 00
Fine common, 4x4	35 00
5x4, 6x4 & 8x4	38 00
Shop, 4x4	22 00
5x4, 6x4 & 8x4	25 00
Flooring, selected common	22 00
No. 1 common	18 00
No. 1 fencing	16 00
Roofing, D. & M	16 00
Siding, clear	22 00
A	21 00
B	19 00
C	14 00
Ceiling, select common	25 00
Ceiling, No. 1 common	22 00
No. 1 fencing	20 00
Stocks, 1x12 & 1x10, No 1	18 00
1x12 & 1x10, No. 2	14 00
1x12 & 1x10, No. 3	11 00
Ship culls	10 00
Mill Culls	8 00
Bil. stuff ordinary sizes:	
12 to 20 ft	11 00
18 to 20 ft	12 00
22 to 24 ft	13 00
26 to 28 ft	14 00
30 to 34 ft	16 00
Shingles clear, 18 in. Ex	3 25
10 in. clear, 18 in	2 30
6 in. clear, 18 in	2 00
6 in stocks clear, Ex	4 00
5 in. " "	4 80
Lath, per M pcs	2 50

Add for S. 1 or 2 S. $1 ₩ M

ALBANY.

Pine, clear, ₩ M	$55 00@60 00
Pine, fourths	50 00@ 7 00
Pine, selects	42 00@44 00
Pine, good box	22 00@23 00
Pine, common box	13 00@15 00
Pine, 10-in. plank, each	00 45@00 47
Pine, 10-in. plank, culls, each	00 25@00 27
Pine boards, 10-in	00 30@00 32
Pine, 10-in. boards, culls	00 16@00 20
Pine, 10-in. boards, 16 ft., ₩ M	28 00@32 00
Pine, 12-in. boards, 16 ft	28 00@32 00
Pine, 12-in. boards, 13 ft	28 00@30 00
Pine, 1¼ in. siding, select	40 00@43 00
Pine, 1¼-in. siding, common	15 00@18 00
Pine, 1-in. siding, select	40 00@42 00
Pine, inch siding, common	13 00@15 00
Spruce, boards, each	00 00@00 16
Spruce, plank, 1¼-in., each	20 00@00 00
Spruce, plank, 2-in., each	00 00@00 30
Spruce, wall strips, each	00 12@00 12
Hemlock, boards, each	00 00@00 14
Hemlock, joist, 4x6, each	00 00@00 32
Hemlock, joist, 2½x4, each	00 00@00 14
Hemlock, wall strips, 2x4, each	00 00@00 11
Black walnut, good, ₩ M	100 @120 00
Black waluut, ¼ inch	80 00@90 00
Black walnut, ¾ inch	00 00@85 00
Scaymore, 1-inch	28 00@30 00
Scaymore, ¼-inch	21 00@23 00
White wood, 1-inch and thicker	38 00@40 00
White wood, ¼-inch	28 00@30 00
Ash, good, ₩ M	40 00@43 00
Ash, second quality, ₩ M	25 00@30 00
Cherry, good, ₩ M	60 00@85 00
Cherry, common, ₩ M	25 00@30 00
Oak, good, ₩ M	40 00@43 00
Oak, second quality, ₩ M	20 00@25 00
Basswood, ₩ M	25 00@30 00
Hickory, ₩ M	40 00@40 00
Maple, Canada, ₩ M	28 00@30 00
Maple, American, per M	26 00@28 00
Chestnut, ₩ M	38 00@40 00
Shingles, shaved, pine, ₩ M	0 00@ 6 50
" 2nd quality	0 00@ 5 50
" extra, sawed, pine	4 30@ 4 00
" clear, "	0 00@ 3 00
" cedar, mixed	0 00@ 3 13
" cedar, XXX	0 00@ 0 00
" hemlock	2 25@ 2 37
Lath, hemlock, ₩ M	0 00@ 2 35
Lath, spruce, "	0 00@ 2 20

LONDON, ENG.

LONDON, NOV. 20.—There is not much of interest to note since our last, and it appears now to be generally felt that as regards the position here there is not likely to be any change from the present quietude before the advent of the new year. By that time we shall be able to judge more correctly as to the stocks here and the prospects of consumption in the future.

The chief point of interest is now shifting from this country to the other side, and is being centred on the probable free-on-board quotations for next season, and the extent of business that is likely to be transacted. The question is rather a complex one, the chief factor in arriving at a conclusion necessarily depending mainly on the views taken as to the future prospects of general trade both in this country and abroad. Of one thing we may be tolerably certain, and that is that the consumption of wood goods here and in the Colonies is, to say the least, not likely to be less than for the present year. Prices are now at a low level, and stocks generally throughout the country are in moderate compass, so that, should the present improving tendency in general trade continue and develop further, we may in the spring have larger demand for first open water shipments than has been experienced for several years. Should this be the case, we think producers would act wisely in not making quotations too high, but rather study to keep prices at a moderate level, and thus ensure a steady and continuous volume of business throughout the season to the mutual advantage of both seller and buyer. A constantly fluctuating market renders buyers timid and cautious, while an even and regular range of prices emboldens them to purchase freely for their probable requirements.

Each week that passes continues to confirm the views we expressed some time ago as to the unsoundness of trade in several quarters, and we are afraid we have not yet seen the end of it. It is, however, reasonable to hope that in the long run the trade must be improved and strengthened by the elimination of what weakness and unsoundness exists.—*London Timber.*

LIVERPOOL.

LIVERPOOL, Nov. 20.—The timber trade of Liverpool has been more or less excited by the announcement that one or two more failures are to follow those already published; however, as the result of this has to a great extent been anticipated, and comparatively few houses are involved to a large amount, the trade is really not much affected except in a certain circle. In spite of these adverse circumstances, it is thought that although there is not a great volume of business doing, there is a better tone prevailing and orders recently taken have been at more remunerative prices. The arrivals are only light.

BOARD OF TRADE RETURNS LONDON, ENGLAND.

The following are the officials returns of the imports of wood goods during October, 1886, and also for the ten months ending 30th ult., as compared with the same periods of 1884-5:

VALUE OF IMPORTS.

		Month ended 31st October, 1886.	Month ended 31st October, 1885.	Ten Months ended 31st October, 1886. £	Ten Months ended 31st October, 1885. £
Hewn	Russia	46,921	62,870	339,377	438,066
	Sweden and Norway	79,419	85,878	365,831	470,859
	Germany	60,502	63,329	33,301	34,248
	United States	15,041	26,891	347,600	322,881
	British East Indies	28,041	79,065	16,624	30,929
	British North America	133,045	122,112		
	Other Countries	46,976	35,895		
	Total	408,605	467,040	1,102,393	1,296,983
Sawn or Split, Planed or Dressed	Russia	62,870	47,399	438,066	324,605
	Sweden and Norway	85,878	71,823	461,630	438,002
	United States	63,329	51,619	34,248	18,281
	British North America	26,891	13,360	322,881	305,107
	Other Countries	79,065	11,249	17,205	17,205
	Total	324,605	199,450	1,260,131	1,103,131
Staves of all dimensions		62,870	47,399	460,122	439,313
Mahogany		85,878	71,823	470,446	441,837

QUANTITIES.

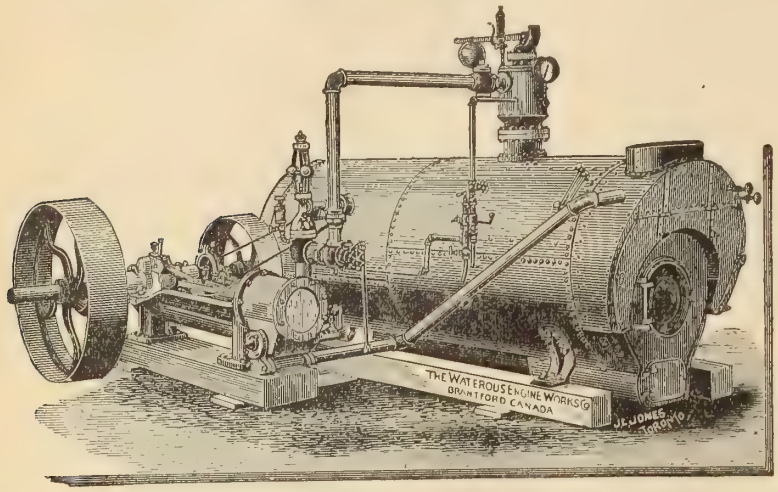
		Month ended 31st October, 1886.	Month ended 31st October, 1885.	Ten Months ended 31st October, 1886.	Ten Months ended 31st October, 1885.	Ten Months ended 31st October, 1884.
Hewn	Russia Loads	23,993	30,687	27,625	214,963	237,741
	Sweden and Norway "	63,311	62,133	50,575	541,566	481,134
	Germany "	23,056	23,236	20,113	245,130	268,639
	United States "	3,298	7,247	3,419	150,907	127,942
	British East Indies "	1,693	5,986	882	33,691	34,596
	British North America "	31,254	28,766	18,962	203,340	217,020
	Other Countries "	39,282	31,989	27,574	357,895	344,116
	Total "	176,116	190,063	149,150	1,747,532	1,711,208
Sawn or Split, Planed or Dressed	Russia Loads	151,214	198,938	222,319	991,308	1,041,638
	Sweden and Norway "	168,466	228,527	240,819	1,416,063	1,646,314
	United States "	10,757	11,604	6,580	259 211	217,465
	British North America "	143,376	132,658	131,600	878,109	816,456
	Other Countries "	4,788	9,636	4,531	79,125	81,763
	Total "	479,001	581,363	605,849	3,621,811	3,703,636
Staves of all dimensions	Loads	12,095	14,235	17,312	116,639	104,580
Mahogany	Tons	6,601	4,954	3,063	62,460	10,625

Send in your subscription for 1887.

ENGINES, SAW MILLS, SHINGLE and LATH MILLS

SEND FOR NEW SAW MILL CATALOGUE.

100 Page ILLUSTRATED CATALOGUE on SAWS AND MILL SUPPLIES.



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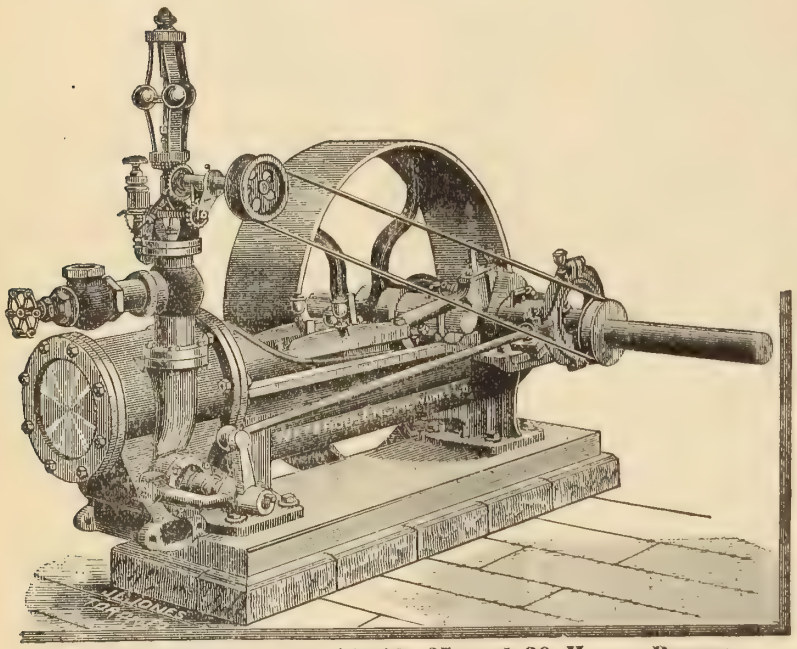
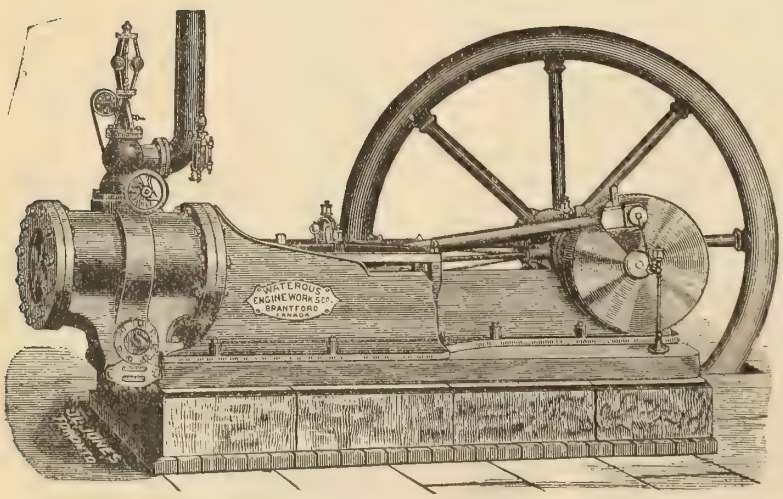
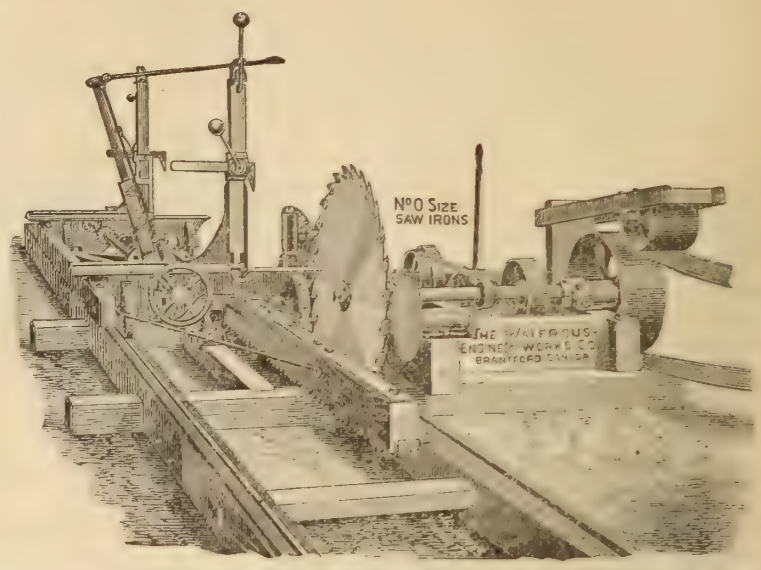


This Style made in 12, 16, 20, 25 and 30 Horse Power.



Best Saw Mill Engines 30 Horse Power up.

THE BEST MATERIAL AND WORKMANSHIP.

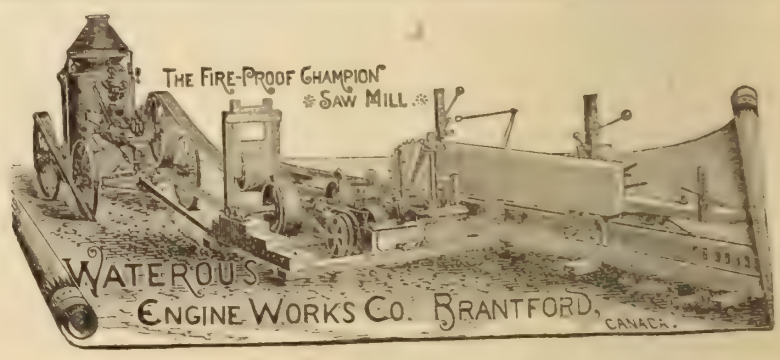


The above Cut represents our Farmers' and Threshers' Saw Irons, Very Cheap. Have Knight or Peel Dogs, V Track, Patent Lumber Gauge and Saw Guide.

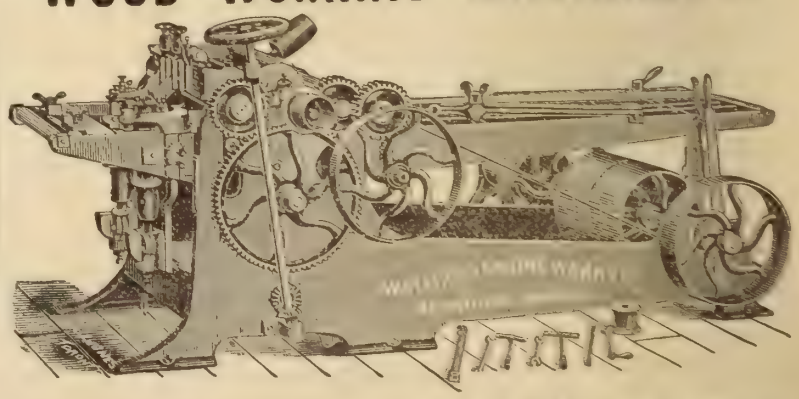
SEND FOR REPORT OF A

25 HORSE POWER CHAMPION SAW MILL

Cutting Lumber for the CANADA PACIFIC SNOW SHEDS, at Dugan's Siding, Roger's Pass, B.C. Mill was running 28 days after it was loaded on the Cars at Brantford, and in two months run over 1,100,000 feet of 1 inch Lumber, and 3 & 4 inch Plank—all cut to widths and edged on large Saw.



WOOD WORKING MACHINERY.



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DAVID H. HENDERSON, *President*; NORMAN HENDERSON, *Vice-President*; CHAS. H. WALTERS, *Sec-Treas.*

Dealers in, and manufacturers of, Dimension and Bridge Timber, Sawn Lumber, Clapboards, Shingles and Lath. Packing Cases and Boxes a Specialty.

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Manufacturers of all kinds of PLEASURE, FISHING and HUNTING

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Patent Cedar Rib Canoes, Patent Longitudinal Rib Canoes, Bass wood Canoes, Folding Canoes Paddles, Oars, Tents, etc., etc

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Send 3 Cent Stamp for Illustrated Catalogue.

Canoes for Lumbermen, designed to carry any amount of goods and chattels and strongly built, made to order on short notice.

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KNIGHT'S PATENT "EXCELSIOR"

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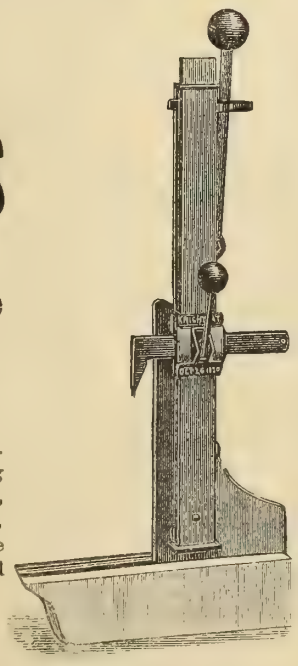
The Sawyer's Favorite

For Holding Logs upon a Saw Mill Carriage while being Sawn into Lumber.

These Milldogs I guarantee to give satisfaction in every case. They will hold a frozen log as well as a soft one, for cutting Scantling, Square Timber, &c. These Dogs cannot be excelled, I sell them all on their own merits, give ten or fifteen days trial, and then, if not satisfactory, return them to my order, as I have no agents on the road this year, I will sell them at a reduced price. Send for Circular and price list.



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LEATHER BELTING

70 KING ST. EAST, TORONTO.

To Mill Owners, Manufacturers & others requiring Leather Belting

Do not buy any Belting unless with DIXON'S PATENT LAP JOINT. It will last longer and do more service than any other. Please note the address, 70 KING ST. EAST, and send for Circulars and Latest Discounts.

Norman's Electro-Curative Belt!

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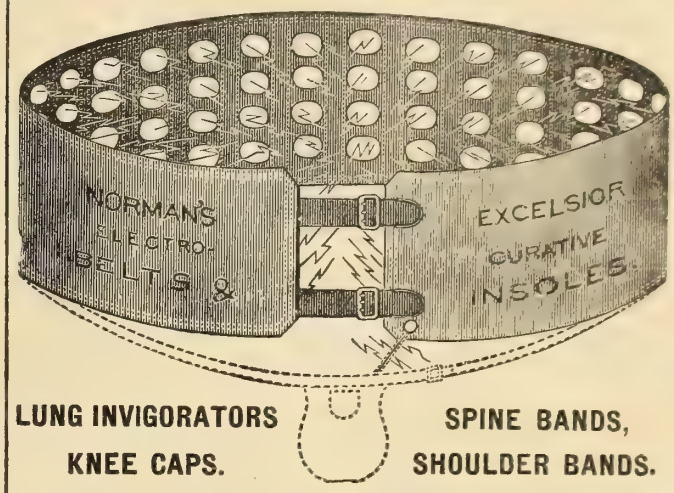

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KNEE CAPS.
SPINE BANDS,
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This Belt is the last improvement and the best yet developed Curative Appliance in the world for

INDIGESTION,
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and all diseases of men, and is a grand remedy for Female Complaints also. Circular and consultation free.

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N. B.—Mr. Norman has had long experience in the Treatment of Diseases by Electricity, and will give his personal attention to every case, by letter or examination.

A FULL LINE of all Sizes Single and Double Belting constantly in stock.

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WHAT THEY SAY OF US.

The CANADA LUMBERMAN, published every month by Mr. A. G. Mortimer, Peterborough, is one of those practical periodicals, which are invaluable to the members of the constituency to which they cater.—*Orillia Packet.*

THE CANADA LUMBERMAN is still published monthly by Mr. A. G. Mortimer, of Peterborough, and is devoted to the lumber and wood-working industries of the Dominion. It is a valuable technical journal.—*London Free Press.*

THE first issue of the CANADA LUMBERMAN under its new management clearly indicates that Mr. Mortimer has not missed his calling, and that the Dominion is going to have a newsy exponent of the lumber trade. Success to it.—*Chicago Lumber Trades Journal.*

MR. A. G. MORTIMER, who has for many years been connected with the *Mechanical and Milling News*, has assumed the proprietorship of the CANADA LUMBERMAN, which will hereafter be issued on the first day of every month.—*Deseronto Tribune.*

THE CANADA LUMBERMAN published at Peterborough is now under the editorial and business management of Mr. A. G. Mortimer. The LUMBERMAN is a good trade journal, and should meet with success.—*Bobcaygeon Independent.*

THE CANADA LUMBERMAN published at Peterborough, Ont., has been sold by the Peterborough Review Printing and Publishing Company, Limited, to A. G. Mortimer. The paper has been published semi-monthly, at $2 a year, but now it will be made into a monthly, the subscription price being placed at $1.—*N W. Lumberman.*

THE CANADA LUMBERMAN has been purchased by Mr. A. G. Mortimer, an old office mate of the editor of the *Star*, who has changed the paper to a monthly, and has reduced the subscription price to $1 per year. We wish him every success in his new undertaking.—*Parry Sound Star.*

THE October number of the CANADA LUMBERMAN is undoubtedly the best copy of that journal which we have yet received. Every person interested in the lumber industry of Canada or the preservation of our forests should subscribe for the LUMBERMAN.—*Deseronto Tribune.*

THE CANADA LUMBERMAN, hitherto published by the Peterborough Review Printing Co., will hereafter be published by Mr. A. G. Mortimer, of the *Mechanical and Milling News*, on the 1st of every month, at $1 a year. The LUMBERMAN will now be in good hands.—*Uxbridge Guardian.*

Mr. A. G. Mortimer has assumed editorial and business management of the CANADA LUMBERMAN, which is published monthly at Peterborough. The October number we found to be full of matter interesting to the trade, well and clearly arranged.—*Canadian Manufacturer.*

THE CANADA LUMBERMAN, published in Peterborough, we are pleased to notice, continues to flourish. Is the only journal in the Dominion devoted to the lumber and wood-working industries, and should find a ready patronage from wood-workers and those connected with the lumber interest.—*Port Hope Times.*

A. G. MORTIMER, brother of the publisher of the *Dominion Mechanical and Milling News*, has purchased the CANADA LUMBERMAN from the Review Printing and Publishing Co., of Peterborough, Ont., and will hereafter conduct it as a monthly journal. The subscription price, which, as a semi-monthly, was $2 per annum, has been reduced to $1. Under its new management we hope to see the LUMBERMAN live and prosper.—*Dominion M. and M. News.*

OUR Canadian cotemporary, the CANADA LUMBERMAN, published at Peterborough, Ont., has been purchased by Mr. A. G. Mortimer. Under the new management the LUMBERMAN will be issued on the first of each month, and the subscription price will be $1 a year. Mr. Mortimer has made himself known in Canada by his connection with the Toronto *Mechanical and Milling News*, and his experience in trade journalism will enable him to keep the LUMBERMAN at a high standard of excellence as a news journal and an advertising medium.—*Lumber World, Buffalo, N.Y.*

THE CANADA LUMBERMAN now in its seventh year, has passed under the editorial control and business management of Mr. A. G. Mortimer, who has had considerable experience in the management of trade journals. The LUMBERMAN contains several special features of much value to those engaged in the lumbering business and promises, by its trade reports and attention to the interests which it represents, to be an indispensable periodical.—*Ottawa Journal.*

We are pleased to notice that under its new management the CANADA LUMBERMAN is being enlarged and improved in many ways. Mr. Mortimer seems to have the correct idea of how to conduct a trade publication, and one of his first improvements has been the addition of an attractive cover to be followed by the adoption of a fine toned paper throughout. We wish our successor every success that his enterprise merits.—*Peterborough Review.*

CANADA LUMBERMAN.—This excellent journal has been purchased by Mr, A. G. Mortimer, and will hereafter be published monthly at the low price of $1 per annum. The CANADA LUMBERMAN is the only newspaper devoted to the lumber and woodworking industries of the Dominion, and should be taken by every person interested in the manufacture and sale of lumber.—*Midland Free Press,*

Under the editorial management of Mr. A.G. Mortimer, by whom it was recently purchased, THE CANADA LUMBERMAN has greatly improved. Its handsome typographical appearance, and its varied and interesting list of contents, are eminently in keeping with the evidently progressive ideas of its present owner. It is deserving of a wide circulation among the lumbermen of the Dominion. Published monthly at Peterborough, Ont.; subscription, $1. — *The Timberman, Chicago.*

THE CANADA LUMBERMAN, published monthly by Mr. A. G. Mortimer, at Peterborough, Ont., is one of the best trade journals in the Dominion. As its name denotes, it is devoted chiefly to the discussion of matters affecting the lumber trade of Canada, in all its branches, from getting the logs out of the forest till they are ready to be put on the market in various manufactured states. It is a large 16 page journal, now in its sixth volume, and has so far deserved success that its publishers have decided on introducing several improvements in its make-up, commencing with the next number.—*Montreal Gazette.*

RAILWAY NOTES.

The C. P. R. company will have an entrance into Boston before May 1st, 1887.

The Saskatchewan and Western Railway has been completed to Rapid City.

IT is rumored that the Canadian Pacific has secured an outlet to New York by securing some New England roads.

It is expected the C.P.R. will enter the city of Hamilton by short span from the Toronto and Niagara falls line.

A collision occurred on the C. P. R. at Roger's Pass, B.C., on Saturday night. Two passengers are known to fatally have been injured.

Workman are busily engaged in completing the new (or lower) line of railway to the Vancouver Coal Company's South Field Mine. The mine will be reopened as soon as the railway is finished.

The C. P. R. Co. having completed the railway bridge over False Creek without a draw, steps are being taken to appeal to the federal authorities against closing this waterway against navigation.

W. A. Peterson, Canadian Pacific railway engineer, has gone to Sault Ste. Marie to make preliminary surveys for the proposed bridge at that place to connect the Algoma branch of the C.P.R. with the Chicago Minneapolis and Manitoba railway.

The jubilee of railways will be celebrated in Paris next year. On this occasion there will be held—first, an international exhibition of railways and of industries connected with them, which will be open from May to October, 1887; secondly, an international congress composed of delegates of railway companies, Chambers of Commerce, Syndical Chambers of Trades, scientific societies and others.

The C. P. R. company is extending its telegraph system from Medicine Hat to Fort Benton in Montana.

THE Canadian Pacific Railway are abolishing the present eating houses at Calgary and Broadview, and will run a dining car instead over this section of the road. The dining car will be taken off the eastern end of the road through the Rocky Mountains and the new hotel at Field made a dining station.

The engineers who have been locating the Saskatchewan and Western Railway westward to the Assiniboine river, about fifty miles from the present terminus at Rapid City, are finished. They will go on locating the extention of the M. & N. W. Railway another fifty miles toward Prince Albert.

Application has been made to Parliament for to an Act incorporate the Teeswater and Inverhuron Railway Company to build a line of railway from Teeswater via Tiverton to Inverhuron, and to take over and manage the harbor with the consent of the Governmet and the municipalities interested.

The short line of railroad from Smith's Falls to Montreal is well advanced towards completion. Trains are running from Smith's Falls to Merrickville, and from Bell's Corners to Kemptville. The St. Anne's, Oxford Mills and Kemptville bridges are nearing completion, by which straight connections with Montreal will be made.

The Canada Atlantic Railway company have made arrangements for the hire of 500 American cars to be used in the transport of foreign grain from Chicago to Owen Sound, and then to Boston via Ottawa and the Canada Atlantic railway. This is eighty miles shorter than any. The first shipment passed through Ottawa a couple of weeks ago.

THE Canadian Pacific representatives have submitted the details of their new route into Toronto. The rails will be laid on the west bank of the river, which position will be reached by a branch from the Ontario & Quebec main line, some distance east of the ravine bridge. The Don will be crossed at that point by an iron bridge. The right of way will be purchased from this point to a point half way between King street and Eastern avenue. Here the line will deflect by a curve westward until Berkeley street is reached. From this point the company propose to reach their projected staton at the foot of Bay street by means of a road to be filled in south of the present breastworks. These plans will be worked out concurrently with the improvement of the Don.

THE time made on the Canadian Pacific railway from Montreal to Vancouver, a distance of 2900 miles is 136 hours. This will soon be reduced to 120 hours, while specials may make the distance in 90 hours. When the short line is completed next autumn, through trains will make the trip from Halifax to Vancouver, a distance of 3590 miles, in 116 hours. Passengers will then be able to make the trip from London to Vancouver in 240 hours or ten days. The time from Vancouver to Yokohama by the proposed Pacific line of steamers will be 12 days, from Vancouver, to Hong Kong 17 days. The time from Halifax to Hong Kong will be 21½ days; and the trip from Halifax around the world to Halifax may be made in 61 days, thus breaking Jules Verne's record by 19 days.

THE Thunder Bay railway, now in course of construction will develop the mineral district tributary to the head of Lake Superior, and feeding the Canadian Pacific Railway. To any one familar with the great richness of the silver deposits alone, it is a wonder that the road was not built before. Dr. Lehman of St. Paul, the well known mining expert, says this is superior to the great Montana silver district, and in a few years must have a vast output. In fact he considers it the greatest silver bearing region in the world. The line will also tap the fine agricultural lands and valley bottoms, and will afford a means of marketing the millions of pine and other timber along its proposed and surveyed course. The engineers report a good route, with construction easy, and cost reasonable.

When opening a correspondence wtih advertisers always mention that you saw their advertisement in the "Canada Lumberman."

A SHORT, SIMPLE RULE FOR MEASURING STRAIGHT LOGS.

An experienced log and lumber inspector gives the following short and easily remembered rule for ascertaining the contents of a log by Doyle's rule when a copy of Scribner's book is not available:

RULE.—Square the diameter of the log after subtracting 4inches from it, and the result will be the exact contents in inch boards of a log 16 feet long. A log 8 feet long will be half this amount; 12 feet long three-quarters, 14 feet long seven-eights, and so on.

He also states that there is but one accurate rule for measuring crooked, hollow and knotty logs, and gives it thus:

RULE.—Have the log cut into the kind of lumber wanted on a good mill, by a competent sawyer, and have it inspected and measured by the Nashville inspection rules.

When opening correspondence with advertisers always mention that you saw their advertisement in the "Canada Lumberman."

Perhaps the most extraordinary that success has been achieved in modern science has been attained by the Dixon treatment for Catarrh. Out of 2,000 patients treated during the past six months, fully ninety per cent, have been cured of this stubborn malady. This is none the less startling when it is remembered that not five per cent. of the patients presenting themselves to the regular practitioner are benefitted, while the patent medicines and other advertised cures never record a cure at all. Starting with the claim now generally believed by the most scientific men that the disease is due to the presence of living parasites in the tissues, Mr. Dixon at once adapted his cure to their extermination; this accomplished the Catarrh is pratically cured, and the permanency is unquestioned, as cures effected by him four years ago cures still. No one else has ever attempted to cure Catarrh in this manner, and no other treatment has ever cured Catarrh. The application of the remedy is simple and can be done at home, and the present season of the year is the most favorable for a speedy and permanent cure, the majority of cases being cured at one treatment. Sufferers should correspond with Messrs. A. H. DIXON & SON, 305 King street west, Toronto, Canada, and enclose a stamp for their treatise on Catarrh.—*Montreal Star.*

Canadian Pacific R. R.

The only Through Route for the Great North West.

Going East.

PETERBOROUGH DEPART.—11.31 a.m., 7 53 p.m. 10.56 p. m.

ARRIVE.—5 31 a. m., 8 39 a. m., 6.42 p. m.

Going West.

PETERBOROUGH DEPART.—8 39 a. m., 6.42 p. m., 5.31 a. m.

ARRIVE.—11.31 p.m., 7.53 p.m., 10.56 a. m.

C. W. SPENCER,
Ass't General Sup't.

D. McNICOLL,
General Pass'r Agent.

W. C. VAN HORNE,
Vice-President.

GEO. OLDS,
General Traffic Mg'r.

FOR THE RIGHT MAN.

WANTED—A trustworthy and pushing man to represent the CANADA LUMBERMAN on the road, capable of writing up the lumber and wood-working industries solicit subscriptions and advertisements, and do general business. One acquainted with this branch of trade preferred. Must be perfectly sober and able to furnish good references. Apply personally or address A. G. MORTIMER,
Publisher, Peterborough, Ont.

New York Lumber Auction Co.

(LIMITED.

OFFICE AND YARD, Foot West 21st Street, New York City

REGULAR SALES will be held during the year 1886, as follows:

Tuesday, April 6th,	*Tuesday, August 10th,*
do May 11th,	*do September 7th,*
do June 8th,	*do October 5th,*
do July 13th,	*do November 2nd,*

and Tuesday, December 7th.

Sales commence promptly at 10.30 am. Wm. Norman, Auctioneer

At each of these sales we shall offer a full and complete assortment of the best grades of

HARDWOODS AND PINE LUMBER

Dealers and consumers will find it to their profit and advantage to attend. Catalogues giving the inspection of each lot offered can be had at the yard on the day of sale, or will be mailed on application. Address

New York Lumber Auction Co. (Limited)

Foot of West 21st Street, New York City.

THE BRITISH WHIG

The neatest Daily in Canada, bright and newsy, $5 by Mail.

THE WEEKLY WHIG

Rivals Toronto and Montreal papers, giving a better selection of general news, fair and independent.

ONLY $1 TILL END OF 1887.

The Whig has a larger circulation than the three other Kingston journals combined. It pays always to advertise in the best.

E. J. B. PENSE,
Proprietor.

SMITH'S

Mercantile & Land Reporting Agency

BANKERS—DOMINION BANK.

General Solicitor, JNO. LEYS, ESQ., Barrister, Toronto. Secretary, JOHN SMILEY, M.A.
MANAGER—WILLIAM SMITH.

General Offices—Court St., Toronto, Ont.

Telegraph Address—Agency, Toronto.

Having for its special objects the furnishing to subscribers of reliable information on the financial standing or otherwise of tradesmen and others, the collection of outstanding accounts, and the procuring of the most reliable information from independent sources of the value and condition of landed and other properties in any part of Canada and the United States, with correspondents in Great Britain and other parts of Europe.

Our method of procuring for our subscribers the most reliable information is through solicitors of the highest standing, and from other equally reliable sources in the several localities indicated, who are under contract with us to supply the necessary information promptly.

The Landed Enquiry Department of this Agency, the only institution of this kind known, is invaluable to Solicitors, Loan, Investment, and Insurance Companies, Estate Agents, and others, preventing fraudulent land transactions resulting from mi-representations.

The Department for the collection of outstanding accounts is conducted on an entire change of the system usually followed by Collecting Agencies, viz.:—Subscribers may have their collections paid either direct to themselves, or to the offices of the Agency, in which latter case remittances will be deposited to an account provided for that purpose, and immediately remitted to the parties to whom it is due, and will not be applied to any other purpose.

Another important feature in connection with this department is, that subscribers depositing accounts for collection will, if requested, be furnished with a Form of Script, on which will be entered the name of each debtor, the amount owing, and a full report of the prospects of collection, and providing that the receipts thereof be paid to bearer only, thus enabling subscribers to realize on their outstanding accounts.

The Agency will forward at least once in three months, or oftener if desired, a report and statement of all accounts in hand.

NOTE.—The offices of the Agency are open to the Solicitors and subscribers for reference to our numerous maps, atlasses, directories and correspondence, and for the transaction of business with their clients and customers when in Toronto.

W. SMITH, Manager.

GEORGE GALL

WHOLESALE and RETAIL

HARDWOOD LUMBER

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Car Lots sold on Commission, railway switch in to yard and plenty of room for storage. Yard corner of Stachan and Wellington Ave. Office, 9 Victoria St. Telephone Connection.

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Notice to Contractors.

TENDERS will be invited for the construction of the Section of the Cape Breton Railway extending from the Grand Narrows to Sidney, a distance of about 45 miles. This preliminary notice is given in order that Contractors desiring to tender for the work may have an opportunitp to examine the location before the winter sets in.

By order,

A. P. BRADLEY,

Dep. of Railways and Canals,
Ottawa, 26th Nov., 1886.

Wrought Iron Shanty Cook Stoves

The Best Article ever offered to the Trade.

I have much pleasure in drawing attention to my **WROUGHT IRON COOKING STOVE**, for Shanty, Hotel and Boarding House use. These Stoves are made of Heavy Sheet Iron, the top and lining of the fire-box being of Heavy Cast Metal and all the connecting parts of substantial Wrought Iron Work. The dimensions of these Stoves are as follows:

Top surface contains six 10-inch holes, fire box 28 inches long, and one oven 19x34x23.

The Best Stove I have ever Used.

PETERBOROUGH, May 31, 1880.

ADAM HALL, Esq., Peterborough. Dear Sir,—I have used your Wrought Iron Cooking Stove in our lumbering operations since its introduction here, and have no hesitation in saying that I prefer it to any other. For durability, economy and efficiency, where a large number of men are employed, it is the best stove I have ever used. You can, with confidence, offer it to hotels, boarding houses and lumbermen.

Yours truly, THOS. GEO. HAZLITT.

The Stove for Lumbermen.

PETERBOROUGH, June 3rd, 1880.

ADAM HALL, Esq., Peterborough. My Dear Sir,—We have used your Wrought Iron Cooking Stove and find it is very satisfactory for lumber operations, especially so on drives. We can recommend it highly.

Yours truly, J. M. IRWIN.

Gives the Greatest Satisfaction.

PETERBOROUGH, June 3rd, 1880.

A. HALL, Peterborough. Dear Sir,—I have had the Wrought Iron Cooking Stove, purchased from you, in constant use ever since last fall, and it gives the greatest satisfaction in every respect. I can recommend them highly to any one who is in the lumber business. Very truly yours, GEO. HILLIARD, M. P.

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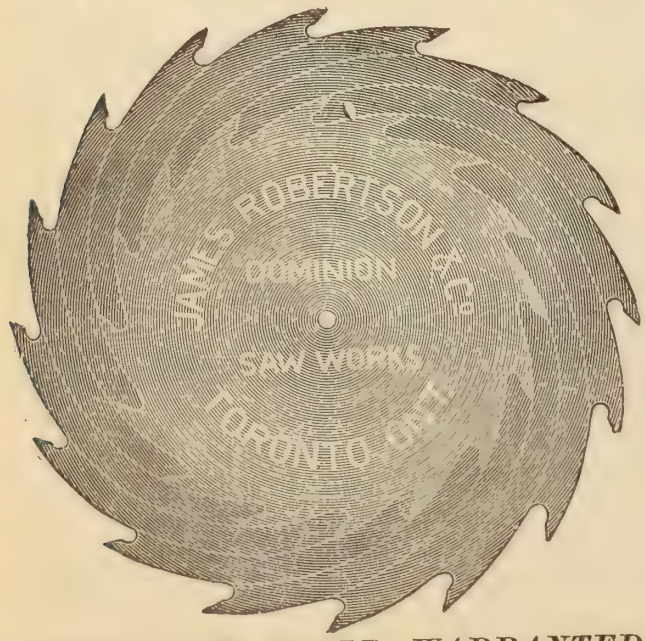

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PUBLISHED MONTHLY By A. G. MORTIMER.

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SUBSCRIPTION $1.00 PER ANNUM.

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PLANING MILL PRACTICE.

WHAT do we do, or what can we do, to make all of our planed stuff of uniform thickness? Every man for himself and every mill for itself seems to be the motto and way of doing business, each having a style and thickness of its own, and each varying a little. Some have a way of making their work just a little large, and anything that does not plane up at that goes one-eight of an inch thinner. Another mill has a way of making its stuff a little thin, which picks up all these thin boards and everything goes into what they call a standard thickness. That is the standard for that mill. But, to be more particular, what do these individual mills do to make their own stuff of their standard, uniform thickness? Every man, when he first starts up, takes up his rule and tries one edge and then the other, to see if both sides are alike, and if one edge is a little thicker than the other, he stops, and if he is running two sides he raises or lowers the pressure bars till he gets it right, and then proceeds. But just as likely as not when he measured the first time his rule, instead of being straight across, was held at an angle of several degrees, and the board was really thinner than he thought it was, and when he comes to measure again the fault is corrected, and now he finds it wrong because he was wrong himself the first time he measured it, and the adjustment has to be all overhauled again. Finally it goes right, or, at any rate, it goes to suit him, and he goes on with his work.

Many persons carry one of these little caliper rules in their pockets, which is well enough in itself, but generally they have been carried so long that the figures are all worn out and they have to rub the bar in their hair to draw out the figures, the same as I have seen people rub the old four pences and six-pences to show the bar on them.

The way of measuring stuff to see that it is of the right thickness when we first start up is the correct way, but the way rules are often used is anything but what it ought to be, and a great many times makes the stuff anything but of a uniform thickness.

If we should take a solid gauge for thickness and slip it on to the edge of the board we should find that our rule measurements were very far from being a perfect thing.

If any person will take the pains to measure the stuff he is planing with a rule, and be as exact as he can, and then take solid gauge made of some kind of hard wood or metal, and he will see that the ordinary measure by a rule is quite a ways from being perfect, and yet we are surprised to see that boards will show quite a difference when measured by a solid gauge, and when they are piled up the pile will stand square.

We all (or most all) of us watch the pile as it grows higher and higher, when it goes away from the mill, and if it piles up square we "rest the case" and are satisfied that the mill is running right. But, as I have said, if we take this same pile and slip a solid gauge over each edge we shall more than as likely as not find that it will show it to be quite a ways from both edges being alike.

Now, while I shall argue that all stuff, wherever planed, should be of one thickness, i. e., that ½ inch should be just ½ inch everywhere, and ¾ should be just that anywhere we may find it, or 1⅛ should all be that, no matter who planes it or where it comes from. If we are to have 15 16 let it all be of a uniform thickness, and not be 1-32 scant or full, as the case may be, according to the mill it may come from.

Well, how are we to get at this uniformity? We all know that under the present conditions it is next to impossible to do it. We might as well try to bring order out of chaos as to attempt any such thing under the now existing circumstances, when everybody "paddles his own canoe."

Lumber conventions get together and talk up matters of interest in their business were dollars and cents are concerned, but I never have seen or heard of their talking up anything of this kind, notwithstanding I do think this and some other like things would be matters of interest to talk up when planing mill men have their big talks.

As an operator, I can see why it is next to impossible for every board in a lot (unless it should be a small lot) to be of the same thickness. You see, a man starts out on a lot, say 10,000 feet of boards, and he runs along till his knives get dull, and all the while his stuff is varying in thickness a little. The rule hardly shows it, but if a solid gauge is slipped over the edge it will show very plainly there is a decided change in thickness. Well, he runs till he thinks it best to sharpen his knives, and after sharpening starts up to run the rest of the lot. Perhaps he dont even try the thickness by rule, but if he did, the difference was so small he didn't think it worth noticing, and works on till the lot is finished. Now the "almost impossible" comes in in the present arrangement of the parts of the planing machine. If the operator wants to alter just a least bit, he must let his board run out and come up with the tightening nuts and turn down perhaps half a turn and then turn up again till he guesses he is about right, and starts up. Maybe he is right and maybe not. If not, he tries it again, perhaps this time guessing. We have to come down to the fact that all these little alterations are little, if any, better than guess work.

A great many planers have a gauge to set them by when we are about to make any considerable alteration, but when we come to alter just a little or, as we nearly all say, "just a hair," then a gauge does not amount to anything, and we have to guess that we have lowered or raised the head about enough. We should have to do all of this even if we had the most perfect apparatus in the world for measuring the thickness of stuff, but if we had better gauges for making these measurements and paid strict attention to their use, I think planed stuff would be much more uniform in thickness. When nothing better is to be had, if we take a good, hard piece of oak and cut into it across the grain about two inches deep, just the thickness you want the stuff, you will have something that will last a great while and be very accurate. But the hardest of oak wears away finally, and gradually the standard becomes thicker, until we have to make a new oak gauge and reduce thickness to just the point we want it.

A wooden gauge is always more or less faulty, because in damp weather it absorbs moisture to that extent that it becomes perceptibly larger. I thought one time that I would have a perfect gauge to work two sides with tongue and groove in the centre, so I took a piece of hard maple and planed to pieces 5-16 and another ¼ inch, and putting the ¼ inch in the centre in a way to form a tongue and groove, I glued the three parts together solid. I did have a nice one and as perfect as a wooden gauge could be, but I found by using a solid iron gauge for thickness that wet weather would make it quite a little large. By using the two together I could, by watching out, make stuff very nearly all alike.

I have in my mind a gauge which, I think, would give good satisfaction to all parties concerned.

A bar of steel, ⅜ by 1 inch and about 6 inches long, ground and polished and marked like a rule thirty seconds on one side and tenths and twelfths on the other. On one end of this bar should be a solid flat head, having considerable surface and projecting 1¾ or 2 inches. On the bar should be a sliding head just as large as the solid one, and fastened firmly with a set screw. The movable head could be set to any point and would always be reliable if the scale on the bar was right, the thickness would be correct, and the tool could be used as long as any ordinary man would want to work in a planing mill.

If it went through the suction fan several times or got into the furnaces a couple of times, where wrenches and lots of other tools frequently find a stopping place, it would become very much demoralized. If such a tool were in common use, as it ought to be, another ought to be bought for about $1.50, which is the price such a thing ought to be made to retail for. We ought to have this for this work only, and not make it, as many other tools are made, with forty or fifty things attached to it. Say a saw set and glass cutter and can opener, a hammer and screw driver and gimlet twister and socket wrench. Tools work best that are made for and used for a special purpose and not for anything else. We think sometimes it is a gain to use a monkey wrench for a hammer, but if we do we very soon have neither wrench nor hammer to use, and have to beg, borrow, or buy both a wrench and hammer.

Now, I don't think a solid gauge to slip on to the edge of the board would cure all the ills that planing humanity is heir to or make every board from Maine to California of exactly the same thickness, yet I do think if they used to a greater extent then they are, and a certain amount of heedlessness was taken out of some men handling our planing machines by by some kind of patented process, there would be very much less grumbling among those who make the door and window frames and casings and every piece of work where boards are brought together and show their varying thickness, and have to be trimmed with plane and chisel in consequence.—J. T. Langdon, in the *Builder and Wood-Worker*.

AN AMERICAN OPINION OF CANADA AND ITS RESOURCES.

The following is taken from the Missis-ippi Valley *Lumberman and Manufacturer*, and is an instance of the feeling existing across the border, regarding the agricultural timber and mineral resources of Canada:

Last week we had occasion to notice the commencement of the construction of the Winnipeg & Hudson Bay railway, and alluded to the misapprehension which exists in reference to the great region known as British America, stretching in a broad belt from the Atlantic to the Pacific and all north of the Northern boundary of the United States to the Artic regions. This has been a *terraincognita* to all the world except the Hudson Bay Fur Company, who carefully concealed its wonders from the public gaze for a century. A thin border of settlements stretched themselves out the length of the St. Lawrence River, and pushed their way west along the Southern British border until they have reached the Pacific coast. This belt of, say 100 miles wide and 3,000 miles long, has been demonstrated to be not only a habitable country, but one capable of sustaining as dense a population as the same belt across Europe and Asia does now. A quarter of a century ago a large part of this belt was reported to be an arid waste, so bleak and desolate that only furred animals and Esquimaux could inhabit it. Now Manitoba, Assiniboine and Saskatchewan are conceded to be the best rivals if not superiors to Dakota and Montana as wheat producing countries. Vas

mineral deposits are being developed, and forests compared with which all the primeval timber of the United States was but a little grove, are now known to extend in an unbroken broad belt from the upper Peace and Saskatchewan country south and east across the Nelson River and Northern Lake Winnipeg country, away over the Spanish River and the vast Ottawa region, and eastward way down to the mouth of the Sanguina River and southern Labrador and the Atlantic coast. The vast and almost inexhaustible supply of timber would supply the two continents longer than the forest of Norway, Sweden and Russia have lasted Europe. These forests' the races who anteceded the Romans commenced to hew down, and they are still the great source of European supply. What these great Northern woods of Europe are to that continent British America will one day be to this. What the possibilities of development in British America are cannot now be surmised, but enough is known to warrant the belief that it can feed the world. The bulk of the population of the United States inhabit the belt made by 36° on the south 48° on the north. The next 12° of latitude on our north and hundreds of miles longer than ours is capable of sustaining fully as great a population. Its natural location and facilites for reaching the old world markets are far better than ours and under the fostering care and aided by the enormous wealth of the mother country, its development may be far more rapid than even is the marvelous progress made on our own side of the line. The sudden construction of the great transcontinental traffic line, the Canadian Pacific Railway, has in five years fully inaugurated an era of progress scarcely paralleled in the world's history. We have not the figures at hand to give the population and wealth which has seemingly sprung into existence in the Northwest Provinces, but it is amazing. The second step in the grand drama is the construction of the Hudson Bay & Winnipeg Road. These two lines with the lateral feeders which will speedily follow, are the certain means by which England intends to create a new Indian empire out of which to fill her coffers in ages to come. This great political movement on the part of our greatest rival has a significance to us beyond anything which has occurred in American history, save the Revolution and the Civil war. There is no question but that the British American Provinces can be made to produce a superabundance of almost every commodity now produced in or exported from, the double tier of Northern States. Breadstuffs, meats, wool, lumber, etc., which form the bulk of Northern States export, are already produced in them in such considerable quantities as to seriously effect our value at home and abroad. These provinces promise soon to supply the European demand and under their free trade privilege (which means maternal protection), cheap living, cheap labor system, with their more economical methods of life, can and do, produce all the staple commodities cheaper than we can, or do.

Another important factor is the great matter of transportation. With our long rail routes so crooked and circuitous that we have to go two thousand miles out of our road to reach European markets, and these routes in the hands of the most heartless and soulless corporations which ever effected a nation, who render fair competition with our northern neighbors an impossibility by their systems of extortion and robbery. These considerations render it extremely doubtful if it will be possible, at the end of another decade, for the wheat raisers and stock producers of the Northwestern States to earn a bare living. There must be a radical change or Asiatic and British American competition will destroy the great industries of Michigan, Wisconsin, Minnesota and Dakota.

RAMBLER'S NOTES.

A Visit to Some of the Lumber Firms of the Queen City and Elsewhere.

RAMBLER rises to wish all the readers of the LUMBERMAN the compliments of the season, and while doing so desires to intimate that he expects, health and weather permitting, to be present in this column once a month to tell what he has seen and heard concerning the trade and those who are engaged therein. If anyone asks you who Rambler is and where he comes from, be sure and tell him you don't know. This is by far the easiest way to tell the truth, and no one will be hurt. We have been wandering around Toronto for the past few days, and picked up quite a few notes. We have visited some of the larger firms and some of the smaller ones interested in the lumber business, and have left many others for a future occasion. When we get through with the Queen City in all probability we will turn up some place else when least expected. All that it is necessary for the members of the fraternity to do is to give us plenty of room to talk and ask questions. If they don't do this we will shake the dust from our feet and leave by the first train. There is more dry facts and lengthy figures in lumber lore than is to be found in almost anything else, but you get used to it in time and don't mind it. Why it is a common occurrence to find a lumberman with a whole year's quotations laid away in his upper storey, ready for any emergency. Ask him how the market ruled six months before, and all he has got to do is to run his fingers through his hair and he's got it.

Speaking of the individuality of lumbermen we are inclined to the belief that, as a rule, they are a liberal class of people, and while possessing the faculty for driving a close bargain, do it in a businesslike manner and take undue advantage of no one. In making this assertion we are not doing it in the hope of securing the lumbermen's vote at the next election, but solely because we believe that our statement is correct.

But we are digressing. To digress, however, is no crime, therefore in all probability we will do it again. We were about speaking of some of the Toronto "lumber kings" and the part they take in the trade of the country. The best way to do this is to refer to each in the order of our calls, mixing up the larger and smaller concerns promiscously. Let us commence with that well-known and ever-reliable firm of

CHRISTIE, KERR & CO.,

whose head office is situated at 9 Victoria street. The heads of this business are Mr. Alex. R. Christie and Mr. Wm. Kerr, both of whom are among the best known lumbermen of the country. They possess the widest range of practical experience, coupled with an intimate knowledge of the wants of the trade, and for the many years during which they have been engaged in this branch of trade, have achieved an enviable reputation for fair dealing and prompt and liberal dealings with customers. The firm direct the operations of their large force of men from this city, from which point also they are heavy shippers of lumber to various American ports. Their extensive mills are situated respectively at Collingwood and Severn Bridge. They also handle the product of some 10 or 12 mills besides their own insuring direct rail connections south, and by water to all points west and south. The mills of this company are large, and fitted throughout with all the latest improved machinery and appliances, while the cut averages 100,000 feet daily, and gives employment to upwards of 150 men. The firm owns several of the finest timber limits in the north, which are convenient of access for bringing the logs to the mills. At the present time they have a large force of men and teams in their camps, and the output of logs this season will be unusually large. The facilities possessed by this firm for the prompt filling of all orders for home delivery, or exportation, of all descriptions of white pine, hardwood lumber, deals, laths and shingles, &c., are unsurpassed. We learn that the past season's operations have been fairly successful.

From here we step across the hall in the same building and enter the office of

WILLIAM LATCH,

wholesale dealer in hardwood and pine lumber, laths and shingles. This gentleman is one of the "old standby's," in the trade, having been actively engaged in the business for the last twenty-six years. The wholesale yards, of which Mr. Latch is the owner, are located at Cartwright, Ont., where large quantities of rough and dressed lumber of every description are kept in stock. Being possessor of a considerable amount of capital this gentleman has command of a very large trade, and is prepared at all times to undertake and fill the largest contracts. As a citizen of Toronto Mr. Latch is recognized as an influential and public-spirited man, and is identified with many movements calculated to promote the general welfare of the community.

Victoria Chambers, where we find ourselves at present, seems to have a peculiar fascination for lumbermen, as in addition to the two firms mentioned above, there are three others in the same building, equally worthy of mention. Of these we first visit

TENNANT & CO.

the *personnel* of which is Mr. J. Tennant and Messrs. Henry and Albert H. Colwell. The first two named gentlemen have been associated together in a business way for the past seven years, and are well and favorably known. Mr. Colwell, sr., has been connected with the lumber trade in Toronto for upwards of a quarter of a century, and is generally acknowledged to be an authority on all matters pertaining to this branch of trade. The firm do a wholesale trade in pine lumber, the bulk of which comes from Penetanguishene and the North Shore district. About one million feet per month is the extent of the business done. They state that the prospects for next year's trade are good, and express the opinion that a slight advance in prices will soon take place. The light stock on hand at the mills and the scarcety of cars for shipping combined, seem to effect the market towards this end.

GEORGE GALL.

Situated on the same flat as the last named firm we find the office of Mr. Geo. Gall, wholesale dealer in hardwood lumber. This gentleman has been connected with the lumber and building trades of Toronto for the past twelve years. He is a Scotchman, having left Aberdeen for Canada a score of years ago, and by strict attention to business has met with more than usual success. Mr. Gall's yard, containing on an average one million feet of lumber, is situated at the corner of Wellington and Strachan Ave. in the west end of the city. He purchases in both Canadian and American markets, and has a reputation for supplying the very best material obtainable. He reports prices firm, with a possibility of an increase.

On our way out of the building we make a call on

F. N. TENNANT,

a gentleman who has been more or less connected with the lumber business since a boy. He was a member of the late firm of J. & F. N. Tennant, who, a few years ago, handled, on an average, from 35 to 40 million feet of lumber annually. He has since gone somewhat extensively into the real estate business, and this in connection with his wholesale business in lumber, laths and shingles, keeps him busy. Mr. Tennant's principal purchases come from Midland mills. He informed us that the building trade of Toronto for the past year eclipsed that of any previous period, and that the prospects for next year were equally encouraging.

MUSKOKA MILL AND LUMBER CO.

Room 17, the Arcade, 24 King street west. This company was incorporated under the laws of the Province of Ontario in 1875. Its capital is $150,000, with a reserve fund of $100,000. The company own about 270 square miles of pine lands on the Georgian Bay, where are located extensive saw mills, which, with the vessels engaged in carrying their lumber, give constant employment to about 200 men. The facilities of this company for filling the largest orders at short notice, or undertaking the most extensive contracts, are unsurpassed. Its resources are of such a character that it is able to offer the most favorable inducements to the purchasing public, and can afford rates not easily duplicated. Mr. A. H. Campbell the head of the company, is a native of Scotland, and has been a resident of the Dominion since 1845.

JAMES CARNOCHAN,

proprietor of the Barrie Lumber Yard and Planing Mill, 61 Ontario street, and 356 to 366 Queen street east, conducts an extensive business, and is a representative man in his branch of trade. Mr. Carnochan carries a very large stock of every discription of lumber, including pine, spruce and basswood boards, scantling, lath, shingles, casings, mouldings, &c. In fact from this establishment the public can be supplied with every material essential to their building from cellar to attic. The premises occupied on Ontario street cover more than half an acre, while the yard on Queen street is upwards of an acre in extent. The lumber handled comes from the Muskoka, Georgian Bay and Ottawa regions. The business gives employment to about 15 men. Mr. Carnochan is a Canadian by birth, and has had an experience of fifteen years at the business.

Thinking that we had picked up enough notes in Toronto to supply sauce for LUMBERMAN readers for one month, and having espied a sign in the distance which read, "City Tonsorial Art Hall, we shied off to "get a clean shave, and remove the super-abundance of Toronto real estate which had very affectionately attached itself to our lower extremities. We were bound for the north, and at the mid-day Northern railway express steamed up to the Union depot we stepped on board and were soon on our way to the picturesque little town of

PENETANGUISHENE.

Many a time in the past have we travelled over this route. Then we knew the location of every mile post and farm house for many miles north of Toronto; but things have changed since then, and now we find ourselves almost a stranger in the hamlets which once were, but are now prosperous villages and towns. The Northern railway has changed also. What many for years have been calling a "one-horse concern" is now being equipped equal to any railway in Canada. It has become the principal line over which to reach the great north-west of Canada, and will ere long be generally recognized as the shortest and most direct route to those far-distant provinces. But while improvements by way of equipment are observable to the most casual observer, the slow speed at which trains are run has not been improved upon. For fear the management have overlooked this important matter, we might suggest that this is an age when people—if their wishes could be satisfied—would prefer to travel at the rate of a sixty-mile-an-hour wind-storm, even though there was a fair possibility of their ending their earthly career before they reached their destination. Now we believe we have said enough on this point, and if the directors of the Northern don't feel in accord with our ideas, we are satisfied in the knowledge that we have done our duty to a suffering public.

Just as we expected, we have been digressing again, and have only been brought to a sense of our duty to the lumber trade when speeding along the shimmering waters of Penetang. Bay. On one side we have a glimpse of the town on a high elevation in a distance, and to the left of us a dark sail of a fishing-boat here and there, and further beyond heavily laden schooners with their cargo of lumber, saw mills, docks, and forest.

Penetang. is certainly an attractive place in which to spend one's time during the summer months, but our sympathies turn to those who have anything to do with winter in this section of country. We heard enough of winters up there to make icicles sprout out of our boots, and that's all the experience we crave for.

The secret of this town's success is the extensive lumber trade which is carried on, there being about a dozen saw mills within a radius of five miles. A visit to some of these mills gave us an idea of the extensive trade being done.

"CHARLIE" MCGIBBON,

by which name the jovial and good-natured Reeve of the town is known, is among the foremost in this branch of trade. Placing ourself at his service we were shown through the mill of which he and his father are the owners. These mills have been established since about the year 1867, and from that time to the present have run continually during each season. The manufacture consists of every description of lumber, laths and shingles. The output of lumber averages from two and a half

to three million feet per annum, the bulk of which is shipped by boat to Sarnia, where the wholesale and retail yards are situate. As a rule about 20 men are employed in connection with this business, and the present season 40 men have been sent to the woods. Mr. F. McGibbon, the senior partner, is one of the oldest lumbermen at present actively engaged in the business in Canada, having already spent 32 years of his life at the work. He is a man of sterling integrity, and what he doesn't know about lumber is hardly worth finding out. By fair dealing and close attention to business he has accumulated a considerable amount of the necessary wherewith to keep him independent during his declining years. The business in Penetang. is under the entire control of his son, Mr. Charles McGibbon, who ranks as among the most popular men of the town in which he resides.

C. BECK & CO.

By far the most extensive industry of the town is the "Penetanguishene Steam Saw Mill," under the proprietorship of the above well-known firm. This mill is situated close to the bay, and has been established for the past 13 years. A fire, some time ago, completely destroyed the entire works, but Phoenix like, they have sprung up larger than ever, and within the new structure is now in use some of the finest saw mill machinery manufactured in America. The output consists of lumber, laths, shingles, creight and bill stuff, the cut of lumber the past season being in the neighborhood of 7,000,000 feet. About one year ago this firm nearly doubled its capacity by buying up the large premises and machinery of the Brentwood Lumber Co. which is in close proximity to their own. In their new acquired property, they propose manufacturing bill stuff almost exclusively. The area of land utilized in conection with this business, consists of 25 acres along the water front, with three wharfs for the shipment of lumber, etc. Nearly all the lumber which goes by water finds a market at Sarnia. Large quantities are also shipped by rail to Toronto and elsewhere in Ontario. Railway ties and deals have been shipped in considerable quanties to England during the past year, and this trade is expected to increase. On enquiring the prospects for next year's cut we were informed that the company then had 150 men in the woods, and that as near as could be judged at the present time a cut of from nine to ten million feet would be made during the next season. Mr. Beck complains severely of the discriminating rates against lumber dealers in that town who are compelled to ship over the Northern railway in order tc find some of the leading markets. He affirms that they are compelled to pay nearly double the rate which the railway company charge dealers in the North Shore district. Such a state of affairs as this will materially injure the lumber trade whereever such an exorbitant rate has been levied. The Northern railway evidently consider that they can act as they like in this matter, as the lumber has to be shipped, and there is no other line to carry it. Mr. Beck has been fighting this injustice for some time, but notwithstanding that he is a "solid Scotchman," his weight does not seem to have any effect Penetanguishene owes very much of its present prosperity to the firm of which we are now writing. Mr. Beck evidently does not believe in employing assistants to look after his business, for he seems to have an eye to everything, and is hardly ever absent from his works. He is said to have accumulated a considerable fortune and is certainly entitled to his gains.

MR. D. DAVIDSON

operates a large saw mill on a peninsula across the bay, and for many years has done an extensive and prosperous business in the manufacture of the different kinds of lumber. It so happened that our visit was inopportune, as Mr. D. had left the same morning in company with a party of sports, with a Winchester on his shoulder and a rather weighty bag of cartridges at his side, for a few days hunt on the North Shore. We never had much ambition for tramping the woods after the beast of the forest and the fowl of the air, but on this occasion we were somehow drawn into the net. In company with a couple of "crack" shots, who, by the way, had intended to accompany the expedition of the morning, but had turned up too late to join the party, we set out for the neighboring woods prepared to destroy anything that happened to present itself. Time nor space will not permit of a rehearsal of our experience during that day's tramp. Suffice it to say that we had a deadly encounter with a striped rabbit and an owl. The latter we left in the tree, after sending something less than a dozen bullets after it, and bringing down a few feathers. The former we placed in our "game bag," and as the sun sank in the horizan, a homeward move was made. On reaching the town we bartered our game for three bottles of ginger ale, and if not satisfied with the day's sport were at all events quite ready to seek our virtuous couch.

THE SEASON TO CUT TIMBER.

Much has been written as to the time for cutting timber, and as authorities differ, I propose to give that time as near as possible. This is a branch of industry to which little or no attention has been given by our woodmen, who always have and are continuing to cut at any and all seasons of the year, regardless of the injury they inflict on themselves and others. I have asked the question of some who made it a business to get out timber the year round (excepting the season when they are apt to be idle and lay off, which will be the very part they should have been the busiest,) "What is the best time to cut?" The answer invariably is, "We can sell, and the time of cutting makes no difference." This question is never asked, especially by the manufacturer or the party getting it out, and many wonder why they get so much poor or brash timber, and attribute all this to the timber itself, when in reality much of the trouble is due to the ignorance of those who cut the timber. There is a time to harvest timber (or fell the trees if nothing more) just as much as there is to harvest wheat. A farmer would never think of cutting a field of wheat when it is just headed out or in the milk, expecting that he would be remunerated for so doing, or that he was going to get a full and plump berry therefrom; and so in regard to cutting timber, we must observe the season, and when the timber is ripe, the pores or openings filled, and the tree is a solid mass, as it were; for the the right season the pores or grains, as I will call them, are filled with the gum and oil that has formed after the sap has ceased flowing.

The custom has always been to cut timber in the winter time, because then the farmer, who does the most of the cutting, has the most spare time for so doing. In late seasons, when winter runs well into spring, and there has been little thawing but almost continual freezing, the damage is light, but in a reverse season cutting proves fatal.

Timber at the present day is treated somewhat different from formerly. Instead of the farmer cutting, as he formerly did, much of it is cut by parties who take it in bulk and cut at any time to suit their convenience, and as no complaint is made, it does not make any difference to them. This timber question has been much discussed at different times, and is to-day, but no one that I have seen has struck the key-note, or given definite time for cutting. Some there are doubtless who may know all about it, but I have never seen it in print, nor have I ever talked with any one who could give detailed information. Cut only when the timber is ripe. To fell it simply will do, and then you can let it lay and cut it up for what you want it for at your leisure, or in a few months. There are no exceptions to this rule, and all timber comes under it as a rule, and the time is the same for all. All must be benefitted, every person who uses timber, even to those who burn it, for fire wood cut at the right season is certainly worth fifty per cent. more than that cut out of season. Think of all those who use timber and the millions of feet that are sacrificed. England cuts her oak, her best timber, for the bark, or to save it, and at the expense of the timber, for the timber is ruined if cut when the bark peels.

I think that it is important to know the proper time to harvest timber. To individuals and to governments much has been written as to preservatives, but the best preservative is to cut in the right season. There are no doubt preservatives which can be applied for certain purposes, but they will always be externally and not internally. Injecting, as some have advocated and advised, is all bosh, as will be seen when thoroughly understood. The oil and gum that the timber is impregnated with is its own preservative, and if cut in the right season needs no other; in fact, to impregnate with any other liquid or solution, or attempt to do so if cut in season, it will be necessary to displace the timber's gum and oil, and to do this you must destroy the timber itself in the operation of displacing. If the timber is impregnated in the same liquid, fluid or water that the displacement took place in, it will again be filled in part with its own liquids or gum. This displacement theory is all wrong, as the operation destroys the life of the timber.

Timber is never so well preserved as when done by nature and its own preservatives. I am convinced if this is observed strictly no decoction is necessary, only where an external application in some way would be beneficial. Among those that are good, are raw or hot linseed oil, crude kerosone oil, its extracts, hot or cold. Creosoting, as spoken of in the *National Builder*, is no doubt one of the best of the many spoken of by that authority, but I shall say only as an external preservative, and not as an internal, as claimed. I doubt not of its great usefulness if properly applied. Many of the others spoken of by the same authority are good, no doubt. The goodness of all are as an external remedy.

The time to cut, which in my judgment is about right, is mean time, being October and November. This is the best time, no doubt. Mean time, from middle of August to first of January, and the extremes from middle of July to the first of February. You may go outside the extremes, but it is not safe. Sap commences flowing in January, it may not be much, but it is sufficient to hurt the timber; and do not commence earlier than the 15th of July. The sap has no doubt ceased flowing, but the oil and gum which the pores are filled with now have not sufficiently ripened or hardened; therefore, confine yourselves as much as possible to the mean time, October and November. This is about the time for this latitude. There is, or can be, no set time, as the seasons and locality vary. Here in central New York it varies six weeks, and all these must be taken into consideration. March, April, May and June are the out-of-season months.—*J. B. W., in Coach and Saddlery.*

The average weight of 1,000 superficial ft. of Douglas fir lumber is from 3,300 to 3,500 pounds, and it is worth from $9 to $25.

General News Notes.

Currier's old mill at Ottawa is being demolished.

Mr. Samuel Frazer has sold all the pine, oak and basswood on his Midland property to Chew Bros., for $2,000.

Mr. Herbert B. Rathbun is engaged with a large crew of men in collecting logs around the shores of the Bay of Quinte.

Messrs. Hillard & Dickson, Pakenham, have sold their limit on the Clyde to Mr. W. C. Caldwell, who intends to commence lumbering on it at once.

Mr. W. H. Carpenter, of Fort William, has large gangs of men at work in the woods this winter. He expects to have a larger cut next season that usual.

The Buffalo Lumberman's Exchange which is composed of lumber dealers in Buffalo and vicinity, will hold weekly meetngs throughout the winter, at the Merchants Exchange Committee rooms.

Mr. A. Hoppins, of Kingston, has purchased the stock of the Bedora mill on the K. & P. railroad. The stock is composed of 185,000 feet of hemlock, joisting and scantling, and 146,000 shingles. He has also bought 600,000 feet of lumber from the Calabogie mill, and 100,000 feet from John Schellington, of Hinchbrooke.

The lumber shipments from Montreal during the season of navigation just closed were:—To the United Kingdom, 97,804,336 feet; for 1885, 89,667,407 feet; from Montreal and Lower St. Lawrence to River Platte, 20,088,204 feet; for 1885, 31,747,142 feet. Total shipments for the season to all places, 130,602,923 feet.

A gentleman down from the lumbering regions of the Upper Ottawa reports that the number of logs made so far this season is far in advance of last year. He says this was the finest fall of log cutting he has seen for many years. Drawing has already commenced in many districts. He anticipates bright spring prospects for the trade.

Recently a man named Thomas Clark, of Bristol, engaged in one of Messrs. Gillies Bros. shanties on the Temiscamingue, was killed by the falling of a limb on his head whilst engaged in chopping. His body was taken home for burial with great difficulty, first being drawn on a hand sleigh a distance of 25 miles to a lake, which delayed the party a day, during which time the lake froze over and the party proceeded.

Some important changes are announced in two of the leading houses in Quebec trade. Mr. H. T. Walcot has retired from the firm of Messrs. J. Burstall & Co., of Quebec, Montreal and London; the business will be continued under the same style by the remaining partners, who have appointed Mr. H. W. Lightbourn to take charge of their London office. In addition to their Canadian business, Messrs. Burstall & Co. have arranged to sell ditch pine timber, deals, &c., for shipment from southern ports. The retiring member of this firm, Mr. Walcot, has entered into partnership with Mr. Edward Harper Wade, and will carry on business at 17, Gracechurch Street, London, under the style of Walcot & Co., and at Quebec and Montreal, under the style of Smith, Wade, & Co. From the latter firm, which has hitherto been carried on at Quebec, Mr. R. H. Smith, who was associated in partnership with Mr. E. H. Wade, has retired.

Supt. Evans, of the Deseronto shipyard, will have an exceedingly busy winter. He is making extensive preparations for the erection of the new steel steamer to which we referred last month, and which will be of large proportions. He will also build a large steam barge for the Rathbun Company. The now vessel which is intended for the Rideau trade, will be 99 feet keel, 106 ft. over all, 21 ft. beam and 6 ft. 6 inches depth of hold. He is also rebuilding the yacht Norah and will make many changes and improvements on the fleet of the Deseronto Navigation Company. Brisk times may thus be expected in the shipyard for the winter.

In conversation with a prominent lumberman on the Gatineau river and district an Ottawa *Journal* reporter learned that the winter so far has not been favorable to the lumbermen on account of the scaccity of snow. A great many teams with provisions for the shanties were stuck at points along the road. The prospects of a good cut this year are quite as favorable as last, and if a good spell of cold weather comes after Christmas the want of snow until the present time will not greatly inconvenience the lumbermen. "What firms will do most extensive work this winter?" Well, James McLaren will work his old limits as well as the Hall limit which he purchased some time ago. His operations will be considerably larger than any former year. Then Hamilton Bros. and Gilmour & Co. will, I think, do about the same as in former years." "What is the quality of timber taken out of the Gatineau regions?" "On the whole it is first-class timber both clear and large, but there is a great deal of drawing to do, which of course detracts from the value and then the length of the drive is also another drawback." "Then this is considered as a good season by the lumberman on the Gatineau?" "Well I do not say that, but there are very good prospects for a fair cut this season."

AN ENGLISH OPINION OF CANADIAN SAW-MILLS.

R. CHARLES WOOD, who was for many years manager of Mr. Chappell's saw-mills at Pimlico, and who until lately carried on the business of saw-miller on his own account at Camden Town, has recently returned to England from Canada and the United States, where he has been travelling for the purpose of making himself acquainted with the Canadian and American methods of running saw-mills, and to see the sights of the countries. The *Timber Trades* reports the following interview with this gentleman, which, being of interest to our readers, we reproduce:—

"I left Liverpool for Quebec on the 27th of August. The passage was very pleasant until we neared the Straights of Belle Isle, which is the summer route to the Gulf, the winter route lying between Cape Ray and Cape North. Here owing to the unusual number of icebergs floating south, it was intensely cold. One of them had assumed the form of a cathedral, in outline not unlike Notre Dame, and, with its sparkling roofs and glittering walls, was really a splendid spectacle. An experience of iceberg regions such as I had would enable one very easily to comprehend the wretched plight in which the inhabitants along the neighbouring coast and at the summer cod fishing grounds of Labrador were recently placed by the presence of those mountains of ice.

Well, we reached Rimouski on the following Sunday week, and Quebec at eleven o'clock next day (Monday). From Quebec I went to Toronto, and there called on Mr. Hargreaves, the well-known shipper, by whom I was very kindly received, and taken across to the Waubaushene Lumber Mills, owned by the Georgian Bay Lumber Company. These rank among the best and largest mills in Canada. They are situated at the head of the bay, in the county of Simcoe. The distance from Toronto is 112 miles.

I saw much to surprise me, the methods and appliances they employ being of the latest and most approved description. In glancing round the place, the thing that most impressed me was the important part that machinery played in every operation. The lumber is not handled by the workmen as it is in this country, being in nearly every instance manipulated by ingenious mechanical appliances. The output of the mill 150 standards per day of ten hours. The working hours are from six to six an hour between twelve and one being allowed for dinner. On Saturdays the men leave off at a quarter to six. They are paid, the mill sawyers, 12 dols. a week; and the labourers, 6 dols. a week, besides which they are supplied with three meals a day, breakfast, dinner and supper. The men live in the village of Waubaushene, for whom it has been erected by the Georgian Bay Company. It can boast of two churches, a library, a doctor, and a school master. It does not possess, however, a public house or drink-shop of any kind, being under the Scott law, which prohibits the sale of intoxicants, and generally the Company seem to have given considerable attention to the spiritual, intellectual and physical needs of their *employes*.

The mills are at the water's edge, and the logs are drawn up out of the Bay on to the first floor of the mill by means of what the Americans call a log haul-up. This consists of a large launder, if it may be so styled, inclined from the mill to the water, and supported by A-shaped tressels, made of two logs with a cross-piece on top. Inside the launder runs an endless chain, on the links of which spikes are fastened at the top of the launder. At the other or water end a man stands on a log raft, and as the logs are floated to the haul-up he guides them with an ordinary hitcher to the spiked links of the endless chain, and they are conveyed lengthways to the first floor of the mill, where all the cutting is done.

The logs are broken down with a gang, or what we should call a frame saw. First, the logs are squared with a circular saw to about 11 in., and are then cut down to inch boards. In this latter process there is great waste, each cut taking out five-sixteenths of an inch of sawdust. This is doubtless owing to the peculiar formation of the saw-tooth used in American saw-mills, and which is rendered necessary by the amazing rate of speed at which the saws are run. It is really astounding to watch the rapidity with which the log car in front of the saw is worked backwards and forwards. I saw a log 15 ft. long, 22 in. diameter, cut into twelve 1in. boards in a second or two under a minute. As I have already said, very little handling of the stuff takes place, and the boards fall from the saw on to endless chains running along frames, and are automatically conveyed outside the mills to the trams. They are then taken all over the yard for stacking.

The slabs taken off the round logs with the circular saw, when squaring, also fall on endless chains, which convey them to the gang slab slasher, or a series of circular saws, placed at intervals of 4 ft. apart. The chains run in guides, and are provided with spurs, or spikes, which helps to hold the slabs firmly, while a lug carries them to the saws. They are then cut into 4 ft. lengths, which are sent down a shoot to another set of saws, arranged three-eighths of an inch apart, where they are sawn into laths. All laths in America are sawn; at least, I did not see a single builder using rended laths. The slabs are also sawn into boxwood for the New York market, and the output of this stuff alone amounts to two trucks per day.

"As you are aware, Mr. Wood," we observed, "the question is frequently asked in our 'Practical Notes' column, 'What is the best means of disposing of saw mill waste?' What is the plan adopted in the Waubaushene Mill, where, of cause, there must be an enormous waste?"

"Well, the larger items of waste, such as the ends of the 4 ft. slab lengths, are burnt in the boiler fire-boxes as fuel, but the very refuse, such as saw-dust, &c., was formerly thrown into the Bay. In consequence, however, of the passing of laws prohibiting the deposit of mill refuse in rivers, the company erected a bottle-shaped iron furnace, 40ft. in diameter. The refuse is introduced into the furnace through on opening at the shoulder, the means of conveying it there being an endless chain arrangement. Verily, endless chains are endless in America. The cost of erecting this furnace was $25,000.

The yellow pine converted by the Georgian Bay Company is drawn from the district lying to the south of Lake Superior. Six other mills besides the Waubaushene are owned by this company, and I was told that they have sufficient timber in their limits to keep their mills going twenty years. The pine of this district is of first-class quality. Mr. Dobell, who draws some of his supplies from the same source, told me that pine is being there cut into 42 in. planks without showing a knot.

"In travelling from Toronto to Waubaushene," said Mr. Wood, "I noticed many miles of cleared woodland. A peculiar feature of it is the number of stumps which it contains. These are from three to four feet from the ground. I thought this an evidence of considerable waste in felling, and I asked Mr. Hargreaves what was the reason of it. 'The snow,' he said, 'is here about three to four feet deep in the winter, when the felling takes place. Of course it would be too expensive to remove the snow, and the trees are cut down at the surface of it.' I also noticed at Toronto that the streets are paved with cedar wood. When they want to make a new street they plough up the ground. A large scoop or shovel, drawn by a horse, comes along and takes out of this displaced earth a depth of about 12 inches. A layer of sand 4 inches deep is then laid and levelled, and, upon this foundation of sand only, blocks, of round cedar, 8 inches long and cut out of the branches of the tree, are placed. Except in the better streets, the pavements are also composed of wood. Toronto seems to be a thriving city, and things are cheap, except clothing and house rent. Houses, say, which in Camden Town could be rented for £40 a year, would realise an annual rental of £100 in Toronto.

"From Toronto I proceeded to Chicago, and stopped to see the Niagara Falls *en route*. I have heard much talk about utilising the immense water-power of these falls for driving mills, &c., but, as far as I could learn or see, nothing of any great extent has yet been done."

"What do you think of the States after Canada, Mr. Wood?" we asked.

"Well, Chicago is a very different place to Toronto and other Canadian cities. I was informed before I left Toronto that I should find the devil at Chicago; and at times, and in some places, you almost do. There seems to be little, if any, regard for the Sunday, as labour of all kinds is carried on as on ordinary days; and at the Board of Trade building, in which are located the corn, cotton, and hog rings, it is a perfect pandemonium when business is being transacted. Chicago is a magnificent city, laid out in squares, each square containing four blocks of buildings, which are among the highest and largest to be seen in any city in the world. Certainly I have never seen in any city so large a number of big buildings. Here it is not 'Great is the Diana of the Ephesians,' but 'Great is the Mammon of Chicago.' 'The least erected spirit that fell is the great object of worship, and everything seems sub-ordinated to it. To give you an instance—the motto of the States is, 'In God we trust,' and an enterprising, but irreverent, Chicago tavern keeper has on his sign the following prostitution of it:—'In God we trust; all others must pay cash.' In Canada, and in the States particularly, I noticed that children were being worked at a very tender age, and on mentioning the fact to a Chicago citizen, I received the truly American answer: "I guess it's a free country, and people can do as they like." This again is an outcome of their insatiable thirst after 'the almighty dollar.' A Factory Act in my opinion would be a priceless boon to the children.

"From Chicago I proceeded to Quebec, and on arriving there accompanied one of Mr. Dobell's clerks to the Montmorency Falls, which lie about seven miles below the city. The mills situated here are owned by Messrs. Hall Bros & Co., and are worked by water-power derived from the falls. The distance between the mills and the falls is about 200 yards. The latter have a width of 50 ft., and a descent of about 250 ft. A dissectible pipe composed of conical shaped joints, each joint being 4 ft. in diameter at the base and 3 ft. 7 in. at the apex, is placed in the water at the right bank of the stream, near the edge of the falls. The water is let in and shut off by means of a valve. The water flows into the pipe at the base or big end of the first joint. The joints are placed in this inverted order, the small in the big end, so that the water may acquire additional impetuosity. The water rushes from this pipe into a shoot 200 ft. long and 5 ft. wide, passes into a trough or a reservoir 14ft. square, and its course is then directed at a right angle into a launder, underneath which are six vertical cylinders conveying it to a corresponding number of turbine wheels, which constitute the motive power of the mills. Six gang saws are employed for the purpose of squaring the logs on two sides. The partially squared logs are then cut into planks and deals of various thicknesses. A series of saws subsequently cross-cut the deals into the different lengths they make. They are then conveyed into the yard by means of a shoot, at the bottom of which stands the culler, who marks the various qualities before the deals are removed for piling. When possible, the slabs I have already mentione are cut into boards of various sizes, when, however, this cannot be accomplished, they are converted into shingles, squares for broom and mop handles, &c. Every week 12,000 logs, ranging from 12 to 16 ft. long, and 11 to 13 in. diameter, are passed through the mills, which run throughout the night as well as the day. The workmen are divided into two gangs. The first starts working on Monday at 1 a.m., and continues up to 8 o'clock, at which time the second appears on the scene. These men work up to 4 o'clock in the afternoon. The first gang then reappears and works until midnight. This process is repeated throughout the week, and it amounts to this—that the gangs work alternately one day sixteen and the next eight hours; the men are paid by the piece. Messrs. Hall Bros. & Co., in addition to utilising the water power for driving their mills, also keep going by it a quantity of dynamos which supply electric light to the mills, and also to the city of Quebec. I understand that Messrs. Dobell, Beckett, & Co. have purchased the past season's output of these mills. The logs cut up consist entirely of spruce. Here, as at Waubaushene, the waste is very great, each saw, without exception, taking out three-eighths of an inch of sawdust.

SUCCESSFUL MANAGEMENT

A superintendant who has charge of a factory employing a large number of hands, writes as follows to the *American Machinist*:—Frequently of late I have been requested by a number of managers, to tell the secret of my success in shop management. It is a hard question to answer, but I will in a simple way through your paper try and explain how I manage the factory of which I am superintendent. When I first took charge I found everything out of joint, and such a thing as system utterly unknown.

The first few days I let things go on in the old way until I became acquainted with the men and the men with me. I then set about to bring order out of chaos. My first step was to discharge every man who I found unwilling to submit to the new order of things. The first man discharged was the engineer. He had done as he pleased so long that he had an utter contempt for law and order. On finding himself locked out of the factory for disobedience he kicked the door down. A few more discharges followed, which proved sufficient to convince the men I meant business.

I then divided the factory into five departments, picking out in each the brightest fellow to act as foreman. In each department I put a responsibility upon each man, that he might feel himself of some importance. I interested myself fully in all things transpiring in each department. When I arrive in the morning I am very careful to visit each man at his post and say good morning. I ask after those absent and visit the sick. At night I place myself so all have to pass me and so good night to each.

I have at all times treated every one like a gentleman What is the result? Every man is doing his duty. The factory is turning out more goods with fewer hands. We have a place for everything and everything in its place. The factory is clean, and I feel that I have the respect of every man about the place. I think then the secret of my success in shop management is

"Do unto others as you would have others do unto you."

WOOD-WORKING PATENTS.

The following list of patents relating to the wood-working interests, granted by the U.S. Patent Office, up to Nov. 25th, is specially reported by Franklin H. Hough, Solicitor of American and Foreign Patents, 925 F. street N.W., Washington, D.C., who will furnish copies of patents for 25 cents each.

352,976—Planing machine.—J. P. Hoyt, Aurora, Ill.

353,109—Saw drag.—C. W. Wright, Democracy, Ohio.

352,242—Saw gage.—O. E. Williams and J. R. Brewster, Windsor, Vt.

352,937—Saw-handle.—G. E. Siebler, Dayton, Ohio.

353,260—Saws. Wheel for band,—G. M. Hinkley, Milwaukee, Wis.

352,988—Wood-polishing machine.—A. Bridgman and J. Challoner, Omro, Wis.

353 302—Lathe. Turning,—S. W. Goodwin, Toledo, Ohio.

353,530—Saws. Guide-roll for band,—G. S. Black, Indianapolis, Ind.

353,385—Wood-working machine.—J. Gassey, New York, N. Y.

353,539—Saw-tooth. Insertible,—E. S. Snyder, Snyder's Mills, W. Va.

HISTORY OF THE SAW-MILL.

HOW surprised I was on seeing in a museum, a long time ago, such things as scissors, seal rings, necklaces, and pairs compasses, that were taken from Egyptian tombs 3,000 years old!

But, after all, men were men 3,000 years ago, and women were women. They had the wants, the needs, the vanities of men and women, and they had brains not unlike our own to supply them.

The most boastful Yankee (not that Yankees are more boastful than other people) in some of the rooms of the British Museum is obliged to confess that the ancients originated a great many good notions which we moderns have only improved upon.

For instance, there are few tools more ancient than the saw. All the ancient nations appear to have had it; certainly the Hindoos, the Egyptians, the Greeks and the Romans. The saw may have existed even before there were any men on earth.

There is a creature called the saw fly, with the saws in its tail, which is actually used for sawing the stems, leaves and fruits, wherein its eggs are to be deposited. There is also a saw-fish, the long snout of which is a saw. It is said also that the original inhabitants of the Island of Medeira found a ready-made saw in the backbone of a fish.

The Greeks had a pretty story attributing the invention of the saw to the accidental finding of the jaw-bone of a snake by one Talus, who used it to cut through a small piece of wood. Being a slave, and finding that this jaw-bone eased his labor, he made a saw of iron, and thus gave mankind a new and most valuable tool.

The ancient saws differed from ours in two ways. The teeth were so arranged that the cut was made by pulling instead of pushing; and the teeth, instead of being set one to the right and one to the left alternately, were set so that ten or a dozen in succession were slanted one way, and the same number the other way.

The ancients have several varieties of the implement. The Greeks, for example, had cross-cut saws for two men, also saws for cutting marble into slabs. And they had a kind of tubular saw for hollowing out a marble bath-tub, similar in principle to the method now employed.

Among the pictures uncovered in the buried city of Herculaneum there is a representation of two genii sawing a piece of wood on a carpenter's bench very much like ours and using a saw with a wooden frame similar to those now employed. Still more strange, the frame saw tightened with a rope and stick, such as our street wood-sawyers use, was probably as familiar to the Romans as it is to us.

A saw-mill, however, by which wind, water or steam is made to do the hardest part of the work, was not known to any ancient nation.

Sawing by hand, next to digging a stiff clay soil, is about the hardest work that men ordinarily have to do. It is therefore not surprising that our ease-loving race began to experiment a good while ago with a view to applying the forces of nature to the performance of this toil.

A learned German investor who has investigated the subject very thoroughly states that the first trace of saw-mill yet discovered is in the records of the German city of Augsburg, for the year 1337.

The reference is slight, and does not fix the fact with certainty. But there are two saw-mills near that city, which are known to have existed as far back as 1417, and they are still used.

Before that valuable invention, all boards and planks were split with wedges, and then hewn to the requisite smoothness with the axe.

The splitting of boards is still practiced in remote settlements, as I myself have seen, and it is recorded of Peter the Great, of Russia, that he had much difficulty in inducing the timber cutters of his empire to discontinue the method. At length he issued an edict forbidding the exportation of split planks. Even in Norway, covered with forests as it was, there was not one saw-mill before 1530.

Nowhere in Europe, it appears, was the introduction of the saw-mill so long resisted as in England. In 1663 a Hollander erected one near London; but it brought upon the poor man such an outcry and opposition that he was obliged to abandon it.

The sawing of timber by hand furnished occupation, at that time, and long after, to large numbers of strong men.

In every town there was saw pits, as they were called, for the convenience of the sawyers, one of whom stood at the bottom of the pit and the other on the log.

We can easily imagine that when every beam, plank and board, thick or thin, had to be sawed by hand, the sawyers must have been a formidable body, both from their numbers and their strength.

After the failure of the Dutchman in 1663, there was no serious attempt to start another saw-mill in England for more than a hundred years.

In 1767 an English timber dealer of large capital built a saw-mill to be moved by the wind. It was thought to be a great and difficult enterprise, and it attracted much public attention. Some years before an author had explained the advantages and economy of saw-mills; then the society of arts gave the scheme of building one their approval, and, finally, the mill was actually built by an engineer who had studied the saw-mills of Holland and Norway.

No sooner was the mill complete than the sawyers assembled in great force and tore it to pieces. The Government compensated the owner for his loss, as was just. Some of the rioters also were convicted and imprisoned.

A new mill was then built, which was allowed to work without molestation, and proved so profitable that others were soon introduced.

In no part of the world, probably, has the saw been more minutely and curiously developed than in Great Britain, where they have saws so fine as to cut diamonds, and circular saws nine feet in diameter and a quarter of an inch thick.

They have also veneer saws so accurately adjusted as to cut 18 slices of veneer from a rosewood plank an inch thick.

In London they will put a log of mahogany upon the mill and cut it into slices so thin that the sawdust weighs more than the veneer.

Yankees have beaten this performance. They take a piece of mahogany or rosewood, soften it by steam, and cut it into veneers with a knife, without making a grain of sawdust.

Daniel Webster tells us that his father had a saw-mill after his removal to New Hampshire, at the source of the Merrimac river.

Daniel, who was by no means fond of labor at any part of his life, liked nothing better in his boyhood than to attend this saw-mill, because when he had put his log in position and started the saw, he had 16 good minutes for rest or reading before the business required further attention.—*Journal of Progress.*

CANADIAN PATENT LAWS.

Recently, at a meeting of the Inventors' Institute, held in London (Eng.), Mr. Henry F. Coombs, of St. John, New Brunswick, read a paper on "Canadian Inventions and Canadian Patent Laws." He stated that Canadian inventors were a numerous body, and their number was rapidly increasing. In the year 1885 the Canadian Patent Office issued 2,200 patents, the official fees received amounting to $69 000. From this had to be deducted $10,000, showing a net profit of $59,000—certainly a pretty penny to collect from people for using their brains. In Canada the cost of a patent was about $20 for five years, this being the Government fee. The patent could be continued for ten years longer by paying $40. The money was payable in instalments, upon the failure of any of which the patent would lapse. The total duration of a patent was fifteen years. The agents' fees were all they could get, but the ordinary charges were $40 to $50 inclusive of Government fees and drawings, models being required. The business had out-grown the facilities of the department, which required reorganization. Their patent office was organized when the Canadian patents aggregated a few hundreds annually. The department was at present an appendage of the Department of Agriculture. New accommoderation was required for models deposited, at present models costing scores of dollars each being stacked like lumber A room assigned for such a purpose would be of value as part of a museum where the progress of art could be practically illustrated. Previous to the federation, each of the older provinces had its own separate patent law, but in the year 1872 a general Act was passed, and this, with the amendments of 1873-4-5 and 1883-4, made up the existing patent laws of the Dominion. He considered that the later amendments were not in the interests of inventors. Patents were issued only to inventors or their assigns. Provisional protection was secured for incomplete inventions by the issue of *caveats*. This was a secret document and was good for twelve months, conditional on no application being made for a patent for a similar invention, in which case a notice was issued to the holder of the *caveat*, calling upon him to perfect his invention, in three months, in order to obtain the benefit of priority. Canadian inventors complained that some parts of their patent laws were unjuet to them, and they claimed the repeal of such parts on the ground that the State could not afford to deal unfairly with any of its citizens. He then quoted extracts from the Canadian Acts on the subject, in justification of this remark. He stated that, according to Canadian law, if a promissory note given for an invention did not contain on its face the intimation of that fact, the vendor of the invention was liable to a term of imprisonment not exceeding twelve months. In conclusion, he advocated the unification of the principles of the law of patents throughout the empire, so that English inventor should be able to say that his patent was his own wherever the flag flew.

NEW BRUNSWICK WOOD EXPORT.

A very considerable falling-off in exports of lumber and timber from New Brunswick appears by the comparison of shipments in this year and the like period of former years made by the St. John *Globe* of the 9th Oct. The total figures are this year 108,909,416 feet as compared with 126,497,856 feet last year. The falling off in shipping is represented by twenty-seven vessels and 21,000 tons. One of the features of the year's business is the decrease in the number of steamers coming here for deal cargoes. While twenty three steamers of 32,451 tons cleared in 1885, only seven of 6,864 tons have taken cargoes this year—a circumstance due, of course, to the exceedingly low rates that prevailed during the summer. By the tabular statements of the quantities sent to various ports it is seen that Liverpool, as usual, retains the first place as a market:

SEASON 1886.

Port.	No. of Vessels.	Tons.	Deals. Sup. feet.
Liverpool	44	51,098	43,541,657
London	4	4,163	1,739,566
Bristol Channel	22	19,173	17,807,121
Ballyshannon			
Belfast	5	4,810	4,338,776
Barrow	2	1,981	2,136,891
Cork	8	4,576	4,471,189
Coleraine	2	565	603,713
Dundalk	4	1,365	1,592,756
Dublin	7	4,876	4,540,702
Fleetwood	7	4,740	3,907,589
Galway	3	1,460	1,439,136
Glasgow	2	1,262	772,318
Llanelley	2	765	708,208
Limerick	3	1,819	1,687,000
Londonderry	5	3,222	3,032,378
Queenstown	3	2,093	2,111,421
Sligo	3	996	1,098,212
Tralee	2	863	886,654
Continent	9	5,201	4,795,521
Africa	3	2,288	2,169,036
Other ports,	14	6,253	5,511,572
Total	154	123,449	108,909,416

Fifteen other ports received one vessel each, whose aggregate tonnage was 6,253 tons and their cargoes reached 5,511,572 feet. The names of the shippers were, in order of amount, A. Gibson, R. A. & J. Stewart, W.M.Mackay, Guy, Bevan & Co., Geo. McKean, S. Schofield, Knight & Co., C. Hamilton & Co.

As to square timber, there has also been a falling off, the export of birch being less than half the quantity sent last year. The figures are as follows:

Shippers.	1886. Tons Birch.	Tons Pine.	1885. Tons Birch.	a
W. M. Mackay	2,156	1,614	8,822	ri-
S. Schofield	1,265	202	3,394	ous
A. Gibson	1,056	8	7	m-
R. A. & J. Stewart	11	76	....	ide
G. McKean	8	....	....	nd
	5,496	1,800	12,224	He
Ports.				d
Liverpool	3,939	1,109	10,487	2,
Avonmouth	....	76	....	...
Carnarvon	501	....	800	....
Crookhaven	....	....	363	....
Dublin	125	....	....	....
Fleetwood	400	706	....	658
Glasgow	512	9	....	....
Hare Island	....	....	7	....
Queenstown	....	....	563	....
Wexford	8	....	4	....
Continent	11	....	....	....
	5,496	1,900	12,224	2,973

The *Globe* ventures the opinion that the shipment for the remainder of the year will be comparatively light, and the above proportions between the two years will probably be maintained.

In 1885, the number of vessels was 181; tonnage 144,803 tons, carrying 126,497,000 feet.

Protection Against Mill Fires.

We find, upon examination of the "record of fires in the United States," that the largest ratios of losses to premiums received are upon saw and planing mills. This at once to thoughtful minds presents the question as to how to remedy and prevent this great destruction of property. The trouble has been in most cases the great outlay of money necessary upon the part of manufacturers of lumber for an extensive fire protection plant.

A new company—the Manufacturers's Fire Equipment Co., of 155 and 157 Broadway—has been organized to fill and cover this increasing want. They agree to equip extensive manufacturing properties with all the appliances and devices known to skilled mechanics and experienced underwriters as will control any fire in its incipient stages. They rent this equipment to mill owners. They contract for insurance, also, and in most cases the rent of the equipment and the insurance combined does not cost any greater sum than is now paid by the manufacturers for insurance only.

Another feature combined with this is the careful and complete inspection at stated periods by expert inspectors, so that cleanliness, order and care of management can be guaranteed. After ten years, this equipment becomes the property of the manufacturer absolutely, and he is released from all further obligations to the Equipment Company. This seems so fair and practicable that every leading manufacturer or worker in wood should avail himself of the advantages offered.—*New York Lumber Trade Journal.*

THE CANADA LUMBERMAN

DEVOTED TO THE LUMBER AND WOOD WORKING INTERESTS OF THE DOMINION.

PUBLISHED MONTHLY BY

A. G. MORTIMER, PETERBOROUGH, ONT.

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Advertisements intended for insertion in any particular issue should reach the office of publication at least six clear days before the day of publication, to insure insertion.

The CANADA LUMBERMAN is filed at the Offices of MESSRS SAMUEL DEACON & Co., 154 Leadenhall Street, London, England, who also receive advertisements and subscriptions for this paper.

Our Readers who write to Advertisers in this Journal, will oblige both the advertiser and Publisher by mentioning the "Canada Lumberman."

PETERBOROUGH, ONT., JANUARY, 1887.

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UMBERMAN congratulates Mr. Bronson, of Ottawa, on ion to the Local Legislature.

Canadian contemporary, the LUMBERMAN, has donned of green, and appears to be flourishing like the green ee under Editor Mortimer's management.—*Lumber rld*, Buffalo.

THE trade outlook in England shows no signs of improvement, the chief topics of interest being failures, both actual and prospective. This state of affairs unfortunately exists not only in London, but also in Liverpool, Glasgow and elsewhere.

WE direct attention to the new advertisement of H. W. Petrie, of Brantford, Ont., which will be found on back of cover. Mr. Petrie is well known as a dealer in new and second-hand machinery, and can supply the wants of everybody from a needle to an anchor, at extremely low prices.

THE motion of the publishers of the *Northwestern Lumberman*, of Chicago, for an injunction against *The Timberman*, of the same city, has been dismissed by Judge Tuley. The court wisely held that there was no ground for interference. We heartily congratulate *The Timberman*, and hope that it will enjoy a prosperous New Year.

THE outlook for business among the lumberman of the Ottawa district during the present season is of a most satisfactory character, and if the fact that more lumber was sold during the past year for the United States market, than has ever been sold during the same period in the past, can be accepted as a criterion, the business done will certainly be a source of envy to other lumbering centers, whether Canadian or American.

MESSRS. C. J. WOOD, of H. H. Gordon & Co., and Geo. W. Hotchkiss, Secretary of the Chicago Lumberman's Exchange, have recently returned home from a trip to British Columbia, It is reported in one of the coast papers that these gentlemen have arranged to purchase a large body of timber west of the Rocky Mountains, for an eastern syndicate. The statement is probably true, as the parties named do not deny it. They speak very highly of British Columbia.

IT is stated that the American Exhibition, London, 1887, will open on May 2nd. A large force of men are at work, and a quantity of material is on the ground at Earl's Court. The management are assured of a larger number of desirable exhibits than they can well handle. The original scheme of the exhibition, if well carried out, will, in fact, place before the British public quite as many subjects of interests as was the case in the Indian and Colonial Exhibition, and it is to be hoped that the great American show will prove popular.

MR. DANIEL C. MAGUIRE, of Montreal, one of the largest shippers in the Dominion, has assigned, and called a meeting of his creditors. The liabilities are half a million dollars. The principal creditors are, Bank of Montreal, Merchants Bank, Quebec Bank, Bank of Ontario, People's Bank, Senator Ross and Charles Sampson. The firm owns 22 vessels engaged in the lumber trade worth over a million dollars. The trouble is stated to be due to the over doing of the lumber and shipping business of the river Platte. The failure has caused great excitement in financial circles.

"A MAN out West bought a bedstead, the wood of which was so green that one warm spring day it broke out all over with little groves of waving branches. In autumn the children picked the chestnuts from the side pieces, and the next spring tapped the headboard for maple sugar." We have never had reason to doubt the veracity of editor Van Fredenburg of the *Lumber World* until now, but after reading the above item our good opinion of him has dropped below zero. How any man after writing the above can ever expect to play on the "harp of a thousand strings" is more than we can understand.

IT is particularly pleasing to us to note the satisfaction expressed by the friends and patrons of this paper throughout the Dominion and our valued contemporaries both in Canada and the United States, with regard to the improvements which we have already made in the LUMBERMAN. What we have done has simply been an initial step towards still more extensive improvements. The typographical appearance of the paper is by no means equal to what we intend making it, and we hope by the next issue to present the paper in an entirely new dress of type. We have undertaken to make the LUMBERMAN a worthy representive of the great lumber industry of Canada, and by the assistance of the trade we hope to have our ambitious fully realized.

NEW railway projects are of almost daily occurrence in Canada at the present time. Every new point that promises business for a road if being sought out, and at the rate at which rail-laying is going on at present, it will not be long before our railway system will be as complete as a spider's web. Nothing could be more desirable for lumbermen and other tradesmen than good railway facilities. It will not only open out new and desirable sections of country, but will tend to reduce the high rates charged for transportation now existing. No matter how strong financially any company may be, when keen competition exists the tendency of rates is downward. Not only are we in need of reduced freight rates but also in passenger traffic, and it is only a matter of time before this step in advance will be made.

DOMINION Surveyor-General Deville, speaking of the result of the surveye in British Columbia, says the resourses of the Province have been greatly underestimated; that the timber wealth is enormous and the extent of land adapted for agriculture greater than has been heretofore supposed. He has a high opinion of the provinces as a fruit growing centre. Of Banff, the site of the new national park, he says the scenery is unrivalled; and he thinks the Canadian Pacific railway the most stupendous monument of engineering skill which the world has yet seen. This is loud talk, but it cannot be much too loud to express the actual facts. The climate of British Columbia is greatly in its favor, and must aid in attracting capital and industry to assist in the development of its agricultural, mineral and forest resources.

A CORRESPONDENT asks the *Iron Trade Review*:—"What is the correct spelling of that indispensable little tool, called the monkey wrench? What had the monkey to do with it anyhow?" And in reply the editor of that journal says: "Capital M-o-n-c-k-e-y, so named from the inventor, Charles Monckey, and not from our Darwinian ancestor. We hope the statement in the papers is not true, by the way, that Charles Monckey is living in poverty, in Brooklyn, N. Y., while parties who bought his patent for $2,000; are making millions of dollars every year. At any rate, he ought not to have the additional indignity of a misspelling of his invention cast upon him, as was recently done by a well-known machinery paper that ought to know better. Even Webster's Unabridged does not appear to know the derivation of the word."

TO EVERY one sending us $1.25 we will mail to their address THE CANADA LUMBERMAN for one year, and a copy of "Scribner's Lumber and Log Book," which is a work every lumberman and wood-worker should have. It gives tables for finding the correct measurement of scantlings, boards, planks, cubical contents of square and round timber, saw-logs by Doyle's rule, stave and heading bolt tables, cord wood, prices of lumber per foot, speed of circular saws, weights of wood, strength of rope, felling of trees, growth of trees, tables of wages by the month, price of standard logs, interest tables, etc., etc., to which is added 60 pages of new tables, making 160 pages in all. It is the most complete book of the kind ever published. It is worth many times the price of the subscription, and no lumberman or wood-worker can afford to be without it. This offer is good for a limited time only, and should be taken at once.

THE American consul at Ottawa, Ont., furnishes the following summary of the values of the various products of the forest exported to the United States from the Ottawa consular district for the fiscal year ending June 30, 1886: Sawed pine lumber, $2,045,809; box shooks, $46,428; lath, $26,456; railroad ties, $11,604; pickets, etc., $25,751; match blocks, $8,450; telegraph poles, $2,033; hemlock bark, etc., $4,500. Total export, $2,225,000. In addition to this, 35 per cent was used for home consumption. The total amount of lumber manufactured by the Ottawa mills for the year is placed at 288,000,000 feet. The principal destinations of the consignments sent from Ottawa to the United States were Burlington, Albany, New York and Boston. A large proportion, however, of the lumber sent to the United States has been exported from thence to South America, the West Indies and Africa. The square timber trade, which at one time was so largely carried on along the tributaries of the Ottawa river, has been almost entirely abandoned, nothing having been done in that way during the past year.

THIS re-sawing business is getting to be a great thing. A New York correspondent of a prominent lumber journal writes: Machinery men who are constantly devising labor-saving and product-increasing machines will soon have to stand a heap of cussing from the lumber dealers who have heretofore sold box makers one and one-fourth inch stuff. The box manufacturers have all along bought one and one-fourth inch pine to re-saw into one-half inch, and as experiments with re-sawing machines using thin saws have proved entirely successful, it has been found that Canada pine boards sawed plumb inch, as is the custom, can be re-sawed and produce lumber fully as thick as formerly obtained from one and one-fourth inch stock re-sawed on an old style machine. It is also claimed that Michigan pine boards can be re sawed and produce stock 1-16 inches in thickness, which for many purposes is thick enough. An investment of say $1,000 in a thin re-sawing machine will more than save its cost in a year in any ordinary box factory.

WE have pleasure this month in drawing attention to the new advertisement of The Polson Iron Works Co., of Toronto, (Limited), which appears on third page of cover. This company is a consolidation of the well-known firms of Wm. Polson & Co., Toronto, and Thos. Worswick & Co., Guelph. They have recently opened up in their new and extensive premises on the Esplanade, foot of Sherbourne street, in which they have located some of the finest iron and wood-working machinery to be found in the Dominion. The main building, which is constructed of corrugated iron throughout, is 240x50 feet in size, and contains two stories. This building is divided into six departments: machine shop; blacksmith, boiler, boat-building, pattern and pipe shops. In addition to this there is a large wareroom, two stories, 70x25 feet. The manufacture consists of the "Brown" and "Allan" automatic engines, steam yachts and launches, vertical, hoisting and marine engines, a large variety of slide valve engines, particularly constructed for saw-mills; iron tools and boilers of all descriptions; etc. The company claim that their "Brown" automatic engine, for economy of fuel, durability, regularity of speed, and other features, surpasses that of any other. While visiting these works we were shown a number of elegant yachts which this firm have been building, which clearly indicate that the company are experts in this important branch of their business. In addition to the manufacture of the class of machinery above referred to the company buy and sell all classes of second-hand machinery. Saw and planing mill owners in particular, requiring anything in this line, will be amply repaid by visiting these works.

A FEW years ago trade publications in the Dominion were comparatively scarce, but with the wonderful strides made in all classes of manufacture, trade journalism has become almost and indispensible accessory to each and all of the leading branches of industry. One by one journals of this nature have been established, and although in the past it has been up-hill work for the publishers to impress upon the minds of manufacturers and others their duty towards publications devoted to their respective branches of trade, and the profits which would naturally accrue, by extending to such a liberal patronage, still this difficulty, to a certain extent at least, has been obviated, and the manufacturer and dealer in Canada, as in the United States, now realize its importance. In the matter of advertising, manufacturers in the past have depended almost entirely on the daily press as mediums through which to introduce their wares, but while this, to a limited extent, has proved beneficial, they have paid extravagant rates for a large circulation, of which seven-eighths, possibly, would pass into the hands of persons in no way interested in the class of goods they are offering for sale. But this is by no means the case when class journals are patronized. Each paper has a separate and exclusive field to cover; every man who receives such is directly or indirectly interested in *everything* its pages contain,

both reading matter and advertisements. Should they be in need of new machinery, or new appliances, they will naturally turn to the journal specially devoted to their interests, and the man or firm who manufacturers such—and have business enterprise enough to make the fact known—is the one who is benefitted thereby. As an instance of the success which has already been achieved by technical journals we have pleasure in mentioning that handsome monthly, the *Dominion Mechanical and Milling News*, of Toronto, the only objection to which is its unpardonable long name, our italic letter being the sufferer in this case. Mr. C. H. Mortimer, the publisher has, since assuming control of this paper, materially improved it in many respects. Millers and manufacturers have reason to be proud of their organ, and at the extremely low price of one dollar per year none should be without it. Other similar journals in Canada are also entitled to a large measure of credit, and we trust that as time rolls on, the trade press of Canada will be generally recognized in every calling, as it has been for years in our sister country across the border.

CONCURRENTLY with the advent of the New Year, the first issue of the seventh volume of the CANADA LUMBERMAN is placed in the hands of its constituency of readers. For the first time since assuming the editorial management of this journal it is our privilege and pleasure to extend a hearty, friendly New Year's greeting to each and all of our readers and friends, sending our best wishes for their continued happiness and prosperity. Since the commencement of 1886 our readers has more than doubled, and the many tokens of confidence and appreciation we are receiving from one end of the Dominion to the other, stimulate us in our work, the duties of which we hope to perform for many years to come. By degrees we are becoming familiar with the requirements of the trade, and any deficiency of the past, we hope to make up for in the future. To successfully conduct a paper as the LUMBERMAN should be conducted, every one who desires to see the great timber interests of Canada prosper, should do his share towards furnishing information to the editor for publication. We are pleased to note the remarks of a correspondent which appear in another column, anent this matter, and also to perceive that others have also supplied valuable matter for the current issue. No one need hold off for fear of encroaching on our space. We want *everybody's* opinion, and will see that due prominence is given to all matters which have a bearing on the trade. The CANADA LUMBERMAN is the organ of no individual man, clique of men, or company, and is therefore prepared to discuss all questions independently and fearlessly, with regard only to the well being of the great industry, the cause of which it aspires to espouse. The year just closed has, on a whole, been a fairly prosperous one for Canadian lumbermen. There certainly have been times during this period when our lumbermen have realized a stagnation of trade, but everything considered the season's operations has been pretty generally encouraging. The unsatisfactory condition of the lumber market in Europe for some time past has materially lessened the shipments which would have been made from Canadian ports had a more active demand existed. What the outcome of the depression in Europe will be is hard to determine, but from our English exchanges it would appear that with the opening of spring a new impetus will be given trade, and business generally will gradually pass from under the cloud which now hangs so threateningly over the whole country. Such a change would be hailed with delight by Canadian lumbermen, and it is to be hoped that conjecture may ere long change into reality, and that the year 1887 may be remembered in the future as one of the most prosperous in the history of the trade.

EXCHANGE ECHOES.

Contemporary Opinion on the Various Matters of Interest to the Trade.

The Wood Worker.

It is painful to the lover of nicely manufactured lumber, to visit some, a great many in fact, of the country hardwood saw mills, and witness the manner in which good logs are butchered. The holders evidently hold the mistaken opinion that no brains are needed in this business.

The Chicago Timberman.

There is considerable complaint in northern Maine of the operations of Canadian lumbermen in Aroostook county, that state. They cut lumber on the St. John waters, float it down to New Brunswick mills, where it is manufactured, and thence shipped back to this country free of duty. The forests of Aroostook are thinned out, while foreigners reap the profits.

Lumber World, Buffalo, N.Y.

Market reports and trade advices combine to show a general tendency to advance prices and the latter show that the tendency is based solidly on a large business. Supplies are not excessive and demand is large. Prices remain firm and inquiries are sufficiently numerous to give hope for a good business far into the winter. There is not what might be called a "boom," nor is a boom desirable. Steady growth is far preferable, and that is now the condition of the lumber trade.

The Wood-Worker.

A lumber journal calls attention to the danger which is supposed to lurk about the band saw mill in the shape of very fine dust which is produced by that machine. Attention is called to the fact that fine flour dust, and many other substances when reduced to this state, are highly inflammable and explosive in character, hence, why not wood dust? It is said that two or three late saw mill fires were caused by these very fine particles of wood, set on fire by a heated journal. Whether these claims have been proven or not it will be wise for owners of band mills to see that the mills are kept clean as possible, and the dust all brushed off before leaving them at night. Wetting them down before leaving might be a good idea.

Northwestern Lumberman.

Nearly all the news from the woods is to the effect that the logging season set in a month earlier than last year, and it is generally stated that so far the conditions for cutting and skidding have been excellent. It is hardly necessary to say that these conditions have been fully utilized. No matter how good the market may be next season, there will be plenty of lumber, and probably a surplus. Should the demand from any cause be light, there will be an overstock. So long as the manufacturers are asserting that at the present prices of lumber and stumpage there is little or no profit in manufacturing in many cases, and as the tendency of stumpage is upward, all this disposition to rush logs in is a hard conundrum to solve. If lower prices for lumber rule next year, the manufacturers should not complain. No man should grumble if obliged to lie in a bed that he makes with his eyes wide open.

Northwestern Lumberman

If the fine dust that collects in a band mill is occasionally the cause of a fire why may not some of the mysterious fires in other saw mills be attributed to the same cause? No matter what kind of a saw is used there is a collection of fine dust in out of the way places, and in a circular or gang mill there is no good reason why this dust, under certain conditions, should not be subject to spontaneous combustion the same as though it were in the band mill. Many a mill has gone up in smoke when it was absolutely known that the fire started in the main body of the mill, where no heat or lamp was used or required. One of the conditions which would render dry sawdust liable to ignite spontaneously would be the mixing of oil with it, and this might be readily brought about by the oil being scattered by the force of the machinery. There are men who know how to oil machinery and others who do not. With the former enough is plenty, while the latter are everlastingly droping the oil boxes. When oil is applied too plentifully it drips or is thrown off by the machinery, and why should it not come in contact with the fine dry sawdust when such sawdust is in the way? The theory that the destruction of mills, oftener than is supposed, is due to spontaneous combustion is certainly a tenable one.

COLONIAL WOODS.

(*From Messrs. Duncan, Ewing & Co's. Wood Circular, Liverpool, 4th December*, 1886.

YELLOW PINE TIMBER—The import from Quebec during November has been exceedingly small, comprising only 5,000 feet of Square and 54,000 feet of Waney Board Wood. This has enabled merchants to deal more with their yarded stocks, and the deliveries of both descriptions during the month amounted to 106,000 feet, as against 151,000 during the same period last year. Stocks are very moderate. Three vessels from Quebec have arrived here since the 30th ultimo, and practically the import season may now be considered over. The wholesale transactions during the month comprise a parcel of 1st quality Waney Pine, 17 inches average, at about 23½d per foot ex quay, and 2nd quality, 19 in. average, at 18d per foot ex quay. A parcel of G F A Square Pine, 60 feet average, has been sold at 20d, and a parcel of Miramichi Pine at 13d per foot ex quay. Red Pine Timber—No arrivals and no sales to report. Oak Logs—The export for the month has been only 4,000 feet and the consumption 25,000 feet, as against 45,000 and 73,000 feet respectively during the same period last year. The stock on hand is only about half of that of last year. There is a fair demand for prime wood and prices are well maintained. Ash—The import has been light (2,000 feet), whilst the consumption amounts to 5,000 feet. No wholesale transactions to report. Birch—The import has been moderate and the demand good. Sales comprise a parcel of Quebec, 18 inches average, at 19½d. Elm—A parcel of Quebec has been sold at 22¼d per foot, ex quay. Quebec Pine Deals—The import though light has been quite sufficient for the demand. No wholesale transactions to report. Quebec Staves—No arrivals. Cull Pine have been sold at £45 and Cull Puncheon at £12 10s per mille.

BARK Vancouver, loaded with spruce deals by Messrs. King Bros. for Londonderry and wrecked at Manicougan, is breaking up, her cargo floating about in all directions.

MR. GARRET, proprietor of a mill at Ilfracombe, ran against the lever in his mill and was thrown on the large circular which severed his left arm completely off near the shoulder. His body was also gashed in several places.

THE Charlemagne Lumber Company at its annual meeting in Montreal elected the following directors:—Messrs. Robert Reford, D. W. Ross, A. McLaren and J. Dillon. At a meeting of directors afterwards Mr. Reford was chosen president and Mr. Dillon secretary and treasurer.

PERSONAL.

[Contributions from or concerning our friends and patrons are freely welcome to this column. The name of the sender must always accompany such notices.]

A prosperous new year to one and and all of LUMBERMAN readers.

Mr. J. T. Lambert, lumberman, of Ottawa, is likely to be elected alderman for one of the wards of that city.

Mr. W. H. Rowley, local manager of the Merchants' Bank, has accepted the position of manager of the establishment of Mr. E. B. Eddy, at Hull.

Henry Fox, proprietor of the large planning mills on King street, west Toronto, was found dead in his arm chair on Christmas morning, where he had been left sitting when the family retired the previous night. His death is attributed to a stroke of paralysis. He had been in excellent health. He was 61 years of age.

MR. JOHN BOLTON, formerly of Ottawa, who has been contracting in the lumbering business and railroading at the Pacific Coast for years, returned to the Capital during the past month. Mr. Bolton was in the employ of Mr. J. R. Booth, some six years ago, after which he left for the Pacific Coast, and has been fortunate enough to build up a successful bussiness.

Hon. J. G. Thorpe, of Eau Claire, Wis., president of the Eau Claire Lumber Company, was at Winnipeg, Manitoba, last week, with some other Chippewa capitalists. Mr. Thorpe is interested in a large lumbering operation on Bow river, in the province of Alberta, where he has been looking over the improvements made, and figuring on the business to be done next year.

OBITUARY.

The many friends of Mr. David Moore, the well known lumberman, will grieve to learn of his death, which occurred at his residence, River View, on the Aylmer Road on Thursday Dec. 7th. On the Friday previous he was afflicted with a paralytic stroke, the fourth of the kind which he had experienced. For six days he lingered on in a semi-unconscious state, attended by Dr. Henderson and surrounded by the members of his family, who watched day and night at his bedside to the last. Mr. Moore was born in Hull 62 years ago, and his interests have ever since been centured in that locality. He leaves a large fortune, acquired by dint of perseverence and business ability. From his earliest years he had been indentified with the lumber business, and at the time of his death was one of the oldest, if not the oldest lumberman in the country. At an early age he succeeded his father, David Moore, sen., in the lumber business established by him, and developed its restricted operations to an enormous extent. One rule of his business career, and one to which he attached great importance, was to deal entirely on a cash basis, and he was wont to pride himself upon the fact and point to it as one of the secrets of his success. He owned and operated extensive limits upon the Ottawa, Petewawa, Desmoines, Mattawa and Deep Rivers, and delt exclusively in logs and square timber. In his transactions with his fellow merchants he gained their universal respect and admiration. Some twenty years ago he built River View, his handsome residence on the Aylmer Road, about three miles from the city, and there, surrounded by every means of comfort, he dispensed hospitality with a generous hand. In 1854 he married Miss Catherine Cutler, by whom he had six sons and one daughter, all of whom survive their parents, Mrs. Moore having died about four years ago.

Deceased's funeral obsequies took place on the Sunday following his death, and the remains consigned to their last resting place in the Hull Cemetery. From about two o'clock till the conclusion of the ceremonies, the Aylmer Road was crowded with people. At the deceased gentleman's residence at Riverside, all the space about the house was occupied by carriages. The house, which was thrown open, was filled with friends and acquaintances, anxious to get a last look at the face of their deceased friend. The room in which the casket lay was beautifully ornamented with flowers, and the handsome coffin was buried beneath wreaths of beautiful flowers presented as tributes to the memory of the deceased. Conspicuous among the floral offerings was a large and magnificent pillow of flowers from the sons of the deceased, upon which was worked in words "Our Father." Among those who attended the last rites were noticed nearly all the lumbermen in the Ottawa district, besides representative men from the cities of Hull and Ottawa, and from the County of Ottawa. About 2.30 o'clock the service at the house was conducted by the Rev. Frank Smith, pastor of St. James Church, Hull, at the conclusion of which the remains were borne to the hearse by the pall bearers, Messrs. Hiram Robinson, E. B. Eddy, G. B. Pattee, J. R. Booth, C. Smith, R. McConnell; W. R. Thistle and F. H. Kirby. The cortege then moved to Hull, the first four carriages were occupied by the pall bearers and immediately following the hearse came the carriages occupied by the sons and near relations of the deceased. The funeral procession was over a mile and a half in length.

General News Notes.

There are 1200 men engaged in the Gilmour shanties.

The product of the Minneapolis saw-mills for 1886 was 282,636,091 feet.

Messrs. Butchart, Bros. & Co., lumber dealers of Rimouski, have assigned.

About 300 miles of a Kippewa timber limit was sold recently at $1,000 a mile.

J. Millon Williams, a pioneer miller and lumberman, of Arden, Ont., is dead.

By an explosion of dust in a planing mill in Cambridgeport, Mass., six men were fatally burned.

A quantity of logs were caught by the cold weather, in the St. John river, N. B., and frozen in.

There are about 150 planing mills and other shops making wood finishing materials in Chicago.

A St. John, N. B., paper informs us that the big raft at Joggins is now conceded to be a failure.

The total cut of logs in the Duluth, Minn., district for the present winter is estimated at 140,000,000 feet.

L. P. Morin's sash and door factory at St. Hyacinthe, Que., was burned Dec. 2. Loss $18,000; insurance $3,500.

It is estimated that nearly 10,000,000 feet of lumber will be required at Duluth for elevator building before next fall.

F. Curran, Quebec, left a lumber camp in Auckland township, cut a hole in the ice with his axe, and deliberately plunged in.

Operations in Messrs. Bronson & Weston's shanties are now in full blast, and they report that this is a most favorable fall for log making.

A woman works in a Kalamazoo (Mich.) cooper shop who can make as many barrels in a day as any of the men who work with her.

The Wm. Cane & Sons Mfg. Co., of Newmarket, Ont., recently offered Mr. John A. Sharp, of King township, $1,000 for fifty-eight pine trees.

The first saw-mill built upon Puget Sound was erected in 1851. It was a small water power mill, with a daily capacity of from 8,000 to 10,000 feet.

A plank twenty feet long and nine feet wide, without knot or blemish of any kind, is one of the contributions of British Columbia to the Liverpool exhibition.

Messrs. Hurdman & Co., Ottawa, have made preparations or a much larger cut of logs this season than hitherto, and have already sent 700 men to the woods.

The Parry Sound Lumber Co's steam barge *Lothair* and barge *Corisande* have been frozen in at Port Colborne, where they were run for shelter during a gale.

It is said that Chinamen smuggle opium from British Columbia into Puget Sound towns by concealing it in sticks of timber, which they tow across the line.

The Thayer Lumber Company, of Muskegon, Mich., will put in 10,000,000 feet of hemlock in the vicinity of Herses, Mich., according to local newspaper reports.

W. H. Fraser, late of the firm of Gatliff & Fraser, lumber dealers, Emerson, Man., has gone to Edmonton, where he will go into business with his brother in the saw-mill.

The Conger Lumber Company, of Perry Sound, Ont., recently sent its foreman, Mr. William Beatty, to Alpena, Mich., to study American methods of lumber making.

It is reported that Messrs. Perley & Pattee, of Ottawa, have sold their cut of pine deals and siding for next year to Mr. Cox, of Liverpool. No terms or prices have transpired.

Broad & Sons axe factory, St. Stephen, N. B, has lately received a large amount of new and costly machinery, making their establishment second to none of its kind in the Dominion.

Sales of timber, says a Quebec exchange, are taking place every day, and manufacturers are getting rid of a good deal of stuff. Prices are stiffening, more especially in hardwood, elm, ash, etc.

The feeling has become almost general among the largest lumbermen that it is more profitable to cut logs then to purchase them on contract. This means that the contractor's occupation has almost gone.

It is is stated that the new watch factory at Canton, Ohio, will have one and three-quarters miles of shafting, about 8,000 pulleys, and at least fifteen miles of belting. There will be a handsome order for one or more houses.

The schooner Clara E. Simpson, from Windsor, N. S., for Baltimore, Put into Portsmouth, N. H., November 19, with loss of her foretopmast and jib boom. She sprung a leak in a gale and threw overboard her deck load of 250,000 lath.

John McRae, of Glencoe, Canada, has purchased a tract of pine in the vicinity of Keyes Lake, near Florence, Wis., of Brooks & Pumpelly. He will get out square timber for the foreign market. The timber will be hauled to Florence, shipped by rail to Escanaba, and thence by water to its destination.

A great revival is sweeping over northern New Brunswick. It is said to be unequalled in the history of the provinces.

Advices from New Zealand state that a company has been organized to construct a cable from New South Wales to British Columbia at a cost of $10,000,000. An annual subsidy of $500,000 is expected to be obtained from the colonial and imerial governments jointly.

The Canadian lumbermen cut the cream of their logs into deals for the English market. Deals are three inches thick, ten feet and upward long, and nine inches and upward wide. They are assorted into firsts, seconds, thirds and fourths, and these grades only are exported.

Owing to the fine weather, says an Ottawa despatch, the Montmorency and Chaudiere saw mills are enabled to go on sawing at the rate of about 4,000 logs during the twenty-four hours, the result of which will be that but comparatively few logs will remain over the winter unsawn.

The Parry Sound Lumber Company's schooner, "Jane C. Woodcruff, the wreck of which was mentioned in our last issue, has been abandoned, having been found to be so badly damaged as to be not worth the expense of taking her off the shoal and repairing her. The cargo may yet be saved.

During the past season Ottawa lumbermen have been experiencing great difficulty in obtaining lumber cars and barges for the shipment of their lumber. Large quantities of lumber still remain, and now that shipment by boat has ceased, large shipments are expected during the winter by rail.

Shipments of lumber from the port of Dalhousie, N. B. during the past season, were; 18,615,329 s. f. deals, scantling and boards, 551 tons birch timber, with ash, maple, staves and laths. These were shipped in forty-two vessels whose tonnage was 21,947 tons.

Says a Minneapolis, Minn., journal: Oshkosh sawed 50,000,000 feet of lumber this year against 80,000,000 last year. Where is the man that said the Green Bay district was denuded of its pine years ago? Oshkosh will continue to keep the sash and door trade of St. Paul and Minneapolis demorlized (by railroads,) for the next fifty years.

The lumber shipments from the port of Dalhousie, N. B., during the past season, comprised 18,615,329 superficial feet of deals, scantling and boards, 551 tons birch timber, 83 tons pine timber, 550 tons spruce timber, with ash, maple, staves and laths. The shipments show some increase over those of last year, and not very much difference from those of 1884.

Germany has 34 000,000 acres of forests whose estimated value is $2,500,000,000, and whose annual revenue is $50,000,000. Great care is taken of the state forests. In Russia replanting is systematically carried on at an expense of $500,000 a year. The imports exceed the exports by 2,000,000 tons. Every possible precaution it taken to prevent the wastage by forest fires, so common and so enormous in the United States.

Lumber for sounding boards of instruments is very carefully selected, and air-seasoned for about a year, with six weeks of subsequent kiln-drying in a dry-house at a temperature of not over 120 F. This slow process of drying is necessary for all sounding lumber. After the lumber is planed and edged it is carefully assorted, matched and glued into boards of an average size of four by five feet. The entire boards is generally planed three-eights thick.

On Thursday afternoon, November 25, the schooner "P. E. Young," of Toronto, arrived at Niagara loaded with lumber. Taking advantage of a fair wind she sailed for Queenstown on Friday without reporting to the Customs, and returning on Monday was seized by officers and held subject to the decision of the Customs Department at Ottawa. On Monday evening the captain was told by the collector that he could leave by depositing $100 subject to further decision.

The Canadian Pacific Railway always with the comforts of the travelling public at heart, offer the following very liberal arrangement for Christmas and New Year's holiday travel:—Return tickets at single fare between all stations on its line, Dec. 25th good to return till Dec. 27th, 1886; and on Jan. 1st, 1887, good to return till Jan. 3rd, 1887; and at fare and one third, Dec. 23rd, 24th and 25th and Dec. 30th and 31st and Jan. 1st, 1887, good to return till Jan. 4th, 1887.

During the month of November there were recorded seventeen fires in the United States, each with a loss of $10,000 or over lumber manufacturing mills or factories employed in using lumber largely. Forest fires aggregated a loss of $85,000; chair and furniture factories $105,000; lumber mills $140,000; carpenter shops, sash and door factories $20,000 wagon factories, $25,000; piano factories, $25,000 and planing mills $70,000. These items alone represent a loss of $560,000 for the month, a severe tax on these great industries.

A prominent Saginaw lumberman, a manufacturer for fifty years, than whom there are none more competitent to judge, pronounces the big mill at Duncan, Mich., the finest mill he ever saw, and he has seen nearly all he gilt edged mills in the country. The late Thompson Smith, besides being a master financier, was also a man of great mechanical genius, and in building the big mill much labor-saving machinery was used of of his own design, which is used only by this mill. The Duncan City plant is one of the most valuable in the state.

The Manitoba and Ontario Lumbering Company intend going into lumbering on a very large scale this winter, says a Winnepeg exchange. Their limits are all on the Minnesota side of the boundary, but their mills are situated at Keewatin, whither logs are brought by Rainy River and Lake of the Woods. They will this winter cut probably 15,000,000 feet. Last year it was only 6 000,000, and they have at their mills at Keewatin some 8,000,000 feet of logs.

The past season has been a red letter period for the lumber industry, and the outlook for the coming year is regarded as exceedingly bright. The following is a carefully prepared but unofficial estimate of the cut of the leading Chaudiere lumber men during the past summer: Mr. J. R. Booth, 60,000,000 feet; Messrs. Bronson & Weston, 60,000 000 feet; Messrs. Parley & Pattie, 50,000.000 feet; Messrs. Hurdman Bros., 25,000,000 feet; Messrs. Grier & Co,, 15,000,000 feet. It is reported in lumber circles that Mr. Stewart has purchased the controlling interest in the firm of Messrs. Grier & Co.

The C. P. R. mill, about two miles west of Sudbury, will be kept running all winter, The Company have several parties cutting logs on their limits in the township of McKim. There are two firms lumbering on the Wahnapital River 12 miles west of here. The Emery Lumber Co. have three camps in operation on this stream cutting logs. Their operations will be less than last winter. Timmins Gorman are also operating one camp on this river, cutting logs and timber. On the French River and tributaries there are several new firms, and the business done this season will be much larger than the last season.

No further attempt is to be made to entice the big Nova Scotia lumber raft further into the water. It is being rebuilt. A steam derrick has been erected, and the timber is to be drawn up the shore. The timbers for the ways are to be five feet longer than in the present raft, and the angle of slope for the ways will be increased. The new raft is to be 600 feet long, an increase of 200 feet on the present one, and will be completed in May next. The expense since breaking down has been $4,200 and rebuilding will involve a further outlay of $2,000. Still, it is said, the owners will be able to avoid loss if this new attempt succeeds.

The improved French method of preserving wood by the application of lime is found to work well. The plan is to pile the planks in a tank, and to put over all a layer of quicklime, which is gradually slaked with water. Timber for mines requires about a week to be thoroughly impregnated, and other wood more or less time according to thickness. The material acquires remarkable consistence and hardness, it is stated, on being subjected to this simple process, and the assertion is made that it will never rot. Beechwood prepared in this way for hammers and other tools for iron work is found to acquire the hardness of oak, without parting with any of its well-known elasticity and toughness, and it also last longer.

A case which involves some very interesting points promises to come before the Ottawa courts shortly in connection with the sawdust nuisance in the Ottawa river. The complainant, Antoine Ratte, is a well-known boatman, who purchased property on the Ottawa 22 years ago with the view to make a profitable living out of the renting of boats, &c. Had the river remained in the same condition he claims that he could have more than doubled the value of his property and capital. The saw mill industry, however, has killed off boating, polluted the water and turned the beautiful stream into a stretch of sawdust, slabs, lathe, &c. Ratte says his business has been ruined thereby, and claims $74,300 as compensation. He threatens that unless this sum is paid he will enter a suit for damages against the mill owners.

The shipments of lumber which take place yearly from Ottawa value far up into the millions. The outlook for the coming season is most flattering. All the lumbermen are unanimous in stating that the cut this season will not be below the average, while two expect to double their cut. The amount of lumber manufactured during the past season was in advance of that manufactured during any previous year, and it is clear that the amount manufactured next year will show another large increase. The amount of lumber manufactured by the Ottawa mills during the past season is as nearly as possible 288,000,000 cubic feet. The greater quantity shipped has been sent to the United States, but almost all the coarsest grades were consigned to Montreal for home consumption. The principal destinations of the consignments to the United States were Burlington, Vt., Albany, New York and Boston. Excepting in a few cases where consignments were shipped via Montreal direct to England, but little export trade was done from Ottawa, save to the United States. A large proportion of the lumber sent to the United States has been exported thence to South America, the West Indies, Africa, and other foreign markets. The prices of lumber in the various markets fluctuate according to the freight charged from Ottawa, the lumber being sold there on a basis of about $16 per thousand cubic feet, to be delivered on the cars or barges all freight charges to be borne by the purchaser. During the past season nothing has been done in square timber. Hardwood is not touched by Ottawa lumbermen except occasionally for private use.

THE LOCATING OF MACHINERY.

BY JOHN KANE, "OBSERVER."

OF the many people who purchase machines, there seems to be but few who give much thought to the matter of locating them. They will perchance cast their eyes to the line shaft, and see where they can most easily take out a length, put on a pulley to drive the machine in question, re-couple the shaft, place the belts and start up the machine; or they may select some part of the floor that has the most open space, forgetting all other considerations, and place the machine there. Again, others want a machine to stand at right angles to the line shaft, but not knowing how to lead the belts to the machine, give it up and do what they consider to be the next best thing, which may be entirely unsuited for the purpose intended. In either of these cases, as well as many others, the machines are a continual source of delay and trouble, costing a great deal more time and money to operate them as well as to get work to and from them.

I have seen a buzz or hand planer placed in the darkest corner of a shop, requiring a gas light almost all the time; I have also seen upright shapers so close to a wall that one-half of their work had to be done on the next one, thereby causing delay and extra cost of production. Again, I have known of large planing and matching machines so placed that all the lumber that passed through them had to be handled at least twice as much as it would have been if a little consideration and study had been done on the start.

A great part of the success of some establishments is largely due to the advantageous location of the various machines used therein. Light being absolutely necessary to the production of good work, it should be one of the first considerations. An illustration of this fact is had by comparing the amount of work performed by a man on a machine in good, clear daylight, with that done by the same man, on the same machine, while using gas or other artificial light (electric light is not taken into consideration here). Convenience in getting stuff to and from a machine is another important item. No machine that is tucked away in a corner, or has its surroundings of such a nature that extra exertion and work have to be employed to supply it, can do justice to its maker, operator, or owner; the machine may possibly do as much work but it will be at an extra expense.

Another important feature to be considered in locating a machine is that it should have plenty of room. It is neither pleasant nor profitable to have a saw-table and buzz planer so close together that every time either operator steps back with his work he is compelled to climb upon the other's back, neither is it just the thing to have a board running through a rip-sawing machine strike the mortising operator in the back, until he wishes the saw was at least three or four feet away in his rear. You see there is a good deal of backing to my arguments in favor of ample room. Why, I would give them plenty of room if only for the same reason that Mark Twain invented his scrap-book, viz: to save barrels of profanity.

Finally, a lot of machines should be so placed in relation to one another, that no piece of work would have to pass a machine without being operated on, if necessary. It is poor policy to have a machine operator pass his work clear to the other end of the shop for the next process, and then back to the middle of the shop, and so on through all the processes. I have in my eye an establishment that took lumber in at one end and brought the finished work out at the same door, and I can truthfully say that each piece that was cut up as it entered was carried up and down the whole length of the shop at least three times, and that, too, when there was not the least reason for so doing, as there was plenty of room and light everywhere. I said there was no reason for it; there was: the owners lack of studying and reasoning faculties when he started, and they have developed nothing better yet. After the stuff was sawn into lengths and widths, it would run against a boring machine, around a sandpapering machine, and under an upright shaper to reach the planer, when planed it would go through a like devious path to reach the buzz planer, and so on until it was taken to the finishing room. How they managed there I don't know, as I was glad to get out of the machine room, and considered that I had accomplished quite a feat with my big feet. It is needless to say that other concerns in the same line of business do not fear the competition in trade of such a shop as the one just mentioned. They have no need to; such shops are generally as untidy and wasteful as they are inconvenient. System is one of the fundamental principles of success, and is nowhere more clearly shown than in the locating of machinery.

In contra-distinction to the above class of shops, I would say that it gave me great pleasure to go through a large furniture factory not long since, upon the invitation of the superintendent, with whom I am well acquainted, and know that his great hobby is system. The machinery was so arranged that the lumber went in at one end and door, and out the other, almost as quickly as the boy who went through college in the same manner, with this difference, the lumber showed the results of "going through" by being a finished piece of work. It first went to the cut-off saw, thence to the ripping saw, then through the planing machine, afterwards to the jointing machine, band saw, scroll saw, or sand papering machine, as occasion demanded, but no unnecessary stops were taken, and there was no going back. Once started it went like clockwork, smoothly and without friction. The same organized system extended, as a matter of course to all the different departments, and I can assure that any visitor to that factory will be favorably impressed with the *modus operandi*, no matter if he doesn't know a tenoning machine, from a corn sheller. He will leave the premises with the impression that the brain having in charge the mechanical part of the work, understands the value of a *system* of locating machinery.

Not long since the writer had a part in supplying a factory that had been run on the good old hap-hazard plan, with some new machinery as it was being enlarged. An efficient mechanic who makes such things his special business, was employed to arrange and set the new works.

Look the situation over carefully, he began to dispose of the different machines in such a manner that they would do the most good, but after about two-thirds had been so arranged the owner came into the building and the new order of things was so entirely at variance with the old, that he ordered them changed. Expostulations and explanations were in vain; he must have them something like what they had been for the past fifteen years. The expert would not submit and he left. Well the machines were all re-arranged and two of them were so close together that the men could not work, and Mr. Owner ordered two feet to be *sawn* off a rip saw table before he would acknowledge his error, it then had to be moved and patched up before it could be used at all. Not long since this same factory caught fire by reason of their not having the exhaust fan properly put up, entailing a loss of several thousand dollars. This severe loss was caused by ignorance and obstinacy; hard words but true.

Machines are often required to be placed at right angles, or even at any angle to the line shaft for a matter of convenience, etc. This can easily be performed with the aid of a "mule pulley stand," a mechanical device but *little* known. It is far better for all ordinary purposes than bevel gears, and can be used to transmit power to almost any angle within the same plane or nearly so. It consists of a standard or column suspended from the ceiling at any point suitable to turn the belt. It is provided with two idle pulleys revolving on stems which are adjustable in any direction; it receives the belt from the line shaft and turns it round the corner to the countershaft at any angle; it is simple, reliable and noiseless and promises to take the place of many beval gears. The first cost is much less than that of gears and it is easily put up by anyone.

Belt carriers are also a useful appliance for the transmission of power from one side of the shop to the other. They can be placed midway between the delivering and receiving point, and hold the belt up out of the way—in other words, take up all unnecessary "sag." They are made with a column hanging down from the ceiling and have two pulleys for upper and lower side of the belt revolving on spindles at right angles to the column or stand; they are also adjustable in any direction, thereby allowing the leading or direction of a belt, and they also save a long belt from excessive strain.

Indeed mechanical appliances for transmitting power in any direction are so numerous and varied, that with a little good judgment there is no valid reason why the art of setting up and locating machinery should not be thoroughly executed and machines conveniently arranged.

THE TIMBER TRADE IN QUEBEC.

THE annual timber circular of Messrs. J. B. Forsyth & Co., Quebec, has been published, and is as usual replete with information and statistics of very great value to the trade. In speaking of the present condition of the lumber trade Forsyth & Co. regret not being able to record much improvement either in an increased demand or an advance in prices. Regarding the markets in Great Britian, it is pointed out that although more hopeful accounts are occasionally heard, the figures of recent sales quoted show plainly these expectations have not as yet been realized. In tonnage an increase is noted in ocean steamships of 83,428 tons over last season. This increase will effect trade more in Montreal than Quebec, the former being the port of destination. There has been a considerable decline in the number of sailing vessels, especially in those lumber laden and cleared for sea. The arrivals from the lower provinces are as usual on the increase.

The total supply of timber and deals has been very moderate, much below the average of the past five years, the shipments very light and the stock wintering fully up to the present average, if pine deals are excepted.

The supply of white pine, waney board, has been slightly in excess of last year, and the quantity now on hand nearly 700,000 feet more. The returns rendered to the Custom House do not discriminate as they should between square and waney, hence our export returns are wanting in this particular; the total shipment however of white pine shows a falling off this year of 2,223,480 feet. Choice waney has been in fair request all season; during the autumn prices stiffened and nearly every good lot now in stock, or to arrive early next spring, is controlled by the shippers. The slightly improved tone in the accounts from Great Britain, as well as the knowledge that this winter's production must be far short of previous years, are no doubt the chief reasons which have prompted buyers. It is a well-established fact that several of the heaviest operators are not manufacturing this season. It is also stated that old waney has been entirely neglected, the heavy losses entailed in dressing, causing it to be most difficult to dispose of. Consequently the present stock contains a large quantity of this wood unsold, which has been lying over in the coves for two years or more.

The supply of square has been light, and the quantity now in the booms very slightly reduced from what it was last year. The manufacture is likely to be exceedingly small, and it is most desirable that it should be, for with the exception of a limited demand for square board-wood and deck-plank, other foreign woods are now extensively used, where at one time, white pine only was consumed. Nor can this be surprising to any person in the trade when we read in Messrs. Edmiston and Mitchell's circular of the 30th November last, that pitch pine of good quality 100 feet average, has been sold at 1s. to 1s 1d. per foot according to quality. The new and increasing development of sawn pine for longitudinals has also materially curtailed the demand for common grades.

Few transactions occurred until about mid-summer when sales were effected, but towards the close of the season fresh wood, especially choice lots, were moved off without much difficulty at fair rates, and our market closed firm with a shade of an advance. Our stock contains many old rafts still on manufacturer's account as well as some small common wood for which there is but scant enquiry.

The quantity of Red Pine now wintering here is unprecedently light, owing to the diminished stock from 1885 and the small production last winter. The uncertainty of the demand is largely due the great depression in the Irish markets, which at one time absorbed this wood extensively.

Oak was rather difficult to place this year until the autumn, when a considerable number of sales were effected. The figures of supply and export are almost identical, about half a million feet under that of last season and the stock on hand slightly less.

The supply of elm has been light, the export about one half of what it was last season, and the stock heavier than it was supposed it would be. This wood has been dull of sale all season.

The supply and export of ash and birch have been limited. While the stock of the former is very light, and that of birch is heavier than usual.

Staves are depressed and there is little demand.

Under the head of pine deals, Messrs. Forsyth & Co., say:

"There is a slight diminution in supply, export and stock wintering from last year's figures. This class of goods has been in fair request and held its own in prices during the season and we see no reason to fear that a reduction will take place; on the contrary, with an improvement in high class timber and a better feeling in the United States for lumber of choice quality, we may hope for better prices. It is, we think, evident that the import to this market of Michigan deals will next season be trifling if any. The shipments from Montrea continue to be heavy."

Under spruce:—"There has been during the last season a diminished shipping demand, resulting in the wintering stock exceeding that of last year by fifty per cent. In view of the heavy stock we would strongly caution our mill men against an over supply; this we are satisfied is the only line of action, and should a better feeling be developed in the trade of Great Britain, the value of this article next season may be enhanced."

Sawn lumber has been in fair demand, prices have ruled at $7 to $15 per 1000 feet b. m. for pine according to quality, and $5.50 to $10.50 for spruce. The shipments to South America have been heavy, to the Argentine Republic along it is estimated that nearly forty million feet b. m. of pine and spruce have been delivered from all Canadian Atlantic ports.—*Quebec Chronicle.*

Steamship Lines to Be Swallowed by the Great Railway Companies.

This seems to be the way things are going now. The great Inman line of steamers went into liquidation recently, and the International Navigation Company has made an offer to purchase the vessels and good will of the company. The first move in this scheme was made by Clement A. Griscom two years ago, when he advanced to the Inman Line money on about $1,500,000 of debenture bonds then out. Soon afterward the agency of the Inman Line was transferred to Peter Wright's Sons, principal owners of the International Navigation Company. Later the Pennsylvania Railroad purchased the controlling interest in the International Company. There seems to be no doubt that the Pennsylvania Railroad and the Standard Oil Company will secure the ownership of the Inman Line. It is reported also that they wish to purchase the *Arizona* and the *Alaska*, now running on the Guion Line. The Inman Line has been in an embarrassed condition for some time. John Birely, the millionaire Manchester cotton spinner, owns the majority of the stock. The above reports, says the Boston *Manufacturer's Gazette*, appear in our New York exchanges, and, though not yet fully confirmed, are believed to be reliable.

Common lumber is worth $14 to $15 a thousand f. o. b. at Kewatin, and $17.50 to $18.50 at Winnipeg. Logging operations in both the Lake of the Woods and Lake Winnipeg district will be active this winter.

WANTED.

The publisher of the CANADA LUMBERMAN desires thoroughly reliable and competent correspondents at the following named places:—

Kingston, Ontario.
Quebec City, Quebec.
St. John, New Brunswick.
Halifax, Nova Scotia.
Winnipeg, Manitoba.
Victoria, British Columbia.

The duty of each correspondent will be to give a review of his local market for the month preceding the date of issue, and the ruling quotations for different kinds of lumber, &c. For terms and any other information, address

A. G. MORTIMER,
Peterborough, Ont.

Market Reports.

MONTREAL LUMBER MARKET.

From Our Own Correspondent.

MONTREAL, Dec. 27.—As usual at this season of the year, the lumber market presents a quiet aspect, the demand having fallen off considerably. Business, however, under the circumstances has been good, and shows an increase of about 25 per cent. over December of last year, but a slight decrease as compared with November of this year. There are no changes to report in quotations, nor anything special to note in the market. The storage ground alongside the docks of the Lachine Canal just now is pretty well stocked with lumber belonging to various dealers for city consumption, and for early export in the spring.

The Liverpool timber circular of Messrs. Alfred Dobell & Co., dated December 1st says: "We have had another month of moderate imports, which has enabled merchants to deal with their yarded stocks. With the exception of three, perhaps four vessels, the import from Quebec is over, and we do not on the whole consider that it has been a satisfactory season. Shippers as a rule have wisely refrained from burdening our market with consignments of timber, and it is to be regretted that the same restraint was not exercised in the case of manufactured lumber."

The following are the quotations at the yards here:—

Pine, 1st quality, ₱ M	$00 00@40 00
Pine 2nd " "	00 00@30 00
Pine, shipping culls, ₱ M	14 00@16 00
Pine 4th quality deals ₱ M	10 00@12 00
Pine, mill culls, ₱ M	8 00@10 00
Spruce, ₱M	10 00@13 00
Hemlock, ₱ M	9 00@10 00
Ash, run of log culls out, ₱ M	20 00@25 00
Bass, " " ₱ M	18 00@20 00
Oak, ₱ M	40 00@50 00
Walnut ₱ M	60 00 100 00
Cherry, ₱ M	80 00 100 00
Butternut, ₱ M	35 00@40 00
Birch, ₱ M	20 00@25 00
Hard Maple, ₱ M	25 00@30 00
Lath, ₱ M	1 50@ 0 00
Shingles, 1st, ₱ M	2 00@ 3 00
Shingles, 2nd, ₱ M	2 50@ 0 00

Forsyth & Co's annual timber circular just issued by the Quebec *Chronicle* reports a falling off of 2,223,480 feet in the export of white pine from Quebec last season, of half a million feet in the export of oak, a limited export of ash, birch and red pine, and about half the usual export of elm. Of the stocks wintering there, it says there are about 700,000 feet more of waney white pine than last year, while the supply of square white pine shows a slight reduction, but this fact coupled with the prospect of a very small manufacture this winter is most desirable, as there is but a limited demand now for this wood, owing to the more general use of cheaper foreign wood, especially pitch pine for the same purposes. The stocks on hand, both of waney and square, contain many old rafts, which have been waiting sale for some years, as well as some small common wood, for which there is but scant enquiry. Under the head of pine deals, the circular says there is a slight diminution in supply, owing to the diminished shipping demand last season. The wintering stock of spruce deals exceeds that of last year by 50 per cent, and in view of this heavy stock, mill men are strongly cautioned against manufacturing an over supply, as this is the only safe policy, and the value of these goods next season may be enhanced should a better feeling be developed in the British trade.

QUEBEC STOCKS.

The following is a tabular statement of Quebec stocks on December 1st, 1884-5-6, and also the average on the same date from 1881 to 1885 inclusive.

DESCRIPTION.		STOCK.			
		1884.	1885.	1886.	Avge. of 5 yrs. 1881 to 1885.
Oak	Cubic feet	837,715	1,078,051	997,000	1,279,577
Elm	"	114,961	560,453	907,000	358,672
Ash	"	339,358	428,635	320,000	265,149
Birch	"	23,038	22,138	65,000	36,262
Tamarac	"	12 658	11,948	—	13 824
Square W. Pine	"	7,501,529	6,651,604	6,572,000	6,598,401
Waney do.	"	2,399,001	2,588,603	3.270,000	2,524 267
Red Pine	"	1,012,426	473,136	257,000	1,600,9>9
Pine Deals	Quebec standard	847,683	955,648	800.000	1,512,592
Spruce Deals	"	838,817	822,632	1,300,000	1,047,424

QUEBEC.

The shipping season here is now closed, the ss. Grassbrook being the last vessel outward, 26th inst.

During the season the total arrivals from sea numbered 432, or a shortage of 70 vessels and 55,191 tons as compared with last year. The steamships, however, show an increase over last year, being 43, or 83,428 tons, over and above the number of steamship arrivals last season.

It is announced that the Inter-colonial Railway have chartered the steamer Relief to run a a winter ferry between their station at Levis and the Canadian Pacific Railway at Quebec. If this is so, it will be a great help to the city of Quebec, and be the first step towards connecting the interests of the Inter-colonial and Canadian Pacific Railways, which it is hoped will soon be seen in conjunction by the building of a bridge over the St. Lawrence at Cape Rouge.

Lumbering operations are going on quite satisfactorily. The weather has been just the kind required, cold, with but little snow. If this weather continues logging operations will soon be over, as large gangs were sent into the woods early in order to take advantage of the long days.

With reference to spruce operations, about the usual quantity of logs will be manufactured. Spruce operations generally commence later than pine, consequently very little work has been done in the spruce camps as yet.

Market.—Timber and deals.—No sales of timber have been reported this week, but it is rumored that Wm. Little, of Three Rivers, has sold his '86 cut of pine deals. Terms and prices not transpired.

From all we can learn the lumber business at this port has again been unprofitable to all concerned. From year to year those engaged in this trade have been depending upon some improvement, but so far it has been attended only by disappointment. Last Fall our square timber manufacturers were inclined to hold their wood at very firm prices, but the business on the other side during the winter showed that there was no justification for this action on their part, as our shipping merchants had to face very dull times in making their contracts, and neither in volume nor in the prices realized was the business satisfactory. Oak was very dull of sale, and the same may be said of White Pine, with which Pitch Pine from the Southern Ports is now said to interfere very much. Elm, Birch and all Hardwoods were dull. This state of things was reflected on this side during the summer, and there were few transactions in the sale of timber except for small shipping parcels between merchants. In July we noted the sale of an old raft of 1882 timber containing small Waney and square Pine of about 44 feet at 16 cts., and a choice Kippewa raft of 53 feet with a small portion of Waney Board 21 inch at 25 cents. During mid-summer a more than usual dulness prevailed, and it was not till the latter part of October that any little animation was shown, several rafts having changed hands at that time, some choice lots of 55 to 60 feet selling at 25 cts. to 27 cts., according to quantity and size of Waney contained in each raft, as well as to quality of timber. Since that time lumbermen have been pressing sales a little, and a few choice rafts of White Pine changed hands at an advance in price. From all we can learn there is nothing in the Home markets to cause any great advance in price on this side, and the purchases that have been made here are doubtless with the object only of providing against possible winter sales. Oak also was more largely dealt in late in the fall, probably for the reason that the supply is going to be so curtailed, and also that there is now a difficulty in obtaining the large fine wood that we used to get in such quantities some years ago. The probable production this winter will not be a million feet; the stock both here and in England is much lighter than usual, so that for this wood there is probably a better outlook than for any other kind. Pine deals have been in fair demand during the season at about last year's prices, but Spruce deals have been exceedingly dull of sale. The season closed in Great Britain in the gloomiest possible manner, and with several failures occurring to add to the general uneasiness.

The quantity of both Waney and square White Pine to be manufactured this winter will be much less than last year, and the same may be said of Elm and all other Hardwoods, including Birch of which hardly any will be made this winter as the manufacturers last year all lost money. Of Red Pine there is scarcely any in stock and the manufacturers only intend filling orders that have been contracted for for next season's delivery. Most of the manufacturers in the Ottawa district are turning their attention to Saw-Logs in preference to square timber. Very few staves came down this season, and our stave trade seems to be going to Southern Ports, as we hear of none being manufactured for the coming season.

Much inconvenience was caused to local mill men during the summer by the want of rain to float down their logs, and the manufacture of Spruce deals was in consequence very much curtailed. The season closes, we are sorry to say, with no very bright outlook for the future, and a recent suspension here, as well as similar events in Great Britain serve to add anxiety and disquietude to the general depression.—*Chronicle.*

TORONTO.

From Our Own Correspondent.

In regard to the markets here at present not much can be said. We are now into the holidays and trade is consequently quiet. Building operations have been carried on up to the present time, and the prospects are that as soon as the holidays are over building will begin again, and there is every indication that quite as much building will be done during the year coming as in the year past. Prices will continue to rule about the same as at present. Bill stuff will certainly be in demand, and there must soon be a rise in prices of long bill stuff. It looks as if dry lumber would be scarce in the spring, especially in the better grades. Altogether the prospects are good for next year's business, unless the manufacturers should overdo it by excessive stocking.

The following are the ruling quotations in this city at present:—

Mill cull boards and scantling	$10 00
Shipping cull boards, promiscuous widths	12 00
" stocks	13 00
Scantling and joist, up to 16 ft	13 00
" " " 18 ft	14 00
" " " 20 ft	15 00
" " " 22 ft	16 00
" " " 24 ft	17 00
" " " 26 ft	18 00
" " " 28 ft	19 00
" " " 30 ft	20 00
" " " 32 ft	21 00
" " " 34 ft	22 50@22 50
" " " 36 ft	24 00
" " " 38 ft	27 00
" " " 40 to 44 ft	30 00
Cutting up planks 1½ and thicker dry	20 00@25 00
" boards "	20 00
Dressing stocks	16 00@18 00
Picks Am. inspection	30 00
Three uppers, Am. inspection	40 00

B. M.

1½-inch flooring, dressed	25 00@30 00
1½ " " rough	14 00@15 00
1½ " " dressed	23 00@25 00
" " undressed	14 00
" " dressed	16 00@20 00
" " undressed	12 00@14 00
⅜ Beaded Sheeting, dressed	18 00@20 00
Clapboarding, dressed	12 50
XXX sawn shingles, ₱ M	2 75@ 2 90
Sawn Lath	2 25
Red oak	20 00@25 00
White "	25 00@30 00
Basswood, No. 1 & 2	18 00@20 00
Cherry, No. 1 & 2	50 00@60 00
White ash 1 & 2	25 00@30 00
Black ash 1 & 2	20 00@25 00

OSWEGO, N.Y.

From Our Own Correspondent.

Three uppers	$46 00@47 00
Picking	36 00@37 00
Cutting up	26 00@27 00
Fine Common	22 00@25 00
Common	14 00@18 00
Culls	12 00@15 00
Mill run lots	19 00@21 00
Sidings, selected, 1 in	28 00@36 00
" 1¼ in	30 00@35 00
Mill run, 1x10, 13 to 16 ft	19 00@21 00
Selected	24 00@26 00
Shippers	14 00@16 00
Mill run, 1¼x10	15 00@17 00
Selected	21 00@30 00
Shippers	14 00@16 00
Mill run, 1 & 1¼ in, strips	19 00@21 00
Selected	32 00@34 00
Culls	12 00@15 00
1x6 selected for clapboards	32 00@34 00
Shingles, XXX, 18 in. pine	3 65@ 3 80
XXX Cedar	3 30@ 3 50
Lath 1½, No 1	1 80@ 2 00
No 2	1 60@ 1 80
Ash, 1st & 2nd 1 to 4 in	16 00@20 00
Basswood, 1st & 2nd, 1 & 1¼ inch	20 00@22 00
" culls, " "	11 00@12 00
Hard Maple, ₱ M	23 00@25 00
Lath, ₱ M	1 50@ 0 00
Shingles, 1st, ₱ M	2 00@ 3 00
Shingles, 2nd, ₱ M	2 50@ 0 00

CORDWOOD.

Long Maple, per cord	$ 6 00@6 50
Long Birch "	6 00@0 00
Long Beech "	5 00@5 50
Tamarack "	5 00@0 00

BUFFALO AND TONAWANDA, N. Y.

BUFFALO, Dec. 22.—The advance in prices is favorably received on the whole, and the wholesale trade in pine, with the prospects of an early spring, are feeling quite firm as to value. Tonawanda holders are likewise confident, and the rail trade holds up fairly well for the holiday season.

CARGO LOTS—MICHIGAN INSPECTION.

Three uppers	$42 00@44 00
Common	18 00@24 00
Culls	10 00@13 00

YARD PRICES—CAR LOTS.

3 uppers, inch	$44 00@46 00
3 uppers, plank	45 00@50 00
Pickings, inch	36 00@38 00
Pickings, 1½ in. to 2 in	38 00@42 00
Fine Common	32 00@34 00
Fine Common, thicker	35 00
Cutting up	25 00@30 00
Shelving, 12 in. and up	27 00@30 00
Coffin boards, 12 in. and up	16 00@18 00
Dressing stocks	17 00@20 00
Dressing sidings	19 00@22 00
Common stocks	14 00@15 00
Common sidings	15 00@17 00
Common box	12 00@13 00
Shingles, XXX, 18 in. sawed	3 40@ 3 50
Do. clear butts, sawed	2 20@ 2 30
Shingles, XXX 16 in. cut ₱ sq	@ 3 00
Do. XX do	@ 2 75
Lath	1 90

DETROIT, MICH.

The lumber market was steady last week and prices were unchanged. Receipts amounted to 250 cars and shipments to 34 cars. Prices are as follows:

Uppers, 4x4	$48 00
5" 6x4 & 8x4	50 00
3 & 4 in	50 00
Selects, 4x4	42 00
5x4, 6x4 & 8x4	45 00
Fine common, 4x4	35 00
5x4, 6x4 & 8x4	38 00
Shop, 4x4	22 00
5x4, 6x4 & 8x4	25 00
Flooring, selected common	20 00
No. 1 common	18 00
No. 1 fencing	16 50
Roofing, D. & M	16 00
Siding, clear	22 00
A	21 00
B	19 00
C	14 00
Ceiling, select common	25 00
Ceiling, No. 1 common	22 00
No. 1 fencing	20 00
Stocks, 1x12 & 1x10, No 1	18 00
1x12 & 1x10, No. 2	14 00
1x12 & 1x10, No. 3	11 00
Ship culls	10 00
Mill culls	8 00
Bill stuff ordinary sizes:	
12 to 16 ft	11 00
18 to 20 ft	12 00
22 to 24 ft	13 00
26 to 28 ft	14 00
30 to 34 ft	16 00
Shingles clear, 18 in. Ex	3 30
10 in. clear, 18 in	2 30
6 in. clear, 18 in	2 00
6 in stocks clear, Ex	4 00
5 in. " "	4 80
Lath, per M pcs	2 50

Add for S. 1 or 2 S. ₱ M

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ALBANY.

Pine, clear, ₱ M	$55 00@60 00
Pine, fourths	50 00@57 00
Pine, selects	42 00@44 00
Pine, good box	22 00@23 00
Pine, common box	13 00@15 00
Pine 10-in. plank, each	00 45@00 47
Pine, 10-in. plank, culls, each	00 25@00 27
Pine boards, 10-in	00 30@00 32
Pine, 10-in. boards, culls	00 16@00 20
Pine, 10-in. boards, 16 ft., ₱ M	28 00@32 00
Pine, 12-in. boards, 16 ft	28 00@32 00
Pine, 12-in. boards, 13 ft	28 00@30 00
Pine, 1¼ in. siding, select	40 00@43 00
Pine, 1¼-in. siding, common	15 00@18 00
Pine, 1-in. siding, select	40 00@42 00
Pine, inch siding, common	13 00@15 00
Spruce, boards, each	00 00@00 16
Spruce, plank, 1¼-in., each	20 00@00 00
Spruce, plank, 2-in., each	00 00@00 30
Spruce, wall strips, each	00 12@00 12
Hemlock, boards, each	00 00@00 14
Hemlock, joist, 4x6, each	00 00@00 32
Hemlock, joist, 2½x4, each	00 00@00 14
Hemlock, wall strips, 2x4, each	00 00@00 11
Black walnut, good, ₱ M	100 @120 00
Black waluut, ⅞ inch	80 00@90 00
Black walnut, ¾ inch	00 00@85 00
Scaymore, 1-inch	28 00@30 00
Scaymore, ⅞-inch	21 00@23 00
White wood, 1-inch and thicker	38 00@40 00
White wood, ⅞-inch	28 00@30 00
Ash, good, ₱ M	40 00@43 00
Ash, second quality, ₱ M	25 00@30 00
Cherry, good, ₱ M	60 00@85 00
Cherry, common, ₱ M	25 00@30 00
Oak, good, ₱ M	40 00@43 00
Oak, second quality, ₱ M	20 00@25 00
Basswood, ₱ M	25 00@30 00
Hickory, ₱ M	40 00@40 00
Maple, Canada, ₱ M	28 00@30 00
Maple, American, per M	26 00@28 00
Chestnut, ₱ M	38 00@40 00
Shingles, shaved, pine, ₱ M	0 00@ 6 50
" 2nd quality	0 00@ 5 50
" extra, sawed, pine	4 30@ 4 00
" clear, "	0 00@ 3 00
" cedar, mixed	0 00@ 3 13
" cedar, XXX	0 00@ 0 00
" hemlock	2 25@ 2 37
Lath, hemlock, ₱ M	0 00@ 2 35
Lath, spruce, "	0 00@ 2 20

BAY CITY AND EAST SAGINAW.

The Sage mill at West Bay City manufactured 30,000 000 feet of lumber this year.

A. & E Wilson, of East Saginaw, will carry over 2,500,000 of lumber at St Ignace.

C. L. Grant & Co., East Saginaw, manufactured 5,000 000 feet of lumber the past season.

The mill of C. & E. Ten Eyck, East Saginaw, manufactured 19,547,750 shingles the past season.

The amount of sold lumber on the Saginaw river is larger than manufacturers have supposed.

Reported that Mosher & Fisher paid $107,000 for 20,000 000 feet of timber they purchased in Clare County.

E. R. Poinney, of East Saginaw, manufactured 6 000,000 shingles the past season and carries none over.

Green & Stevens, Bay City, cut about 15,000,000 feet of lumber this last season at their mill on Stone Island.

The N. & A. Bernard Lumber company, Saginaw manufactured 3,500,000 of hemlock lumber the past season.

The annual exhibit of the amount of the lumber and other forest products shipped by water from the ports of Bay City and East Saginaw during 1886, show that the total amount of lumber shipped during the year is less by 71,810 000 feet than the output in 1885, and is the smallest since 1878. The cause of the falling off, says the *Lumberman's Gazette*, is in part the lesser production of the river, but perhaps more is due to the increase of shipments by rail, which now amount to about 15 per cent. of the cut. The advance in freights in the latter months of the season no doubt had some effect in retarding shipments. Then there was a scarcity of tonnage after the rise took place, and as the shipping did not begin until May 1, the season was shorter than usual. The output of shingles was also smaller than in any year since 1876. Freight rates were much higher during 1886 than in 1885; indeed equal rates have not been reached for several years. Rates opened at $1.50 from Bay City and $1.62½ from Saginaw to Buffalo and Tonawanda and $1.25@1.37½ to Cleveland and other ports. About the 1st of September an advance of 25 cents was made and later more was added and closing rates were $2.75@2 87½ to Buffalo and Tonawanda and $2@2.25 to Ohio ports.

The *Lumberman's Gazette* of the 22nd Dec. says:—Actual transactions in lumber during the past week have been very few in number, although there has been considerable inquiry about stock and prices by letter. Manufacturers here have settled down to the fact that there will be very few sales until after the holiday season shall have passed. There is no indication of any prospective change in prices, and the probability is that present quotations will rule for the opening of operations for the season of 1887, and that the season will be fairly brisk and satisfactory. The opinion exists that the stock on the river will be very materially reduced before the opening of navigation by rail shipments, which are visibly on the increase and which it is thought will be larger next season than they have ever been heretofore for several reasons which might be named, but the principal one of which is said to be the action of the Buffalo and Tonawanda lumber men, who resolved at their last meeting to purchase no more lumber on the Saginaw river by straight measure. It is claimed by some of the heaviest operators here that this action will induce more shipments by rail to its final destination, and that this business will be more sought after in the future, unless the action of the lumbermen alluded to is reconsidered and rescinded. Whether such a result will be accomplished or not is a question which time alone can settle.

Mill owners here who have the timber are hustling in their stock for next season with all possible despatch and indications point strongly to the fact that the cut of 1887 will fully equal that of 1886.

The quotations published below give the outside figures on inspected lots and there is considerable lumber on the docks and in sight, which is held at from $21 to $25 straight, although there is abundance at lower figures:—

CARGO QUOTATIONS.

Shipping culls	$ 8 50@11 00
Common	15 00@22 00
3-uppers	37 00@40 00
Bill stuff	8 50@10 00
Norway bill stuff	8 50@10 00
Under straight	
Measure	15 00@24 00
Shingles XXX	2 85@ 3 00
Shingles, clear butts	1 85@ 2 00
White pine lath	1 75

YARD TRADE.

3 uppers wide and thick	43 00@45 00
Do. 1 in	40 00@42 00
Selects	35 00@38 00
Fine common	27 00@30 00
1, 1¼, 1½, 2 in. cut ups	20 00@25 00
No. 1 base, 7, 8 and 9 in selects	35 00
No. 2 do. (fine common)	27 00
No. 1 floor strips	40 00
No 2 "	27 00
No. 3 "	17 00
Fencing	12 00@15 00
Fencing, coarse common	8 00
Fencing, mill culls	4 00@ 6 00
No. 1 stock 12 in	14 00@15 00
No. 2 stocks	11 00@12 00
Wide common	12 00@15 00
Piece stuff and timber	9 00@10 00
12, 14, 16, 18 ft	9 00@12 00
Do. do. 20 ft	12 00
Lath	1 50@ 1 75
Lath No. 2 (cul)	1 00
Shingles XXX	3 15@ 3 25
Clear butts	1 90@ 2 15

CHICAGO.

Predictions which have been made along back, to the effect that the new year would open with fully 75,000,000 feet less lumber on hand in Chicago then was held at the beginning of 1886, seem likely to be more than realized. The report of the secretary of the Lumberman's Exchange for December, which has just been issued, makes the decrease from last year of the amount in pile, 72 972,763 feet, the totals being 608,416,940 feet for 1886, and 681,389 703 feet for 1885. There is also on hand 34,807,477 feet in the yards at South Chicago, against 53,911,525 feet that was held last year, which, as that district is really a part of the Chicago market, ought to be included in the stock at this point. Adding these figures, the totals become 643 224,417 for 1886, and 735,301 228 feet for 1885. This raises the shortage as compared with last year to 92,076,811 feet, which it must be admitted, even by those who can see no pronounced scarcity of lumber anywhere, to be a very respectable quantity. There is every reason to suppose that the difference is increasing, as the receipts have fallen off this month, while the probability is that shipments and the local consumption have been on a rather larger scale. It is likely now that the supply in pile at this will, by the close of the month, show more than the 75,000,000 deficit predicted, and, including the South Chicago, the shortage will probably overrun 100,000,000 feet. The shingle stock has increased during the month, which fact is more likely due to diminished sales than increased receipts. The lath supply shows a diminution that is remarkable, the shortage having more than doubled during November. At this rate of decrease it would not take long to run many yards out of this stock altogether. Between Dec. 1, 1885, and April 1, 1886, the quantity of lath on hand declined about 57,000 000 pieces. A similar decrease the present winter would not leave lath enough in market to give half a dozen yards a decent stock. Take it altogether, the December statement shows that the local trade is full warranted in maintaining a firm front in respect to prices, and will be justified later in making a liberal advance.—*Timberman*

Piece Stuff, short green	$ 9 25@ 9 50
Piece stuff, short dry	10 50 11 00
Piece stuff, long	11 00 14 00
Boards and strips, No. 2	11 00@13 00
Boards and strips, medium	12 00 15 00
Boards and strips, No. 1	15 00 20 00
Shingles, standard	2 00 2 10
Shingles, extra	2 25 2 40
Shingles, cedar, standard	1 65 1 75
Shingles, cedar, extra	1 90 1 95
Lath, white pine	1 50 1 60
Lath, Norway	1 40 1 50

RECEIPTS FOR WEEK ENDING DEC. 23.

	Lumber.	*Shingles.*
1886	6,089,000	208,000
1885	4,636,000	663,000

FROM JAN. 1, TO DEC. 23, INCLUSIVE.

	Lumber.	*Shingles.*
1886	1 653,943,000	774,961,000
1885	1,706,071,000	774,341,000

STOCK ON HAND DEC. 1.

	1886.	1885.	1884.
Lumber	608.416.940	681,389,703	660,936,272
Shingles	483,705,938	411,602,828	336,700,492
Lath	63,564.346	99,881,115	68,905,506
Pickets	1,912,269	2,519 061	2,335,858
Cedar posts	267,746	525,221	571,004

EASTERN FREIGHT RATES.

FROM CHICAGO AND COMMON POINTS ON CAR LOAD LOTS OF HARD AND SOFT LUMBER.

To New York	25c.
Boston	30c.
Philadelphia	23c.
Baltimore	22c.
Washington	22c.
Albany	24c.
Troy	24c.
Buffalo and Pittsburgh	15c.
Shenectady	24c.
Wheeling	15c.
Suspension Bridge	15c.
Salamanca	15c.
Black Rock	15c.
Dunkirk	15c.
Erie	15c.
Toronto	15c.

LAKE FREIGHTS.

From Muskegon, green	1 62½
From Whitehall	1 62½
From Ludington	1 75
From Manistee	1 37½@1 87½
From Menominee, dry	2 00
From Menominee, green	2 00
From Cheboyan	2 00
From Bay City,	3 00
From Oscoda, dry	2 75
From Alpena, dry,	2 50

LONDON, ENG.

We take the following extract from a London contemporary: The state of trade, though on the whole progresing favorably, still vacillates a good deal, and while one manufacturer acknowledges improving business, another will tell you he never knew it so bad. In the timber trade the waiting game seems still in favour, both abroad and at home. Neither side likes to be very demonstrate, but both are ready to negotiate if, literally, the ice were broken between them.

During the last few days some activity in buying from the docks appear to have been displayed by London merchants, as we learn that several parcels have changed hands by private contract, thus indicating that buyers do not entirely trust to the public sales. In these cases we believe sellers have obtained the prices at which they intended to hold the goods for some time.

We are glad to note that the advices received from the north-eastern shipbuilding centres continue to read encouragingly. From Sunderland, for instance, a port where the depression of trade has, perhaps, been more severely felt than in most other places, further improvement is discernable both in the shipbuilding yards and engineering works. Additional repairing contracts have been concluded and new steamships are being laid down, while the ironworks and forges are reported to be better supplied with orders than has been the case for many months.

MIRAMICHI AND DALHOUSIE SHIPMENTS.

The shipments of deals, timber, &c., from Miramichi and Dalhousie for the season just closed were as follows:—

MIRAMICHI.

Shipper	Vessels.	Tons.	Super feet deals, boards, ends	Tons Timber, scant.	birch pine.
J. B. Snowball	46	24,728	20,238,866	1,105	158
N B Trading Co	37	23,721	18,072,273	305	—
Geo. McLeod	27	15,895	14,359,000	—	—
Ritchie & Co.	20	10,979	9,961,354	6	150
W. M. McKay	6	3,261	2 959,516	—	—
Burchill & Sons	4	2,807	2 617,000	—	—
E. Hutchison	3	1,667	1,596.638	—	—
A. Morrison	2	916	856,000	—	—
Chas. Sargeant	1	598	515 600	—	—
John McLaggan	1	576	463,972	—	—
Wm. Richards	1	850	636,172	—	—

In addition to the above palings were shipped as follows:—

By J. B. Snowball	1 411 890 pcs.
By N. B. Trading Co.	1,327.673 pcs.
By D. & J. Ritchie & Co.	170,600 pcs.

DALHOUSIE AND CAMPBELLTON.

	Vessels.	Tons.	Timber. Tons. Deals, &c.	birch,	pine.
R. & J. Stewart	9	8 300	7 219,073	—	—
G. Moffat & Co.	11	6 132	5,119 924	329	59
J. P. Mowat	4	1,626	1 044 926	58	524
John McNair	5	1 391	1,260 606	10	41
Henry O'Leary	5	1 333	1,063,948	—	—
Viney Bros.	2	1,049	997,000	—	—
J. D. Sowerby	3	1,040	860.897	168	7
Geo. Dutch	2	821	788,722	9	2
Arch. McNair	1	255	260 223	—	—
Totals	42	21 947	18,615,319	574	633

Messrs. R. A. & J. Stewart shipped also 203,000 staves.

Mr. Hy. O'Leary shipped also 230,000 laths.

BLACK BIRCH.

The price of black birch of best quality has recently gone up from $7 to $95 per 1,000. The extraordinary advance is due to the discovery that boards cut out of the first logs are susceptible of a very high polish, and can be used for almost any purpose hitherto exclusively reserved for mahogany, which is worth about $250 a thousand. The advance has been expedited by the discovery that the best black walnut is giving out. Black walnut from Arkansas and the south is so porus that it is of very little use in furniture making. The best is black birch found almost exclusively on the barren copper ore regions between Milwaukee and Ashland, where all other timber is stunted in growth and very poor. Here boards out of the butt cut quickly assume a beautiful red tint on being exposed to the atmosphere, and can be polished up to a great degree of fineness. The price will soon fall to $50 or $60 a thousand, as a railroad is being laid right through the very inaccessible region where it grows, and the high prices have tempted several men to open out saw-mills. Red beach has also advanced in price very rapidly. It could be bought up recently in Indiana and Ohio for the bare cost of sawing, but now it is worth $30 a thousand.—*Lumberman's Gazette.*

The wood-working establishment of Messrs. Wm. Cane & Sons, Newmarket, had a narrow escape from complete destruction by fire on Dec. 14th. It will be remembered that this firm sustained a very heavy loss by fire a couple of years ago.

Correspondence.

To the Editor of the Canada Lumberman.

Would you or some of your readers enlighten me regarding a question which is of considerable interest to owners of water-power saws mills and others? I have often heard my father say that he had often noticed the fact that a water mill would run much stronger at night with the same head of water than in the day. For many years he was an engineer in a paper mill when the same machinery was used continnously day and night to grind paper pulp. This would seem to me a fair and conclusive condition as not subject to the fluctuations and interruptions as in a saw mill. He said the mill ran more evenly, or steadily, stronger, and with more revolutions than in the day. He did not know the cause but attributed it to the atmosphere.

W. B. A.

[We shall be pleased to receive a solution of this problem from any of our readers, which will be given in the next issue of the LUMBERMAN.—ED.]

WHITEMOUTH, Man., Dec. 22nd, 1886.

To the Editor of the Canada Lumberman.

Below you will find a list of the quantities of the various kinds of timber to be cut in the woods about Whitemouth, this winter, on the C. P. R. east of Winnipeg:

G. W. Streovel, 300,000 ties; J. G. Dennison & Co., for C.P. R., 100,000 ties; William Skead & Co., for C.P.R., 100,000 ties; Mr. Ferguson, for C.P.R., 60,000 ties; McRissly & Co., for C.P.R., 20,000 ties; Gibbons & Livingstone, 20,000 ties; David Ross. 3,000,000 feet of logs; P. Enwright, wood king of Winnipeg, 4,000 to 8,000 cords; A. C. Smith, 3,000 cords wood; McRissly & Co., 3,000 cords wood; Mr. Hargrieve, 2,000 cords wood; Mr. Goodenhue, 2,000 cords wood; besides many other small operations.

The above will show your readers that Manitoba is not yet *dead*. The wages in the ties camps is from $20 to $45; in log camps, $20 to $26 and board. In wood camps workmen make from 80 cents to $1 per cord for cutting, and pay $4 per week for board.

Working men are in good spirits, as their pay is good, and the weather excellent for working.

LUMBERMAN.

MADAWASKA, N. B., Dec. 22nd, 1886.

To the Editor of the Canada Lumberman.

Lumbermen so far have had a beautiful season and the output will exceed that of last year, unless deep snow sets in, which seems to threaten now, as we already have two feet in the woods. The estimated cut is 7,000,000 feet from the mouth of Tobique to Victoria, up to Grand River, Madawaska, and from that point to St. Francis about 2,000,000 more.

On the American side, Messrs. Couliff, Conners, Stephens, Eatons, Dickley and others, are doing a heavy business, and owing to our export duty not being enforced here in Madawaska, Americans are yearly manufacturing forty million shingles, besides other lumber taken out of our forests. In this case our National Policy is giving Americans a premium of the import duty, to slaughter our forests and allow our local mills to lie idle. Holmes & Hammond are now building shingle mills to increase the slaughter, so that in a few years our stocks will be *nil*.

Our enterprising townsman, Mr. G. V. Hammond, is doing a heavy business in spruce logs, sleepers and shingles, but our staple article is lumber, and so long as the Dominion Government pursues a policy to encourage American citizens to slaughter it, it is poor encouragement for a New Brunswicker to invest his money, and try to build up his country out of it.

P. O. BYBAM.

OTTAWA, Dec. 26th, 1886.

To the Editor of the Canada Lumberman.

While wishing you the compliments of the season, I must also congratulate you on the marked improvement you have already made in your paper—THE CANADA LUMBERMAN. So far as my knowledge goes, lumbermen in the past have been of the opinion that the paper was not up to the mark, and if you will pardon a plain expression, not worthy of the extensive industry it claimed to represent. Of late, however, I have heard many of our leading lumbermen speak very highly of the efforts you are making towards supplying the trade with a first-class journal, and I am safe in saying that one and all will give it a hearty support.

There is one important matter to which I desire to call attention, and that is the little interest manifested by the general reader in regard to correspondence. We, as lumbermen, like all other representative business men, have our grievances. Sometimes they are against the Government, sometimes against the railways, and sometimes against the general public, and unless these grievances are brought to light and discussed through the medium of the press, how can we ever expect to have our wrongs redressed? Now, Mr. Editor, I know that at the present time lumbermen have grievances of paramount importance, and through the existence of such, a very large amount of money is being annually lost to the trade. It is of personal interest to every man to adopt some means to protect his business from loss, and my suggestion is that all matters of this nature should be discussed, *pro* and *con* through the columns of the LUMBERMAN.

In addition to this there are many other matters pertinent to the manufacture and sale of lumber, which might well be taken up in this way, and I hope that the many intelligent and thinking men who are engaged in this business, will devote an hour now and again to the work of putting their ideas on paper, and by so doing not only benefit themselves individually, but the trade in general.

I have written this, Mr. Editor, simply as an introduction, and will in a future issue endeavour to give you something calculated to stir up the dry bones, as it were, and bring forth discussion.

Hoping that the next issue of the LUMBERMAN may contain many letters of interest.

Yours truly,

CHIP.

GRAVENHURST, Dec. 10th, 1886.

To the Editor of the Canada Lumberman.

The mills here and in the vicinity have all shut down, mainly owing to the frost, but a considerable number of logs are held for spring operations. It may not be uninteresting to give you a short statement of the mills here.

G. W. Taylor & Co's. gang mill, cut about seven million feet of lumber for the Ontario Lumber Co. Joseph Tuers single circular mill, cut one and one-half million lumber and one million of shingles for Mr. J. Collins, of Bracebridge, and three million of shingles for Thomson & Baker of this place.

McBurney & Co. (one circular mill) cut about five million feet of lumber and two million of lath. Chas. Mickles three mills (each one circular) cut ten millions ft. lumber, five millions shingles, and about three millions laths. Isaac Cockburn's (two circular mill) cut about five millions feet lumber, five millions shingles, and two million of lath. J. H. Hull's shingle mill cut nine millions of shingles with 3 machines. Thomson & Baker (one circular mill) cut 4½ million lumber, 3½ million shingles and two million of lath. L. B. Hill's shingle mill cut about two millions of shingles. Thomas B. Tait's shingle mill (2 machines) cut nearly eight millions of shingles; and James King's (one circular mill) cut about one million ft. lumber and two millions of shingles. This I believe covers the mills in the town.

In the vicinity James Harvey's mill in Draper, cut about three millions lumber and three millions shingles. Tasker's mill at Reay, also in Draper, cut one and a-half millions lumbum and one and a half millions shingles. H. De Blaquen's mill, just nicely started, has cut about a million of shingles, and will run on bill stuff and shingles all winter. J. H. Hull's mill, (one circular) at Lethbridge, cut about two millions of lumber and one million shingles and lath. J. I. Clark's mill, also at Lethbridge, has cut three and a quarter millions shingles. At Bracebridge, Brown & Sheers mill cut about five millions shingles and half million lumber; and Leishman & Perry's mill about one million lumber and a lot of shingles. Besides the above there is shipped from here several millions of lumber and shingles, cut in mills round Lakes Muskoka, Joseph and Rosseau. The year has been a successful one. The stocks cut by the different mills are all sold, and about half shipped. No dry lumber can be got here next year if the shipping goes on all winter as briskly as now. No large stock of shingles except Mr. Thomas B. Tait's is held here.

All in the trade are hopeful for good demand and a small advance next year.

Large stocks are being got out in the woods and are all well on with the work.

Wages in the woods are ten per cent. higher than last year. The prices of logs on the river is twenty per cent. higher than last year, six dollars being freely paid now for extra logs.

The old De Blaqueur mill will be run by Thos. Tait this year he having purchased same.

Thomson & Baker intend putting in a band saw in there mill here.

Sheers has purchased the interest of Mr. Brown, his partner in the Bracebridge South River mill, and Mr. Leishman has purchased the interest of his partner, Mr. Perry, in the north river mill.

I. J. McNeil has purchased a berth in Bethune from Mr. T. Maxwell, paying, we understand, $16,000 for same.

Mr. Hugh Brown, of Utterson, has purchased the limits in the Township of Stephenson, from the Bank of Toronto, for $2,000.

Several small transactions in timber lots at large prices are reported.

Mr. Waldie, the purchaser of the Victoria harbor limit from Mr. Power of Barrie, was up getting himself initiated into the mysteries of log cutting and shanty life. A little bush life won't do him any harm. He is putting in a band saw in the mill at Victoria Harbor. We wish him success.

A correspondent wishes to know if any one can give him a statement of the case of Dyment vs. Thomson and the principle involved of interest to the trade.

Yours truly,

FRANCIS BAKER.

FROM THE LUMBER REGIONS.

MINNEAPOLIS, Minn., Dec. 1.—The saw-mills have closed down after having the shortest season on record, being one month to six weeks less than last year. As a result, 50,000,000 feet more lumber was sawed in 1885 than during the past season. This season the total cut of lumber was 262,636,019 feet; of shingles, 80,925,000 feet; of lath, 55,264,800 feet. In 1885 the cut of lumber was 313,998,166 feet; shingles, 101,857,750 feet; lath, 82,175,817 feet; the decrease is 51,362,147 feet of lumber. 20,932,750 feet of shingle, and 26,911,017 feet of lath. The Surveyor-General's scale shows that 237,891,540 feet of logs were turned through the boom during the year. This is 51,000,000 less than last year; and it is due to the delay in the beginning of the season. In 1885 79,503,520 feet had been turned through the boom up to July. In 1886 but 30,968,730 feet had been run through up to that time. There are now 12,000,000 feet of logs in the mill ponds and 10,000,000 feet in the booms. Above Sauk Rapids there are about 11,000,000 feet. It is not probable that the mills will be enabled to commence operations any earlier next season, but they will have plenty of logs when they start up, and the cut will be largely increased. It is estimated that the stocks in the lumber yards amount to 175,000,000 feet, against 264,500,000 in 1885.

EAST SAGINAW, Mich.. Dec. 1.—For several months past lumber dealers and mill men of the Saginaw Valley have been busy arranging a scheme which promises to work a revolution in the lumber business of the West. The scheme is to make the Saginaw Valley the great central distributing point of assorted lumber. Since the infancy of the industry here the practice has been to pile on the docks the cut of the mills without sorting, thus giving a great profit to the middlemen. Sold in the rough it was finished in the planing-mills of the purchasers, who thus reaped a large profit that was lost to the capital and labor of the valley. This profit amounted to hundreds of thousands of dollars, and to keep this money in the valley has been an object long aimed at, and led to the establishment in the last five years of sorting yards and planing mills. The project has for its object the purchase of the entire cut of the valley; to be stored in and sold from the sorting yards here.

THE MANUFACTURE OF CANOES.

In Eastern Canada row boats are not in popular favor, the majority of people who paddle our rivers and small lakes either for pleasure or business, preferring the light canoe rather than the more burdensome article just mentioned. We had the pleasure a few days ago of visiting the works of the Ontario Canoe Co., situated in the village of Ashburnham, directly across the river from the town of Peterborough. We were kindly received by the managing director, Mr. J. Z. Rogers, and conducted through the different buildings belonging to this company. On enquiry we found that the main factory was 30x65 feet in size, four stories high, adjoining which is another building, two stories high, in which is contained the offices of the company and storage rooms for the product of the factory. Another building, larger than any of the others, is also utilized for a show room. Here we find almost every variety of canoe, with and without rigging, arranged conspicuously so as to represent them as they appear in the water.

The models used by this firm are noted for their beauty and speed. They carry good wide bearings, and carry them well forward, but not so as to interfere with their speed. All canoes undergo a practical test before leaving the works, and nothing but the best material which can be procured, is used in their construction. During our visit to the works we were shown an open cedar rib canoe, built last year, which weighs 12½ pounds, complete with decks and thwarts, capable of carrying 450 pounds. It is a beauty, and is an indication of what can be accomplished by Canadian boat builders. Nearly two hundred different kinds and sizes of canoes are built, enough surely to satisfy the tastes of the most scrupulous. This company were awarded a silver medal at the Antwerp exhibition, and at every other point where they were shown a prize was given. At the present time the works are running to their fullest capacity, filling orders, principally for the English market.

MEN OF 24,000 YEARS AGO.

If the claims of old descent were a justifiable source of pride, the human race would feel elated this morning on being assured by the wise men of the British Association that authentic proof had been discovered in some Welsh caves, that men, sufficiently developed from the ape to manufacture flint implements, existed on this planet 240,000 years ago. To us it is a melancholy reflection that we should have taken so prodigious a time to attain so small a result. Even when the duration of the race is limited to the six thousand years of history, the outcome can hardly be considered as satisfactory, and there is something profoundly depressing in the sudden addition of a series of ancestors who spent 234,000 years in marking time, indeed, but in making no other mark in the world.—*Pall Mall Gazette.*

The Customs authorities have refused to grant the application made by Detroit residents to be allowed to tow pine logs in rafts to the Canadian side of the Detroit river, and remove them in such quantities as may from time to time be required.

MR. MOWAT SUSTAINED

The Returns as far as Known—Gains and Losses on Both Sides.

The following are the returns of the Provincial elections as far as they can yet be obtained:—

BY ACCLAMATION.

Constituency.	*Members.*	*Opp.*	*Min.*
Dufferin	Stewart	1	0
Waterloo, N	Snider	0	1
Wellington, E	Clarke	0	1
BY STATUTE.			
Algoma, E	Lyon	0	1
Algoma, W	Conmee	0	1
BY ELECTION.			
Addington	Miller	1	0
Brant, N	Wood	0	1
Brant, S	Hardy	0	1
Bruce, N	Biggar	1	0
Bruce, S	O'Connor	0	1
Bruce, C	Dack	0	1
Brockville	Fraser	0	1
Carleton	Monk	1	0
Cardwell	Hammell	1	0
Dundas	Chamberlain	0	1
Durham E	Craig	1	0
Durham W	McLaughlin	0	1
Essex, N	Pacaud	0	1
Essex, S	Balfour	0	1
Elgin, W	Ingram	1	0
Elgin, E	Nairn	0	1
Frontenac	Wilmot	1	0
Glengarry	Rayside	0	1
Grey, S	Blythe	1	0
Grey, C	Rorke	1	0
Grey, N	Creighton	1	0
Grenville	French	1	0
Haldimand	Baxter	0	1
Hamilton	Gibson	0	1
Hastings, E	Hudson	1	0
Hastings, N	Wood	1	0
Hastings, W	Ostrom	1	0
Huron, S	Bishop	0	1
Huron, E	Gibson	0	1
Huron, W	Ross	0	1
Halton	Kerns	1	0
Kent, W	Clancy	1	0
Kent, E	Ferguson	0	1
Kingston	Metcalfe	1	0
Lincoln	Garson (Labor)	0	1
Lambton, E	Graham	0	1
Lambton, W	Pardee	0	1
Lanark, N	Hilliard	0	1
Lanark, S	Lees	1	0
Leeds	Preston	1	0
London	Meredith	1	0
Lennox	Meacham	1	0
Middlesex, E	Tooley	1	0
Middlesex, W	Ross	0	1
Middlesex, N	Waters	0	1
Muskoka	Marter	1	0
Monck	Harcourt	0	1
Norfolk, S	Morgan	1	0
Norfolk, N	Freeman	0	1
Northumberl'd, E.	Willoughby	1	0
Northumb'l'd, W.	Field	0	1
Ontario, S	Dryden	0	1
Ontario, N	Gould	0	1
Oxford, N	Mowat	0	1
Oxford, S	McKay	0	1
Ottawa	Bronson	0	1
Peel	Chisholm	0	1
Peterboro', E	Blezard	0	1
Peterboro', W	Stratton	0	1
Perth, S	Ballantyne	0	1
Perth, N	Hess	1	0
Prescott	Evanturel	0	1
Prince Edward	Sprague	0	1
Renfrew, N	Murray	0	1
Renfrew, S	Dowling	0	1
Russell	Robillard	0	1
Simcoe, W	Wylie	1	0
Simcoe, E	Drury	0	1
Simcoe, Centre	Phelps	0	1
Stormont	Mack	0	1
Toronto	H E Clarke	1	0
	E F Clarke	1	0
Toronto	Leys	0	1
Victoria, West	Cruess	1	0
Victoria, E	Fell	1	0
Waterloo S	Master	0	1
Welland	Morin	0	1
Wellington, W	Allan	0	1
Wellington, S	Guthrie	0	1
Wentworth, N	McMahon	0	1
Wentworth, S	Awrey	0	1
York, W	Gilmour	0	1
York, E	Smith	0	1
York, N	Widdifield	0	1
Parry Sound	Armstrong	Independent	
		32	57

Perhaps the most extraordinary that success has been achieved in modern science has been attained by the Dixon treatment for Catarrh. Out of 2,000 patients treated during the past six months, fully ninety per cent, have been cured of this stubborn malady. This is none the less startling when it is remembered that not five per cent. of the patients presenting themselves to the regular practitioner are benefitted, while the patent medicines and other advertised cures never record a cure at all. Starting with the claim now generally believed by the most scientific men that the disease is due to the presence of living parasites in the tissues, Mr. Dixon at once adapted his cure to their extermination; this accomplished the Catarrh is pratically cured, and the permanency is unquestioned, as cures effected by him four years ago cures still. No one else has ever attempted to cure Catarrh in this manner, and no other treatment has ever cured Catarrh. The application of the remedy is simple and can be done at home, and the present season of the year is the most favorable for a speedy and permanent cure, the majority of cases being cured at one treatment. Sufferers should correspond with Messrs. A. H. DIXON & SON, 305 King street west. Toronto, Canada, and enclose a stamp for their treatise on Catarrh.—*Montreal Star.*

Another result of the construction of the C. P. R. railway is the commencement of a lumber trade from British Columbia. The first car-load left New Westminster the 22nd November arriving in Montreal on the 9th of December and was delivered to its destination on Saturday. It contained 15.000 ft. of Douglas fir and cedar cut into 30 ft. lengths, and from enquiries made the company anticipated doing an extensive trade in lumber from British Columbia, especially where the long sill timber is required. The mills in the province are being enlarged and fitted out with the necessary machinery with the evident intention of supplying a great demand.

Notice to Contractors

SEALED TENDERS addressed to the undersigned and endorsed "Tender for Midland Harbor Works," will be received until Tuesday, the 25th day of January, 1887, inclusively, for the construction of Works at Midland, Simcoe County, Ontario, according to a plan and specification to be seen on application to the Reeve, Midland, at the office of the Resident Engineer, Midland Division of the Grand Trunk Railway, Peterborough, and at the Department of Public Works, Ottawa, where printed forms of tender can be obtained.

Persons desirous of tendering are requested to make personal enquiry relative to the work to be done, and to examine the locality themselves, and are notified that tenders will not be considered unless made on the printed forms supplied, the blanks properly filled in, and signed with their actual signatures.

Each tender must be accompanied by an *accepted* bank cheque made payable to the order of the Honorable the Minister of Public Works, *for the sum of one thousand dollors* ($1,000), which will be forfeited if the party decline to enter into a contract when called upon to do so, or if he fail to complete the work contracted for. If the tender be not accepted the cheque will be returned.

The Department does not bind itself to accept the lowest or any tender.

By order,
A. GOBEIL,
Secretary.

Department of Public Works, Ottawa, 24th December, 1886. 3d153

CAPE BRETON RAILWAY.

SECTION—GRAND NARROWS TO SYDNEY.

TENDERS FOR THE WORKS of CONSTRUCTION.

SEALED TENDERS, addressed to the undersigned and endorsed "Tenders for Cape Breton Railway," will be received at this office up to noon on Wednesday the 12th day of January, 1887, for certain works of construction.

Plans and profiles will be open for inspection at the office of the Chief Engineer and General Manager of Government Railways at Ottawa, and also at the Office of the Cape Breton Railway at Port Hawkesbury, C.B., on and after the 27th day of December, 1886, when the general specifications and form of tender may be obtained upon application.

No tender will be entertained unless on one of the printed forms and all the conditions are complied with.

By order,
A. P. BRADLEY,
Secretary.

Department of Railways and Canals, Ottawa, 15th December, 1886

NOTICE.

TENDERS will be received at the Department of Inland Revenue until Noon on Monday, 3rd January, 1887, from parties desirous of leasing the privilege of ferrying across the River Ottawa, between Fitzroy, in the County of Carleton, in the Province of Ontario, and Onslow in the County of Pontiac, in the Province of Quebec, in accordance with the terms and under the conditions set forth in the Regulations copies of which can be procured from the Inland Revenue Department at Ottawa.

Each Tender must state the amount which the parties tendering is willing to pay per annum for the privilege referred to, which amount will be payable in advance, the terms of the lease being for five years from the first of May, 1887.

Each Tender must be accompanied by a cheque marked "Good" on one of the chartered Banks doing business at Ottawa, for one-half the amount of the per annum tender. This amount will be credited on account of the first year's rent in the case of the accepted tender, and all other cheques will be returned, except in the event of withdrawals, in which case no refunds will be made.

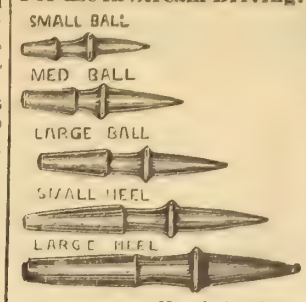
All communications must be addressed to the undersigned and endorsed on the envelope, "Tender for the Quyon Ferry."

WM. HIMSWORTH,
Secretary.

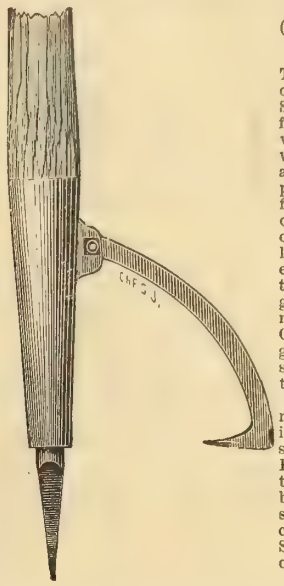
Department of Inland Revenue, Ottawa, 14th, Decebmer 1886.

LUMBER DRIVER'S CALKS,

For use in Stream Driving. Made from the Best Refined Tool Steel and Forged. The method used in tempering leaves every one of the same temper rendering them stronger and more durable than any other Calks. 25 in Ball and 5 in Heel are the numbers usually required. Ask for our make and take no other. See advertisement of Cant Dog.



Manufactured by
T. McAVITY & SONS, ST. JOHN, N. B.



ORONO CANT DOGS
(All Steel.)

The Dogs are made of the Best Cast Steel, by the drop forging process, which makes them very smooth, true and even. The point or hook is fashioned to a nice oval shape so as to catch all sizes of logs instantly, and enabling the operator easily to disengage. The picks are made also of Best Cast Steel and are of good length both inside and outside of the wood.

Our handles are made of best quality straight grained split and turned ROCK MAPLE, 5 to 6 feet in length, bored specially to suit the pick. Prices on application. See advertisement of Drivers Calks.

manufactured by
J. McAVITY & SONS, ST. JOHN, N. B.

NOTICE

TENDERS will be received at the Department of Inland Revenue until noon of Monday, the 3rd January 1887, from parties desirous of leasing the privilege of ferrying across the River Ottawa, between La Passe, in the Province of Quebec, and Gower Point, in the Province of Ontario, in accordance with the terms and under the conditions set forth in the Regulations, copies of which can be procured from the Inland Revenue Department at Ottawa.

Each tender must state the amount which the party tendering is willing to pay per annum for the privilege referred to, which amount will be payable in advance, the terms of the lease being for five years from the 1st May, 1887.

Each tender must be accompanied by a cheque marked "good," on one of the chartered banks doing business at Ottawa, for one-half the amount of the per annum tender. This amount will be credited on an account of the first year's rent in the case of the accepted tender, and all other cheques will be returned, except in the event of withdrawals, in which ease no refunds will be made.

All communications must be addressed to the undersigned, and endorsed on the envelope "Tender for the La Passe Ferry."

WM. HIMSWORTH,
Secretary.

Department of Inland Revenue, Ottawa, 14th December, 1886.

SCRIBNER'S LUMBER AND LOG BOOK.

Over One Million Sold. Most complete book of its kind ever published. Gives measurement of all kinds of Lumber, Logs, Planks, Scantling; cubical contents of square and round Timber; hints to lumber dealers; wood measure; speed of circular saws; care of saws; cord-wood tables; felling trees; growth of trees; land measure; wages, rent, board, interest, stave and heading bolts, etc. Standard bood throughout the United States and Canada. Get the new illustrated edition of 1882. Ask your book-seller for it. Sent post-paid for 35 cents.

G. W. FISHER, Boz 238, Rochester, N.Y., or A. G. MORTIMER, Peterborough, Ont.

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Mercantile & Land Reporting Agency

BANKERS—DOMINION BANK.

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MANAGER—WILLIAM SMITH.

General Offices—Court St., Toronto, Ont.

Telegraph Address—Agency, Toronto.

Having for its special objects the furnishing to subscribers of reliable information on the financial standing or otherwise of tradesmen and others, the collection of outstanding accounts, and the procuring of the most reliable information from independent sources of the value and condition of landed and other properties in any part of Canada and the United States, with correspondents in Great Britain and other parts of Europe.

Our method of procuring for our subscribers the most reliable information is through solicitors of the highest standing, and from other equally reliable sources in the several localities indicated, who are under contract with us to supply the necessary information promptly.

The Landed Enquiry Department of this Agency, the only institution of this kind known, is invaluable to Solicitors, Loan, Investment, and Insurance Companies, Estate Agents, and others, preventing fraudulent land transactions resulting from misrepresentations.

The Department for the collection of outstanding accounts is conducted on an entire change of the system usually followed by Collecting Agencies, viz.:—Subscribers may have their collections paid either direct to themselves, or to the offices of the Agency, in which latter case remittances will be deposited to an account provided for that purpose, and immediately remitted to the parties to whom it is due, and will not be applied to any other purpose.

Another important feature in connection with this department is, that subscribers depositing accounts for collection will, if requested, be furnished with a Form of Script, on which will be entered the name of each debtor, the amount owing, and a full report of the prospects of collection, and providing that the receipts thereof be paid to bearer only, thus enabling subscribers to realize on their outstanding accounts.

The Agency will forward at least once in three months, or oftener if desired, a report and statement of all accounts in hand.

NOTE.—The offices of the Agency are open to the Solicitors and subscribers for reference to our numerous maps, atlasses, directories and correspondence, and for the transaction of business with their clients and customers when n Toronto.

W. SMITH, Manager.

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The only Through Route for the Great North West.

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PETERBOROUGH DEPART.—11.31 a.m., 7.53 p.m. 10.56 p. m.

ARRIVE.—5 31 a. m., 8.39 a. m., 6.42 p. m.

Going West.

PETERBOROUGH DEPART.—8.39 a. m., 6.42 p. m., 5.31 a. m.

ARRIVE.—11.31 p.m., 7.53 p.m., 10.56 a. m.

C. W. SPENCER,
Ass't General Sup't.

D. McNICOLL,
General Pass'r Agent.

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Or "THE CANADA LUMBERMAN" and a copy of SCRIBNER'S LUMBER AND LOG BOOK" for $1.25

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4.—It furnishes complete and reliable quotations of prices of Lumber in all the leading Markets.

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TO ADVERTISERS

It has a circulation among Saw Mill Owners, Manufacturers, Lumber and Timber Dealers and all classes connected with the Timber Business.

Examine the field, count the cost, and you will at once decide that the CANADA LUMBERMAN is the Cheapest, Best, Most Reliable and only true medium for placing your goods and wares before the Saw Mill Men, and Lumber and Timber Dealers of the Dominion.

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THE HENDERSON LUMBER CO. Limited.

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Dealers in, and manufacturers of, Dimension and Bridge Timber, Sawn Lumber, Clapboards, Shingles and Lath. Packing Cases and Boxes a Specialty.

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CANOES

Patent Cedar Rib Canoes, Patent Longitudinal Rib Canoes, Bass wood Canoes, Folding Canoes Paddles, Oars, Tents, etc., etc

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Canoes for Lumbermen, designed to carry any amount of goods and chattels and strongly built, made to order on short notice.

F. E. DIXON & CO

Manufacturers of

Patent Lap-Joint Star Rivet

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To Mill Owners, Manufacturers & others requiring Leather Belting

Do not buy any Belting unless with DIXON'S PATENT LAP JOINT. It will last longer and do more service than any other. Please note the address, 70 KING ST. EAST, and send for Circulars and Latest Discounts.

A FULL LIN of all Sizes Single and Double Belting constantly in stock.

☞All ORDERS Filled same days as received.

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The largest Manufacturers in the world of Vulcanized India Rubber Goods for mechanical purposes.

Rubber Belting from ONE to SEVENTY-TWO inches wide.

Hose, for conducting, suction and steam. ***Packing,*** Cloth Insertion and pure ***Tubing*** of all kinds. ***Rubber, Linen and Cotton Fire Hose. Leather Belting,*** Extra heavy American Oak Tanned.

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Works also at NEW YORK and SAN FRANCISCO.

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LIMITED.

OFFICE AND YARD, Foot West 21st Street, New York City

REGULAR SALES will be held during the year 1886, as follows:

Tuesday, April 6th,	*Tuesday, August 10th,*
do May 11th,	*do September 7th,*
do June 8th,	*do October 5th,*
do July 13th,	*do November 2nd,*

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Sales commence promptly at 10.30 am. Wm. Norman, Auctioneer

At each of these sales we shall offer a full and complete assortment of the best grades of

HARDWOODS AND PINE LUMBER

Dealers and consumers will find it to their profit and advantage to attend. Catalogues giving the inspection of each lot offered can be had at the yard on the day of sale, or will be mailed on application. Address

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WHOLESALE and RETAIL

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MERCHANT

Car Lots sold on Commission, railway switch in to yard and plenty of room for storage. Yard corner of Stachan and Wellington Ave. Office, 9 Victoria St. Telephone Connection.

Notice to Contractors.

TENDERS will be invited for the construction of the Section of the Cape Breton Railway extending from the Grand Narrows to Sidney, a distance of about 45 miles. This preliminary notice is given in order that Contractors desiring to tender for the work may have an opportunitp to examine the location before the winter sets in.

By order,

A. P. BRADLEY,

Dep. of Railways and Canals,
Ottawa, 26th Nov., 1886.

GRATEFUL—COMFORTING.

EPPS'S COCOA

BREAKFAST.

"By a thorough knowledge of the natural laws which govern the operations of digestion and nutrition, and by a careful application of the fine properties of well-selected Cocoa, Mr. Epps has provided our breakfast table with a delicately flavored beverage which may save us many heavy doctors' bills. It is by the judicious use of such articles of diet that a constitution may be gradually built up until strong enough to resist every tendency to disease. Hundreds of subtle maladies are floating around us ready to attack wherever there is a weak point. We may escape many a fatal shaft by keeping ourselves well fortified with pure blood and a properly nourished frame."—*"Civil Service Gazette."*

Made simply with boiling water or milk. Sold only in packets by Grocers, labelled thus:

JAS. EPPS & Co., Homœopathic Chemists, London, England

FOR THE RIGHT MAN.

WANTED—A trustworthy and pushing man to represent the CANADA LUMBERMAN in the field, capable of writing up the lumber and wood working industries, solicit subscriptions and advertisements, and do general business. One acquainted with the branch of trade preferred. Must be perfectly sober and able to furnish good references. Apply personally or address

A. G. McLEAN,
Publisher, Peterborough, Ont.

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STROUDSBURG.

MONROE COUNTY, PENNSYLVANIA, U. S.

MANUFACTURERS OF

Solid EMERY WHEELS

AND SHARPENING MACHINERY.

The products of the Manufacture of the Tanite Company have, for almost 18 years, enjoyed a great reputation, and have been recognized for a long while, in all the countries of the world as a type of excellence in this class of work. In order to increase in Canada their already widely extended use, the Co'y has recently added to the liberality of its terms and conditions, and has chosen the following Houses, so extensively known, to be its Agents:

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EVERY SAW FULLY WARRANTED.
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IMPORTERS AND DEALERS IN

Band Saws, Emery Wheels, Files,
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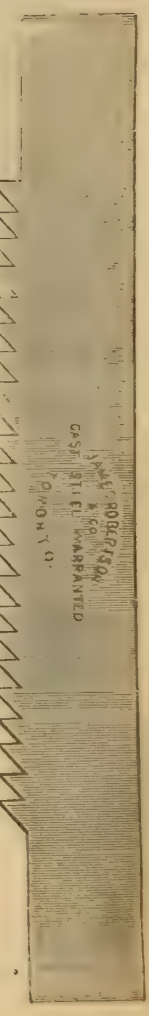
Saw Gummers, Leather Belting, Iron Pipe, &c.



PUBLISHED MONTHLY By A. G. MORTIMER.

The only Newspaper devoted to the Lumber and Woodworking Industries of the Dominion.

SUBSCRIPTION $1.00 PER ANNUM.

VOL. 7. PETERBOROUGH, ONT., FEBRUARY, 1887. NO. 2.

CANADA'S LUMBER SHIPMENTS TO ENGLAND.

CHURCHILL & SIM report the following consigments of lumber, etc. from Canada during the year 1886:—

SAWN WOOD.—Pine, deals. &c., from the St. Lawrence, for 1884,1,714 000 pieces; 1885, 1 665 000 pieces; 1886, 2,072,000 pieces. Spruce Deals, &c., from the St Lawrence, for 1884, 1,971.000 pieces; 1885. 1 968,000 pieces; 1886, 1,858,000 pieces. Spruce Deals, &c, from New Brunswick, for 1884, 355,000 pieces; 1885, 510,000 pieces; 1886. 503,000 pieces.

TIMBER.—Yellow Pine from Quebec, for 1884, 3,841 loads; 1885, 6,247 loads; 1886, 2 681 loads. Red Pine from Quebec, for 1884, 1,135 loads; 1885. 797 loads; 1886. 289 loads. Elm from Quebec, for 1884, 1.999 loads; 1885 2,713 loads, 1886, 622 loads. Ash from Quebec, for 1884 4,495 loads. 1885 2,123 loads; 1886, 1,632 loads Hickory from Quebec, for 1884, 144 loads; 1885, 223 loads; 1886, 41 loads Oak frem Quebec, for 1884 2 936 loads, 1885. 3 557 loads; 1886, 3;076 loads Birch from Quebec, for 1884, 2 066 loads, 1885, 5,475 loads; 1886, 966 loads. Birch, Nova Scotian, &c., for 1884, 3,982 loads; 1885, 3,327 loads; 1886, 1,654 loads.

PINE DEALS, the most important supply from the Canadian ports, have varied little during the year. They have arrived in larger quantities than required; but, owing to firm holding, there has been no appreciable fall in value except for first quality. A favourable turn in the demand is wanted to save the market from the dangers of too large an accumulation of stock. Spruce have fallen so low that it is difficult to believe that they will be much cheaper, or that any reduction could increase the consumption.

In Timber, shipbuilding woods have been very difficult to sell, and exceedingly unprofitable; furniture woods, with the one exception of Birch, are better, the cabinet makers' trade having been far more prosperous than the builders'. A large falling off in the supply is noticeable.

FARNWORTH & JARDINE report:

YELLOW PINE TIMBER:—The import has consisted of 4 cargoes, chiefly waney pine on contract, as compared with no arrivals in the corresponding month during the past two years; the deliveries have been fair, and stocks are now lower than ever previously recorded, nevertheless quite ample for the demand, and there is improvement in values. St. John pine: Several parcels of prime quality and large average have arrived, but the demand is limited, and the bulk has gone into stock Red pine has come forward more freely; the demand is moder ate, and prices rule very low. Oak logs: The import has consisted of 16,000 feet, against *nil* during the same month last year; the stock is light, viz, 151,000 feet, against 288,000 same month last year, and 239 000 for the year before; and although there is rather more inquiry, prices have not improved. Oak planks have been imported more freely, viz., 61,000 feet, against 31,000 feet last year; the demand continues fair, and the stock, though ample (128,000 feet), is not excessive. This article is quite taking the place of oak in the log, and as shipments are now both more carefully culled and manufactured, and the cost comparatively low, it will probably still further grow in favour with our wagon builders. Elm has been more inquired for, and as the stock is light, the prices are firmer. Ash: The import has consisted of two parcels of medium quality, which have been sold at fair rates from the quay; the stock is very moderate. Pine deals: The import has consisted of 746 standards, against 456 standards same month last year; the deliveries have been unsatisfactory, viz., 1,166 standards, against 1,579 standards last year, and the stocks remaining over are excessive, viz., 9,180 standards, against 6,638 standards; sales are most difficult to effect, and prices for all qualities are lower. Quebec staves are seldom inquired for, and prices rule low.

NEW BRUNSWICK, &c., SPRUCE AND PINE DEALS.—Spruce deals have come forward much too freely, viz., 7,105 st ndards, against 5,630 standards same month last year; the demand, though fair, has not kept pace with the import, and the stock has accumulated and is now almost equal to same time last year, viz., 19,344 standards, against 21,331 in 1885; this has checked any improvement that might have been expected at this season of the year, and the prospects during the winter months is not encouraging. Pine deals are dull of sale, and prices are unchanged. Birch has been imported freely, viz., 122 000 feet, against 2,000 feet same month last year; the demand has fallen off, and late sales show a sharp decline in value; the stock remaining over is excessive, viz.. 165,000 feet, against 144,000 same month last year, and 70,000 feet in 1885. Birch planks have been imported moderately and are in fair request, but more care must be taken in the manufacture to bring this article into favour with our buyers.

PITCH PINE.—The arrivals during the month have been 1 vessel 627 tons, against 3 vessels 2 295 tons during the like time last year. The consumption, as usual at this time of the year, has been small, but it is very satisfactory to see the stock reduced to such a small compass—smaller, indeed than for several years past; this has naturally had a beneficial effect on the market, and improved prices have been paid for the season's wood. Freights are stiffening, and with a scarcity of tonnage shippers look for still further improvements in prices, though at present this is not very freely responded to on the part of importers.

A. F. & D. MACKEY, report:

PINE TIMBER.—Import from Quebec during the month, waney 79 000 cubic feet, and square 28,000 cubic feet, consumption 116,000 cubic feet, total, against 76,000 during December last year, stock remaining 110,000 cubic feet square, 194,000 feet waney, against 226,000 and 389 000 cubic feet respectively at this time last year. St. John and other ports pine, import 32,000 cubic feet, consumption 4.000 feet, against 30,000 feet, stock 73,000 cubic feet, against 82,000 feet last year. No sales to report, arrivals having been wholly on local merchants' account.

RED PINE.—Stock reduced by 1,000 cubic feet.

OAK.—We have to report a still more reduced stock, namely, 151,000 cubic feet, against 288 000 cubic feet at end of December, 1885, consumption although scarcely an average one is double the import, being 32,000 cubic feet, against 45,000 feet last year, and only 16,000 cubic feet arrived. No doubt prices slightly advanced, but very little inquiry.

OAK PLANKS.—The stock of these is still somewhat reduced, being 128,000 cubic feet, against 160,000 twelve months ago. The import which was a large one for the time of the year, was 61.000 cubic feet, against 31 000 cubic feet, and consumption 57,000 cubic feet, against 75 000 cubic feet in December, 1885, and 35,000 cubic feet for same period in 1884.

ELM.—There has been 10,000 cubic feet imported during the month, and 5,000 cubic feet gone into consumption, leaving the stock 12,000 cubic feet, against 35,000 cubic feet twelve months ago.

ASH.—A parcel of 10,000 cubic feet arrived during the month, and has gone in consumption direct. Stock 7,000 cubic feet.

BIRCH.—This wood has arrived largely, totalling 122 000 cubic feet, and this fact coupled with a consumption of 37 000 cubic feet has increased the stock to 165 000 cubic feet, which has had a bad effect on prices which had been advancing during October and November. Sales have been as follows:—1 180 logs, ex Tobique from St. John, N.B., 14½ inches average at 15½ pence per cubic foot, and 118 logs 13½ inches average, at 15 pence, 1 004 logs ex Dora from St John N.B., nearly 14 inches average at 15½ pence. 751 logs ex Kildonan from Pictou, 16 inches average at 14½ pence per cubic foot. The latter parcel being offered at auction on account of buyer, was nearly wholly withdrawn, very few bids being produced.

N. B. & N. S. SPRUCE & PINE DEALS.—The import has been large for the time of the year, namely, 7,105 standards against 2,630 standards during December, 1885. Consumption 5,500 standards against 3,150 standards, and stock 19 344 standards against 21.331 standards twelve months ago, and 26 310 standards on 31st December, 1884. No alteration in values, the demand being slow. Several cargoes offered at auction, but only a few lots sold. balance being disposed of privately.

QUEBEC DEALS.—The stock still stands at high figures, viz: 9,116 standards against 9,638 last year at this time. The arrivals during the past month although greatly reduced as compared with November are larger than an average, being 746 standards against 456 in December 1885. Consumption 1,166 standards against 1,579 standards.

PITCH PINE.—The stock has now been reduced to a very healthy limit. consisting of 95,000 cubic feet hewn timber, 161,000 cubic feet sawn and 55 000 cubic feet planks, totalling 311,000 cubic feet against a like total of 1.048 000 cubic feet at this time last year. The import has been 34 000 cubic feet of all kinds, and the consumption 140,000 cubic feet.

SKETCHES OF THE TRADE.

THE Toronto *Globe* of a recent date published a write-up of some of the leading industries located along the line of the Northern railway, in which we find the following references concerning the lumber trade:

WM. CANE & SONS' MFG., CO. (LIMITED).

The town of Newmarket owes much to her manufacturers, of whom Mr. Cane was one of the first. Mr. Cane had been the owner of a sawmill in the township of East Gwillimbury, but in 1875 he moved into Newmarket, and commenced the manufacture of lumber, lath, shingles, sash, blinds, mouldings, door, and in fact all kinds and descriptions of housebuilding materials, in addition to ordinary lumber. This business grew to large proportions, and with it grew Mr. Cane's capital, and he commenced the manufacture of all kinds of wooden ware, such as pails, tubs, washboards, and clothes pins. This business has grown also, and there are now made at the works no less than forty-two different kinds of ordinary pails. At the late Industrial Exhibition many of these were shown and a silver medal was granted for the general excellence of the exhibit. But the articles in that exhibit which attracted the most attention were the impervious wooden packages made by the firm, such as oil cans pickle packages, etc. To such perfection has the manufacture of these goods been brought by this firm, that they can make wooden packages convenient to handle which will hold any substance, no matter how volatile

or penetrating, and their oil can will hold gasoline as safely as any tank. The extent of the business may be gathered from the fact that the company employs 120 men the year round, besides woodsmen, and use over two million feet of lumber, and two thousand cords of stavebolts in the factory in the manufacture of their various products. In 1885, after ten years' successful operation, the firm was changed into an incorporated company, under the style of Wm. Cane & Sons' Mfg., Co. (Limited). The citizens of Newmarket have since they have been incorporated as a town, had but one Mayor, Mr. Wm. Cane, the head of the firm, and are not likely soon to change. This one fact is sufficieut to show that Mr Cane is not only a large employer of labor, but also an extremely popular and public-spirited man.

PHELPSTON'S INDUSTRY.

Where the thriving village of Phelpston now stands, seventeen years ago was nothing but an unbroken wilderness. About that time the firm of N. & O. J. Phelps, of St. Catharines, who had purchased a timber limit at this point, erected what is now the best and most complete circular sawmill in Northern Ontario. The building of the mill brought, of course, a large number of men who were employed by the firm, and a little village sprang up around the property. This village has become each year more and more thriving, and at the present time there are located there a number of handsome stores and spacious grain warehouses, from the latter of which an immense quantity of grain; purchased from the farmers in the neighborhood, is annually shipped to Toronto Phelpston is not on the direct line of railway to the North-west, but all its shipments have to be sent through Allandale, where the great junction of the Northern & North-western system is situated. Although the mill will have to be removed in about two years, owing to the supply of lumber being nearly exhausted, the prosperity of the village will still go on. The business enterprise of N. & O. J. Phelps has made the place, and the firm has always been deservedly popular. The sawmill has a capacity of from forty to fifty thousand feet of lumber per day, and is one of the features of the northern district of Ontario. Mr. O. J. Phelps has served one term in the Local Legislature, with credit to himself and satisfaction to his constituents, by whom he is universally esteemed. Among the benefits which have been derived from Mr. O. J. Phelps, connection with municipal matters the township of Flos, of which he was Reeve for fourteen years, has to thank him for the railway which now passes through her borders.

THE LONGFORD LUMBER COMPANY AND RAMA TIMBER TRANSPORT COMPANY.

The most important industry at Longford Mills, Township of Rama, is carried on by The Longford Lumber Company, who have two fine large steam sawmills, with a capacity of eighteen to nineteen million feet in six months. This company have very extensive limits in the townships of Rama, Digby, Dalton, Carden, and Anson, and they are also sole owners of the township of Longford, which has an extensive and abundant supply of pine, hemlock, and other valuable woods sufficient for their mills for many years to come. The output of their mills this season was eighteen and a half million feet and two million lath and about ten million of shingles. Their manufactured goods are shipped over the N. & N. W. Railway, principally to Toronto and thence by vessel to Ogdensburg, Oswego, and other lake ports. In addition to their large saw mill interest they have a fine herd of Shorthorn cattle, Southdown sheep, and Berkshire pigs This company employ in the cutting season at the mills about 150 men and in the winter season from 300 to 400 men. The next business of importance is conducted by the Rama Timber Transport Company, under the same management It was formed for the purpose of taking logs through the canal from Black River into Lake St. John, and from Lake St John to Lake Couchiching by machinery composed of a tramway about 90 rod long, operated by a large engine and boiler driving a multitude of short shafts and cog wheels with rollers attached, where logs are put on and propelled across at the rate of about 1,500 to 2,000 pieces per day. About forty men have been employed at the work for about four months in the year. There is also on their premises a large shingle mill, with a capacity of eight million in the six months, and the company also operate a magnificent farm in connection. This company has done a large business for the past few years.

North of this are the small post villages of Washago and Severn River, and then the village of Gravenhurst is reached. The description of that place and of those to the north, will, however, appear at a future date.

E. U. WHIFFEN'S MILLS

Among the best known, and most enterprising of the residents of Orillia, Mr. E. U. Whiffen deserves a prominent place. Mr. Whiffen was superintendent of Beecher & Sullivan's mills, at Bell Ewart, for many years, until in 1880, the mill was burnt down, when he moved north, and the British Canadian Lumber Co's mill, at Midland, under contract for one year, and in the year following he purchased a mill at Fesserton, the point where the Midland Railway first strikes the Georgian Bay. The mill has a capacity of from three to four million feet of lumber per annum, and is a complete circular mill with ample power. Around the mill are some of the best piling grounds in the country, well laid out, and with plenty of railway switches running through. Parry Island in the Georgian Bay, is this year furnishing the mill with its stock of lumber. A general assortment of lumber is sawn, including pine, oak, ash, spruce, tamarac, and birch. This is sold chiefly in the Canadian market, and handled chiefly by Toronto firms but some of the choisest finds a market in Oswego. The mill is about sixteen miles from Orillia, on the Midland Railway, and as it has good dockage on the Georgian Bay, there are ample facilities for shipping the products of the mill at reasonable rates. Mr. Whiffen is a native of Utica, N. Y., but has for several years past lived on Peter street in the town of Orillia.

NEW ADVERTISERS.

THE current issue of THE LUMBERMAN contains several new advertisements, to which attention is directed. The prime, first, last, and all the-time object of the advertiser is to draw custom, and patrons of this journal are no exception. The firms below referred to take a place among the most reliable business men of the Dominion, and are well and favorably known by a large majority of LUMBERMAN readers:—

JOHN C. MCLAREN.—BELTING,

292 and 294 St. James Street, Montreal, manufacturer of Oak Leather Belting and Textile Supplies, occupies a space on page 15 of this issue. A special engraving is now being made by our engravers and will be ready by the next issue. Mr. McLaren is so well known by the manufacturers of Canada that a further introduction is unnecessary. This business has been in successful operation since 1856, and is increasing in importance every year. The oak leather belting, as manufactured by this house, stands second to none in the market, and has an extensive sale in every Province of the Dominion. Every variety of textile supplies, such as card clothing, loom reeds, etc., are also manufactured in large quantities.

MONTREAL SAW WORKS

After an absence of over a year, Mr. Chas. M. Whitlaw, manager of the above works, has returned to his old love, and contracted for a space on back of cover. When THE LUMBERMAN called on this gentleman, a fortnight since, the thermometer ranging 20° below zero, we found him in close proximity to a red-hot stove and apparently enjoying all the comforts that man could desire. Business, he informed us, was fairly good, notwithstanding the fact that during the present season trade is generally very quiet among saw men. This firm manufacture all kinds and sizes of circular and cross-cut saws, and have done a large share of the trade of the country for many years past. Saw mill men and wood-workers in general who contemplate adding to their present supply of saws will find it to their advantage to correspond with this firm.

ROBIN & SADLER.—BELTING

But few firms in Montreal are better known among manufacturers than Robin & Sadler, manufacturers of Leather Belting. Having been established for many years, they have won for themselves a reputation of which they have every reason to feel proud. The belting of this firm's manufacture may be found in almost every city and town in Canada, and has given universal satisfaction. A contract was made during the past month for all the belting required in Ogilvie's new flour mill in Montreal, the cost of which will be in the neighborhood of $10,000. This, we understand, is the fifth contract made with the same firm. During a visit to these works we were shown through the large premises from cellar to attic, and found each department of the business under control of a competent head foreman, while the machinery employed is of the latest improved design. Mr. Sadler informs us that not a single article of American machinery is used in these works that can be purchased in Canada. He is a strong protectionist, and believes that the only way to encourage Canadian manufacture is to stick to home production. A good example indeed, and one which should be imitated by every Canadian who desires to see his country prosper. We have pleasure in directing attention to this firm's advertisement on another page.

TEES & CO.—DESKS

An office desk is a commodity which but few men, either in business or private life, care to do without. As in all other branches of trade, desk makers have sought to bring their manufacture as near perfection as possible, and in this they have succeeded. Through the courtesy of Mr. Tees we were permitted to visit the show room of the above firm in Montreal, where is presented for view every variety of office, school, lodge and other kinds of desk, from the cheapest to the most elaborately finished. Messrs. Tees & Co. have been established in this business for so many years that they now control the bulk of the trade of eastern Canada, and a fair share of the western trade also. Almost every reader of THE LUMBERMAN requires, at one time or another, one of these essential articles, and they will be consulting their own interests by writing for one of the firm's new illustrated catalogues now in press, and at the same time keep their eye on the advertisement now appearing in this journal.

GEORGE BRUSH—MACHINERY.

The name of the "Eagle Foundry," of which Mr. George Brush is the proprietor, is so well known that an extended notice is quite unnecessary. This business is among the oldest in the city of Montreal, having been established so far back as the year 1820. The manufacture consists of steam engines, steam boilers, hoisting engines, steam pumps, bark mills, circular saw mills, shingle mills, ore crushers, mill gearing, hand and power hoists for warehouses, etc. Mr. Brush has gained a reputation from one end of the Dominion to the other for the excellence of the machinery manufactured. The extensive works are located at 14 to 34 King and Queen streets. Read advertisement on page 15 of this issue, and watch this space for the handsome illustrated announcement which will appear in our next issue.

THE RATHBUN CO.—BUILDERS' SUPPLIES

This extensive firm have two announcements in this issue of the THE LUMBERMAN. One will be found on page 16, and another on the third page of cover. The Rathbun Co., of Deseronto, Ont., is now classed as among the most extensive corporations doing business in Canada. The diversity of manufacture is such that it is a difficult matter to arrange a concise list. The principal production, however, is lumber, railway ties, telegraph poles; sash, doors, blinds, mouldings and, in fact, everything in the way of building material. The company, in addition to their mammoth works at Deseronto, have branches in Kingston, Napanee, Ottawa, Peterborough, Toronto and many other places.

NAPANEE CEMENT CO.

The advertisement of this company appears for the first time in this issue. The hydraulic cement manufactured by them is used for a variety of purposes, and is particularly adapted for dams erection of chimneys, foundations, culverts, cisterns, cellars, etc. Full information will be furnished by the manufacturers, the Napanee Cement Co., Napanee, Ont.

BUTTERWORTH & LOWE—SAW MILL MACHINERY.

We would direct attention of saw mill owners and others to the announcement of the above firm on third page of cover. This is an American firm of long standing, with extensive works at Grand Rapids, Mich. They manufacture almost everything used in Canadian saw mills, and desire to do a share of the trade of this country. Our readers will find something fresh from month to month in the space allotted them, and we hope that THE LUMBERMAN may be the means of introducing the manufacture of this firm to the favorable consideration of Canadian buyers of saw mill machinery.

ROBT. MITCHELL & CO.—FIRE EXTINGUISHERS.

Fire protection by automatic fire extinguishers is a simple method of getting out of trouble, and a good preventative against loss by the devouring element. Messrs R. Mitchell & Co., have a handy and inexpensive devise for this purpose, and illustrate the same on page 14 of this issue. To lessen one's insurance by utilizing a device of this kind, saves money, and as this is something which everyone desires to do, we would advise readers of THE LUMBERMAN to equip their mills and factories with the latest improvements in automatic sprinklers.

S. S. KIMBALL—SAFES, ETC

The class of manufacture carried on by Mr. Kimball, 577 Craig Street, Montreal, consists of Champion Stump and Stone Extractors, Safes, Cultivators, Hay Presses, etc. The safes manufactured here are among the best turned out in Canada, the leading features of some of the best American safes being brought into use. Mr. Kimball is a thoroughly practical machinist, and the best indication of his success is the rapid increase in his business. Lumbermen and others requiring safes will find this establishment equal to any in Canada, while the prices are at least 25 per cent. lower.

Prizes for Mechanics.

With the view of diffusing mechanical knowledge in Canada, the *Dominion Mechanical and Milling News* is giving a cash prize of $10 every month for the best essay on a mechanical subject selected by the editor. The subjects, which relate to all branches of mechanical knowledge, are announced in the *D. M. & M. News* a month ahead Some of our clever, thinking mechanics in this locality should compete for these prizes. Full particulars may be obtained by addressing Publisher *Dominion Mechanical and Milling News*, 31 King Street West, Toronto.

When opening correspondence with advertisers always mention that you saw their advertisement in the "Canada Lumberman."

McLaughlin Brothers, lumbermen of Ottawa, have sold their entire season's cut to the New York Exportation Company for a price close on to $500,000.

James Chase's saw mill at Clachan was found to be on fire at 5.30 on Friday morning by some of the neighbors, who succeeded in quelling the flames, after property to the value of about $500 was damaged. There had been no fire in the mill for over a week, as it was undergoing repairs. Traces of coal oil were found.

The Ottawa forwarding firms are busily engaged in making contracts with the lumber dealers for the freighting of lumber from the Chaudiere to Montreal and Quebec. Several large contracts have been made and there is every prospect of a good trade this summer. The prices for good lumber promise to be slightly higher than last season and culls somewhat lower.

OUR LETTER BOX.

SOMETHING ABOUT SHINGLES.

KINGSTON, Jan. 14, 1887.

To the Editor of the Canada Lumberman.

DEAR SIR —Among the many kinds of material now used by architects there is none subjected to so many different opinions as shingles One man says: 'give me shaved shingles for durability," and as proof of his opinion he will say, "there is that old barn yonder, I and my father cut the bolts out of trees which grew on such a hill, drew them to the shanty on an Ox sled, and shaved them evenings by the light of a fat pine knot when Jim was the baby, (that is over 30 years ago) and this roof is not altogether worthless yet and we left the sap on too. If I could get them I would have shaved pine shingles sure !"

Next observer says, "I don't like sap. I shingled my house, or barns, and the sap is all defective while the heart-wood is good. I believe like my friend No 1 that shaved pine shingles are best but take the sap off for me "

No. 3 says, "I like cedar shingles, (shaved of course). There is such and such a roof made out of shaved cedar, which my father made long ago. They were 2 feet long and ⅜ in. thick. They are worn very thin where the lap comes but will last a while yet. I prefer cedar."

No. 4 says, "I have not much experience in shaved shingles but in 1862 I shingled my house with X X X pine sawed shingles and it is a good roof yet. The sap was all taken off. I believe it will last 8 or 10 years yet."

No. 5 says, "I shingled my house with sawed pine shingles, sap all off, and I got my shingles from the same mill and the same man made mine that made No 4's. He said mine were as good as he could make, and my roof lasted about 12 years, and I had to put on another roof. I took cedar the last time I don't like sawed pine shingles. There is a fuzz on them that holds dampness and soon rots."

No. 6 says, "I like sawed cedar; they lay more flat and don't split and curl up so much as pine does."

And more of these kind of theories could be brought forward if space would permit.

Now the question is, which is the best and how can we harmonize the different views expressed ? for they are all true and are repeating themselves every day.

In the first place, let me say, it is not the sawing or shaving of a shingle that makes them stand the weather best or last longest. I know the roof well that No 1 mentions, it has lasted over 30 years and No. 4's roof will also last 30 years.

The former was cut green, bark taken off, split and shaved; the turpentine dried in the timber and made the sap hard. It lasted almost as well as the heart wood.

No. 4's roof was cut and split green, drew to the shingle factory 4½ lengths, sawed early in the spring before the gum or turpentine had been run out. It was not put in the water. When it was sawed the gum and pitch collected at the bottom of the saw teeth. When the sawyer filed his saw he took his jack knife and cleaned the gum off his saw teeth so as not to stick up the teeth of his file. Then they were packed up in bunches and kept under cover dry until laid on the roof. They were cut across the grain, not slab fashion. They won't curl nor split any more than No. 6 s cedar did.

No. 2's shingles had black sap on them when they were nailed on the roof. The sap might have been green and bright when bunched up but they were not kept covered and lay exposed to wet before used. Sap is not very good under any circumstances, but unless the gum dries in the wood it is almost worthless.

No. 5's shingles were sawed by the same man that cut No. 4's. These shingles were made of nice pine saw-logs 12 to 15 inches in diameter, had laid in the water three years when the sawyer sawed them All the gum spots on the side of the saw and the saw teeth became clean and bright. There was nothing in the wood to preserve the shingles; the sap was taken off but still they rotted in 12 years. Had they been cut before the gum had left the wood they would also have lasted 30 years.

No 3's roof lasted well because they were ¾ in. thick. Cedar makes good shingles but they require to be thicker than pine. They don't rot but wear out. The nails rust and become loose in the wood more than in pine.

Hemlock makes a good shingle if not too wide and laid 4½ inches to the weather. I don't know the durability of hemlock shingles, I have made and sold hemlock, ash and tamarac shingles and they have given good satisfaction.

I had one man say to me once, "Hoppins, your theory about the durability of shingles, depending on the way that the timber is handled before manufactured, is all wrong. My father and I made the shingles on our buildings and we made some of them out of pine that lay on the ground until the moss and vines had grown over top of the logs and it made good shingles and they have lasted as long as those that you say were cut green."

"Yes sir," said I, "there were no worm holes in that moss covered tree neither were there?" "No," said he. Now this proves my theory true more than not true. There is a kind of pine, which in this part of Ontario we call yellow pine or cork pine. It is not the common pine generally growing in our pineries, the sap is not over ½ inch thick. This kind of pine does not rot easily and it is very scarce. Not much of this kind of pine gets manufactured into shingles. As proof of that it is different from our common pine. The worms do not work in it My long and watchful experience in shingles convinces me that shingles cut out of good large pine and kept out of water are best, the durability 30 years ; cedar not much difference, whether kept out of water or not durability 20 years. Pine left in water for a couple of years 12 to 18 years; hemlock, tamarac and ash I have not tested but I believe they will last 20 years. I erected two dwelling houses last year and put hemlock shingles on them, I intend to erect two more this year and will put hemlock shingles on them also.

A. HOPPINS.

A FEW POINTS WORTH CONSIDERING.

TORONTO, Jan. 27th, 1887.

To the Editor of the Canada Lumberman.

SIR.—As your journal is the only one devoted to the interests of the Lumber business of Ontario, I desire a short space in your columns in order to ventilate a few of the many grievances that for years past the lumbermen of Ontario have been enduring

First of all I take up the Insurance Question. As a rule a saw mill is shut down for five months every year. The danger from fire, not only to the mill but also to the lumber piled in the yard, is very small, but notwithstanding this the Insurance Companies charge the same exorbitant rates as when the mill is running, and the risk from fire correspondingly large, declining in all cases to make any rebate.

Secondly, why should lumberman have to furnish car stakes ? Should not the Railway Companies be compelled to stake every car before it is loaded ? If not, why do they invariably provide lumber for railing up the doors of grain cars ? To ship one million feet of lumber requires an expenditure of at least seventy-five dollars for car stakes Should the shipper or the Railway Company bear this expense ?

These two questions and the vexed one of weighing lumber have long been of interest to the trade in general. There is in my opinion, only one way by which justice and fair play can be obtained. It is by the lumbermen of Ontario forming a union and taking united action to avoid the heavy losses they have sustained in the past. The lumber section of the Toronto Board of Trade has proved itself to be a distinct failure. Now is the time for action. Will not those who have millions invested in lumber limits, saw mills and lumber, take the initiative.

Yours truly,

A LUMBER MANUFACTURER.

THE MAGUIRE FAILURE.

FURTHER particulars, which have come to hand since our last issue, go to show that there has been something crooked in the matter of the Maguire failure, which took place in Montreal in December. At a meeting of the creditors of this firm recently held, the Messrs. Maguire presented a statement which lumps the liabilities at about $327 000, and the assets at $300.000. and undertakes to account for their suspension by the fact that eight of their vessels are locked up at Buenos Ayres in consequence of the cholera outbreak there. The statement and figures submitted were regarded as unsatisfactory by the chairman, Mr. R. R. Dobell, and others, in consequence of the absence of a proper set of books and of ordinary business entries with details of some of the firm's transactions. After an adjournment of some hours the insolvents produced the books which had been kept by them from which it appeared that the last entry in the day book was made in the early part of October. The creditors who had objected to the firm's system of book-keeping pointed to the fact in justification of their complaints. The insolvents thereupon surrendered their estate to the creditors, and the meeting proceeded to appoint three trustees to take charge of it. The first two named were the Hon. James G. Ross and Mr. Kennedy, from the office of Messrs. R. R. Dobell & Co., and the third was appointed by the Bank of Montreal, in the person of Mr. Meredith, of Montreal. The trustees will make a full investigation into the affairs of the firm, and will report as to the best means of realizing upon the estate. Meanwhile Mr. James Maguire continues to manage the estate under instructions from the trustees. Since the date of the meeting above referred to, however, a new phase has occurred in this matter, caused by the entry of an action in the Superior Court at Quebec. The action, we understand, is for $100,000, and is taken by Messrs. Kidder, Peabody & Co., of Boston, against Messrs. D. & J. Maguire, the Hon. James G. Ross, and the three trustees of the insolvent estate. Hon. James G. Ross. has mortgages amounting to $64,000 on nine of the Maguire ships. The action seeks to set aside these mortgages on the ground that they give Mr. Ross an undue preference as a creditor. It also applies for a writ of injunction to restrain Mr. Ross and the trustees of the estate from controlling the ships belonging to the firm, on the ground that the plaintiffs had no part in the appointment of the said trustees. Messrs. Kidder, Peabody & Co., who are the American agents of the Barings, have a claim against the estate of about $90,000.

PERSONAL MENTION.

[Contributions from or concerning our friends and patrons are freely welcome to this column. The name of the sender must always accompany such notices.]

Mr. E. B. Eddy, lumberman, has been elected Mayor of Hull, Que.

The Ottawa Board of Trade have elected Mr G. B Pattee, lumberman president for 1887.

Mr. G. C. Pattee, of Perley & Pattee, lumber merchants of Ottawa, will make a trip to California, where he has an orange plantation.

THE LUMBERMAN was favored by a call a few days ago from Mr. Geo. Cormack lumber merchant, of Whitby. He report a prosperous business.

News has been received of the death of the well known lumberman of the Mattawa, Mr. Noah Timmins, which sad event took place January 12th. Mr. Timmins was obliged to go down to Montreal some time ago to have an operation performed. His system was considerably run down by the trying affliction and he succumbed. Mr. Timmins has been identified with the Upper Ottawa country for the last thirty years, residing at Mattawa where he carried on a large lumbering and mercantile business. His many friends in the business will miss him as he was one of the landmarks of the Upper Ottawa. The deceased gentleman was about 65 years of age and leaves a numerous family.

It is probable that Mr. George Humphrey, lumber merchant, who ran Mr. McGreevy so closely in Quebec West at the last general election, will again be his opponent in the Liberal interest.

Hon. H. W. Pratt, a Parry Sound, Ont., lumberman, recently received the nomination for a seat in the Ontario parliament, but it was found that through some informality in his naturalization papers, he is still a citizen of the United States, and therefore incapable of holding office in the Dominion. He is a partner of A. N. Sprat, of Alpena, Mich.

Mr. F. E. Bushwell, of Grand Haven, Mich., has returned home from a several weeks' trip to the Spanish river, Georgian Bay, Ont., where his firm is putting in a large sawmill plant.

The Ottawa *Evening Journal* thus compliments a well-known lumberman : It is a pity that Mr. J. R. Booth will not stand for South Renfrew. Such men as Mr. Booth are needed in Parliament by the country.

The serious loss by fire which fell to the lot of Mr. J. M. Irwin, of Peterborough, on the 27th ult., is to be regretted. His fine residence was completely destroyed, as well as a considerable amount of valuable household effects.

Mr. J. T. Lambert, lumber broker of Ottawa, has recently returned from a trip up the Colonge River. He reports the lumber trade in that district to be brisk, and states that the great quantity of snow up there has not effected operations in the least. The lakes are beginning to flood, however, owing to the large body of snow on them, and as a result traffic is difficult.

Mr. Alex Calley, at one time engaged in the lumber business in Western Ontario, has opened out business as general merchant and commission agent under the style of Calley & Co., at 15 Merton Chambers, Stanley street, Liverpool Eng.

THE TIMBER LICENSES IN THE DISPUTED TERRITORY.

The Minister of the Interior has issued a fly sheet, containing a statement regarding the timber limits in the disputed territory. Licenses to cut this timber were first granted by Mr. Mackenzie's government. The form of lease was sanctioned by Mr. David Laird, then Minister of the Interior, Mr. R. W. Scott, Secretary of State, and Mr. Edward Blake, Minister of Justice. In the case of the first lease a bonus of $20 a square mile was given, and in the case of others issued under that government, $15. But the leases were for twenty-one years ; and the bonus, spread over the term of the lease, would be about $3 a mile per annum. Under the present government the system was continued, but it was modified by substituting an annual for a twenty-one year's lease, and making the rental $5 instead of $2 with $15 spread over twenty-one years. Under the modified policy 121 orders in-council were passed, but only twenty-two licenses were issued. Of twenty-one licenses issued timber was cut only under one. The last of the licenses expired on the 31st December, 1885, and the government has persistently refused to renew them. Of the twenty-one years' licenses four are still in existence, three o which were issued by the late government ; and the holders of these licenses are the only persons now cutting timber in the disputed territory. Six persons in whose favor orders-in-council were issued never received licenses Permits for cutting cordwood, telegraph poles and railway stuff were issued, but they have all lapsed, and none of them has been renewed. It is very desirable that some arrangement should be made by which timber could be cut in the disputed territory.

Send in your subscription for 1887.

POWER AND ITS TRANSMISSION.

IN order to save considerable time and trouble in searching for information with regard to the transmission of power, says the *Millers' Journal*, the following data have been collected from a mass of irrevalent matter. The reader will be able to find at a glance what he wants to know in order to be able to makec acurate calculations.

BELTING.

Belting is daily coming more and more into use, and it is safe to say that at least 95 per cent. of the power is transmitted by it, while in Europe the greater part of the power is transmitted by cog-wheels.

THE POWER OF BELTS

is derived from the friction between the surface of the belt and the pulley, and is governed by the same laws as in friction between flat surfaces. The friction increases regularly with the pressure, and the more elastic the surface the greater the friction. The only fault to be found with the system of belting is that a portion of the revolutions of the motor are lost. The number of revolutions lost vary with the load as it changes. Ordinary belts will safely sustain a working tension of 45 pounds per inch in width.

WIDTH OF BELT, ETC.

The rule to determine the width of belt and size of pulley required to transmit a given horse-power is easily found. Since a horse-power is 33,000 pounds raised one foot high per minute, we must adjust the width and velocity of belts so as to effect the required result. Thus, if a belt moves with a velocity of 733 feet per minute, a belt five inches in width will transmit five horse power, provided the effective tension is 45 pounds per inch. If the velocity be increased up to 1 466 feet per minute the same belt with the same tension will transmit ten horse-power, so that a five inch belt applied to a five foot pulley making 120 revolutions per minute would transmit ten horse-power when the effective tension is 225 pounds.

By taking the actual tension of the belt and multiplying it by the actual velocity, we get what may be called the indicated horse power of the belt, which corresponds to the indicated horse-power of the engine. By measuring the actual power transmitted, by a dynamometer, rules may be based upon the amount of belt surface in contact with the pulley.

For practical purposes, velocity and power to resist tension are the only available elements of calculation.

Actual tension, adhersion, friction, &c., can all be varied at will and form no certain dependence for calculation. It may, however, be adopted as a rule that the adhersion and capability of belts to transmit power is in the ratio of their relative lengths and breadths. A belt double the length or breadth of another under the same circumstances will transmit more than double the power, and for this reason it is desirable to use long belts. By doubling the velocity of the same belt its effective capability for transmitting power is also doubled.

Belts which run vertically should always be drawn tight, or the weight may prevent its adhering closely to the lower pulley, but in all other cases they should be moderately slack.

In order to obtain the greatest amount of power from belts the pulleys should be covered with leather, and more power can be obtained from the grain or hair side to the pulley than the flesh side, as the belt adheres more closely.

The most effectual remedy for preventing belts from running to one side of the pulley, would be to find out first if the face of the pulley is straight, if not to straighten it. In some cases the shafts may not be in line. The remedy in this case would be to slacken up the hanger bolts and drive the hangers out or in, as the case may be, until both ends of the shaft become parallel. This can be determined by getting the centres of the shafts at both ends by means of a long strip of board.

TIGHTENERS

should be placed as close to the large or driving pulley as circumstances will permit, as the loss of power in the use of a tightener is equal to that required to bend the belt and carry the tightening pulley; therefore, there is a greater loss of power by placing it near the small pulley, as the belt will be bent more than near the large one.

Belts always run to the highest side of the pulley, because of centrifugal force, aad that part of the belt nearest to the highest part of the rounded pulley is more rapidly drawn, because the circumference of the pulley is greater at that point.

LENGTH OF BELTS.

The rule for finding the length of a belt desired is to add the diameter of the pulleys together, devide the sums by 2, and multiply the quotient by 3¼; add the product to twice the distance between the centres of the shafts, and the sum will be the length required.

WIDTH OF BELT.

The rule for finding the width of belt to transmit a given horse-power is to multiply 36,000 by the number of horse power; multiply the speed of the belt in feet per minute by one-half the length in inches of belt in contact with smaller pulley; divide the first product by the second, the quotient will be the required width in inches.

HORSE-POWER OF A BELT.

Following is the rule for calculating the number of horse-power a belt will transmit, its velocity and number of inches in contact with the small pulley being given: Divide the number of square inches in contact with the pulley by 2, multiply this quotient by the velocity of the belt in feet per minute, divide this amount by 32 000 and the quotient will be the number of horse-power the belt will transmit.

To ascertain the horse-power which belts will transmit, multiply the width of the belt by the diameter of the pulley (in inches), by revolutions of the pulley (per minute), by the number in the following table corresponding to the pull the belt can exert per inch of width. Example: 10 inch single horizontal belt, 36-inch pulley, 200 revolutions, pull taken at 50 lbs.

10″x36″x200x0 0001—28.8 horse-power.

The pulls which belts 1 inch will transmit are as follows:

Single horizontal belts	50 lbs.
Double	100 "
Single vertical	40 "
Double	60 "
Quarter-twist single belts	25 "
" double	40 "

Pull exerted by belt 1 inch wide, in pounds.	Horse-power—Pulley 1 inch diameter, one revolution per minute, belt 1 inch wide.
10	.00008
15	.00012
20	.00016
25	.00020
30	00024
35	.00028
40	.00032
45	.00036
50	.00040
55	.00044
60	.00048
65	.00052
70	.00056
75	.00060
80	.00064
85	.00068
90	.00072
95	.00076
100	.00080

HOW TO PUT ON A BELT.

Never try to put on a belt on the pulley in motion. Always place it first on the loose pulley, or the pulley at rest, and then run it on the pulley in motion.

ADHESION.

Adhesion of the belt with the pulley is found to exist most perfectly between surfaces that are coated with some semi-liquid. Castor oil has been found to have an excellent effect, and it is claimed that a belt three inches wide impregnated with it will transmit as much power as a 4 inch belt without it, and, besides this, rats will avoid castor oil, hence they will not touch a belt with it on.

Printer's ink has been recommended as a means of preventing belts from slipping. Neatsfoot oil, with a little resm, has been found very useful when a belt becomes hard and dry, but castor oil and glycerine are the best for this purpose.

The power required to bend the belt from a straight line and cause it to lap tightly around the pulley would not at first sight appear to be worth considering, but it will be found that where the belts are thick and rigid this item becomes an important one, and it becomes advisable to lessen it. The thicker the belt the more difficult it is to bend it It is therefore more economical to use broad, thin belts than narrow, thick ones, as it has been found that the resistance of the belt to bending is inversely as the diameter of the pulley, large pulleys being more economical in this respect

LACING A BELT.

There are many ways of making a lace joint or sewing a belt The following has been recommended: Suppose the belt to be 8 inches wide, punch holes not larger than 3 16th, beginning at ⅜ inch from the edge and one half inch from the end, making the holes ¾ of an inch apart from centre to centre. This will give eleven holes. Let the holes in either end of the belt be exactly opposite to each other. Now place the belt in position with a lace thong, not to exceed in width the diameter of the holes cut from a thin side of lace leather. Begin at one edge to sew your belt exactly in the same manner as you would lace your shoe, drawing the ends well together at each stitch. Having worked across the belt, secure the last edge with one end of the thong by sewing over and over, and repeat the operation to the place of beginning, securing the ends of your thong by inserting them in leading holes made by an awl.

POWER OF BELTS.

The smoother the surface of the belt and the pulley, the more friction is obtained. The following ingredients when mixed can be put on the inside of a belt, when the inside is put next to the pulley. They will be found to have a very good effect, as they will keep the surfaces cool, smooth and moist: 5 lbs of common tallow, 1 lb of yellow wax, 2 lbs of common chalk, 1 lb of blacklead and 1 lb of resin. Dissolve together by gentle heat; put upon the belt when slightly warm. Keep well stirred while applying it; use a little at a time and frequently. It is better, however, to put the hair side next the pulley for power and grip, but the belt will not last so long.

THE COST OF SUPPLYING ELECTRIC POWER.

THERE is nothing in the electrical business that is exciting more interest at the present time than the transmission of power over electrical wires. In the city of Boston there are over a dozen elevators now using this system, to say nothing of the different places where power is used to run printing presses, and for all kinds of manufacturing purposes. Thi power is now in practical use, not only in this city, but in Providence, Woonsocket, Pawtucket, Worcester, Portland and other places. Who can see the end of the advantages to be derived from this great improvement in transmitting power? Every floor of high buildings in cities can have power of the most economical kind. We publish below an estimate by the Sprague Railway and Electric Motor Company, of the cost of supplying this system using the Sprague motors run from electric light or power stations. The figures are of interest to any one interested in the cost of power.

Estimate of the Cost of supplying Electric power from a Station already Established, and the profits Therefrom.

We will assume the station to be already in running order, and furnishing lights for both day and night service, and to be of the capacity of one hundred and fifty-horse power.

Owing to the intermittent use of power by consumers, so well known to steam power producers, if the power delivered to any one consumer be limited to say, ten-horse power, at least double the output of the engine, or three hundred-horse power, could be sold from this plant were it transmitted by the ordinary methods, and, as the loss in transmission by wire is not nearly as great as by belting and shafting, especially where the distance exceeds one hundred feet, the same law of general average is truer in the case of electric power than in that of steam,—we therefore could base our calculations upon the well known practice of all power producers,—but to avoid any possibility of dispute, we will assume that only fifty per cent. above the actual output of the engine can be sold.

INVESTMENT.

Additional wires, structures and switches	$2,500 00

RUNNING EXPENSES.

Coal, (cheap fuel, three tons screenings to one ton Cumberland) four pounds per horse power per hour, ten hours per day	$2,200 00
Oil, additional	100 00
Moter inspector (can also attend to lamp inspection).	500 00
Water, incidentals, etc.	200 00
Other expenses which cannot be specified	500 00
Total	$3,500 00

PROFITS.

Income from 225-horse power at $125.00 per horse power per annum	$28 125 00
Less expenses per annum	3,500 00
Profits	$24,625 00
Income from 225-horse power at $100.00 per annum	$22,500 00
Less expenses per annum	3,500 00
Profits	$19,000 00

Where the station is only running during the night, the profits are the same as above, after first deducting the additional expense for engineer and fireman for day service, but as all incandescent plants to be a complete success must be run during the day, and as such has been the experience of so many plants, it hardly needs mention, and the additional profit from the day lighting will, in almost every instance, more than cover the extra expense.

SMALLER PLANTS.

In small cities and towns, where not more than 100-horse power can be sold within a reasonable time, it is often considered advisable for the company to own the motors, and as the intermittent use in such small plants will not be so great, we will assume that only the output of the engine can be sold: the investments and profits therefrom, would be as follows:—

INVESTMENT.

Motors, various sizes, up to 10-horse power and aggregating 100 horse power	$10,000 00
Wires, structures and switches	1,000 00
Total investment	$11,000 00

RUNNING EXPENSES.

Coal (as above)	$1,550 00
Oil (additional)	50 00
Inspector (lamp inspector for small plant can attend to motor inspection)	500 00
Water, incidentals, etc	150 00
Other expenses which cannot be specified	500 00
Total expences	$2,750 00

PROFITS.

Income from 100-horse power at $125.00 per horse power per annum	$12,500 00
Less expenses	2,750 00
Net profit	$9,750 00
Income from 100 horse power at $100.00 per horse power per annum	$10,000 00
Less expenses	2 750 00
Net profit	$7,250 00

The figures as given above for expenses are not theoretical but are founded upon the actual expenses of running electric light and motor stations, using Armington and Sims engines and the Jarvis setting for boilers.—*Boston Journal of Commerce.*

CHICAGO AND THE WEST.

A REVIEW of the lumber traffic of the West for 1886 presents some new featurers of interest, and shows an average business compared with the preceding years. During the winter months a good demand for lumber gave promise of increased business, and a full stock of logs was provided, and mills in all sections, with the exception of the Saginaw Valley, were fully stocked. When the sawing season opened in April the hours of labour were generally reduced from eleven to ten per day. During 1886 fully 75 per cent of the saw mills of the West were operated eleven hours per day, and hereafter the hours will be uniform in the States of Michigan, Wisconsin and Minnesota. Few new mills were built during 1886, but those in commission have manufactured an average quantity of lumber, estimated at over 7,000,000,000 of feet. Two notable features relating to the manufacturing interest are worthy of mention. First, the large demand for standing pine timber and an advance in value of 20 per cent. in the lumber States on the lakes. The other feature was the steady and rapid growth in the amount of lumber distributed by railways from the mills direct, whereby the large expense of handling so bulky an article in the costly markets of cities is avoided. All important lumber manufacturing towns are now connected by railroads with the markets of the entire country, and Saginaw, Muskegon, Manistee, Grand Haven, Oconto, Menominee, Eau Claire, Wausaw, and Minneapolis are each to-day a better distribution point than any city to which lumber must be first shipped by lake and then pass through the expensive system of distribution which rents, towage, city taxes, insurance, and more enpensive labor always involves.

During 1886 greater progress has been made in the direction of direct shipment from saw mills by rail than in any former year. This increase is largely due to the fact that trunk lines of railway have pushed their branches into the lumber-producing sections to obtain business. The St. Paul system by its connections extends throughout Wisconsin and the Chicago and Northwestern Company, together with its Omaha division, reaches every important lumber town in Wisconsin and Minnesota Following their example, the Chicago, Burlington and Quincy, by constructing its Chicago, Burlington and Northern division and its connections, is enabled to reach all the best lumber-producing points. By these three lines of railway alone more than 15,000 miles of the best lumber-consuming territory is made directly tributary to the points of manufacture.

With all its advantages of a large local business and the immense capital employed and its unequaled facilities for a general distribution of lumber, Chicago can not long retain its present position as the best lumber market in the West in all respects. While no other city can hope to become a larger market, the combined shipments by railway from mills will materially reduce the lumber business of Chicago. Receipts of lumber in Chicago have declined 20 per cent. since 1881, and the decline in 1886 compared to 1885 is 5 per cent. and if any change occurs hereafter, it is likely to be a gradual reduction annually.

The prospect of a larger yard business for 1886 was dispelled by the general labor troubles in Chicago, which not only closed the lumber yards for eighteen days in May, but checked building operations generally. The sale and shipment of lumber has gradually increased, but the average sales of lumber for the year will show no important gain over 1885. The value of lumber has increased full 10 per cent. during twelve months past. This increase was divided between the manufactures and yard dealers. Stocks at the mills for spring shipments are less than at the opening of navigation, and at Chicago, Memphis, and Saginaw the principal distributing points the stocks for sale are 10 per cent. less than one year ago. Eastern buyers have taken more than 6 per cent. of the lumber manufactured at the mills of Lake Superior and Lake Michigan during 1886, and will exceed that quantity in 1887. Five years ago such sales were not expected and seldom made beyond a few 3 inch deals for export.

Saginaw shows a reduced manufacture of nearly 20 per cent. compared to 1885, which accounts for the large purchases West for Buffalo and the East. Capital is ample to absorb all the desirable pine timber that is offered for sale in Michigan, Wisconsin, and Minnesota, and an increasing demand is likely to advance the price of lumber during 1887, and from present indications all engaged in conducting the lumber trade of the West may safely look forward to a satisfactory business during the coming year.

The cargo business at the exchange docks, taken as a whole, was slightly better than in 1885, in spite of the fact that the month of May was practically lost, as the labor troubles prevented manufacturers from shipping to this market. The cargo sales for the season of 1886 were 260,731,592 feet of lumber, 444,474 250 shingles, 395 527 450 lath, and 31,502 cedar posts. Compared with 1885, there was a decrease of 8,445,-091 feet of lumber, 9,992,975 lath, and 20,454 cedar posts, but an increase of 117,465,750 shingles; reducing this excess of shingles to feet and the aggregate sales were 325,247,553 feet, an increase of 3,732 040 feet over 1885.

The hardwood dealers have had a good average year, and compared with the two preceding ones sales show a slight gain. The over-production the past three years has been disposed of, and supplies throughout the country are considerably lighter. There is, however, no scarcity of any grade of stock. The furniture manufacturers have chiefly run on a cheaper grade of wood that will stain red and pass for cherry. In the last half of the year the makers of fine furniture turned their attention to oak, which was also used extensively for the interior of fine residences and office buildings. The coming year promises a big "boom" in this wood, but as it is not expensive, it is not expected to have the run that cherry and walnut did. Gums met a large sale, and were freely offered from the South at moderate prices The labor troubles in the spring greatly interrupted trade during May, but well informed dealers say the time lost was a benefit to them, for they were forced to hold cherry, walnut, oak and poplar, and that has advanced 5 per cent. the past six months, from which they have reaped a practical benefit.

CANADIAN SOCIETY OF CIVIL ENGINEERS.

THE committee authorized by the Civil Engineers who met in Montreal last Autumn to prepare a constitution and rules for a Canadian Association of Civil Engineers, have completed their work and a meeting of the members was held on January 11th to adopt them. The constitution as drafted, provides that the society shall be called "The Canadian Society of Civil Engineers" and be designated by the letters "C. Soc. C. E." The objects are set forth as being to facilitate the acquirement and interchange of professional knowledge among its members, and to encourage original investigation. The term "Civil Engineer," as used in this Society shall mean all who are engaged in the designing or construction of railways, canals, harbors, light houses, bridges, roads, river improvements and other hydraulic work; sanitary, electrical, mining, mechanical or military works; navigation by water or air, or in directing the great sources of power in nature for the use and convenience of man.

The society shall consist of honorary members, members, associate members, associates, and students. Honorary members shall not be subject to fees or dues, nor be entitled to vote. Associates and students shall possess all the rights and privileges of members or associate members, except the right to vote or hold office. Honorary members must be men who, from their position are enabled to further the objects of the society or who are eminent in the sciences connected with the profession of civil engineer, but who are not engaged in the practice of the profession in Canada. Every check is provided to prevent undesirable members being admitted. It is provided that every candidate eligible for election as member, must have been engaged in some branch of engineering for at least 10 years, which period may include apprenticeship, or pupilage in a qualified engineer's office, or term of instruction in some school of engineering recognized by the Council. Two years will be allowed for any graduate who has passed with honors in his engineering course. The candidate must have had responsible charge of work as a Resident or Superintending Engineer, or a position of equivalent professional responsibility, for at least five years.

Every candidate eligible as Associate Member must have been engaged in some branch of engineering for at least five years, which period shall include apprenticeship or pupilage in a qualified engineer's office or school of engineering.

Associates must be persons not Civil Engineers by profession, but whose pursuits, scientific acquirements or practical experience qualify them to co-operate with engineers in the advancement of professional knowledge.

It is proposed to make of the society a widely ramified institution, and a clause is inserted in the constitution providing for the establishment of local branches of not less than ten members and not less than 100 away from the headquarters of the society or any existing branch.

NEW BRUNSWICK STUMPAGE.

New York Correspondent St. Johns Globe.

The people of New Brunswick are only just now (when it has been so largely cut) beginning to discover that land covered by a growth of timber is of real value—the imposition of a decent stumpage has led them to see this matter in its true light. When $4 per mile was the upset price charged for the cutting of timber on crown land for the period of one year, and when lumbermen are allowed to make such combinations that competition was virtually forbidden among them, and when the man that dared to bid against his neighbor was boycotted, it would be against reason that one should think that that which brought us so low a sum could possibly be worth anything. Now when he is told that he must pay $1.25 for the right to cut from six to eight trees he looks at the matter in a different light. It has been claimed by some that this rate is too high when in reality it is lower that the stumpage on private lands. The crown land stumpage on cedar is certainly too low, only 80 cents per M feet board measure. Now a thousand feet b. m., of cedar will make eight thousand of shingles; the stumpage therefore on a thousand of shingles made out of the log will be but 10 per thousand. This rate of 80 cents per M feet b. m. on cedar cannot under the conditions of the crown land leases be raised until ten years from the date of their issuing be expired. So far from leaseholders on the Miramichi having anything to complain of, they have on the contrary, very valuable properties since, to say nothing of spruce and pine. I know from personal experience that they have vast quantities of cedar on very many of their leases, and as there will soon be a railway bridge over the St. John, they can then run the products of their forest direct to Bangor or other shipping ports. I may mention in conclusion that Messrs. Jas. Murchie & Sons are cutting spruce boards and deals in their mill at Edmundston from logs got on the Madawaska, and shipping the same by rail to St Stephen I presume that so able and intelligent a firm would not do this if they were losing money by the transaction. From this one can learn what may be done by those who thoroughly understand the lumber business

HOW TO SELECT GOOD TIMBER.

PROFESSOR RANKINE says: There are certain appearances which are charateristic of strong and durable timber, to whatsoever class it belongs. 1. In the same species of timber that specimen will in general be the strongest and the most durable which has grown the slowest, as shown by the narrowness of the annual rings. 2. The cellular tissue, as seen in the medullary rays (when visible), should be hard and compact. 3. The vascular or fibrous tissue should adhere firmly together and should show no wooliness at a freshly cut surface, nor should it clog the teeth of the saw with loose fibers. 4. If the wood is colored, darkness of color is in general a sign of strength and durability. 5. The freshly-cut surface of the wood should be firm and shining and should have somewhat of a translucent appearance. A dull chalky appearance is a sign of bad timber. 6. In wood of a given species the heaviest specimens are in general the stronger and the more lasting. 7. Among resinous woods, those which have least rosin in their pores, and among non-resinous woods these which have least sap or gum in them, are in general the strongest and most lasting 8 It is stated by some authors that in fir wood that which has most sap wood, and in hard wood that which has the least, is the most durable; but the universality of this law is doubtful. Timber should be free from such blemishes as clefts or cracks radiating from the center; "cup-shakes" or cracks which partially separate one annual layer from another; "upsets," where the fibers have been crippled by compression; "rindgalls," or wounds in a layer of the wood which have been covered and concealed by the growth of subsequent layers over them and hollows or spongy places, in the center or elsewhere, indicating the commencement of decay.

RAT PORTAGE AND KEEWATIN CUT.

The stock of logs and lumber on hand at Rat Portage and Keewatin, Ont., on the 1st of January will amount approximately to the following:

ONTARIO LUMBER CO. (McCauley & Ryan.)	
Logs	12,000 000
Lumber	9,000,000
RAINEY LAKE LUMBER CO.	
Logs	1,600,000
Lumber	7,000,000
KEEWATIN LUMBER CO.	
Logs	5,000 000
Lumber	11,000 000
MCKINNEY & CO.	
Logs	5 000,000
Lumber	8,000,000
Total	62,600,000

The sawing capacity of the mills aggregate 180,000,000 feet per season. This year one mill, belonging to the Toronto Lumber Co. (John Ross, Homer, Ont.), was not operated.

All the stock sawed last year and what is being cut this winter is cut in Minnesota. There will probably be about 150,000,000 feet cut and run into Canada.

THEY DON'T LIKE IT.

The Grand Falls correspondent of the *Canadian Journal of Commerce*, writes as follows concerning the lumber business in Madawaska:—"The cut of lumber will be about nine or ten million in Madawaska and Victoria counties. Holmes & Hammond will have a new shingle mill started in the spring, on the American side, to help the Vanluren mills in slaughtering our forests. No export duty is looked after in this section and it is not expected there will be before the Americans strip our lumber all off. Our mills are at a stand still. Men of capital, so far, prefer to build on the American side and slaughter the forests on the New Brunswick side to stock them; and it is hard to say how long the government are going to allow it We cannot expect reciprocity in lumber so long as we are holding out a premium to manufacture our lumber out of the country, and allow our mills to remain idle. Mr. G. N. Hammond is driving trade. He has lately branched out in the lumbering of spruce logs which gives a market for hay, oats, beef and employment. If the law was enforced and our lumber stopped from being taken to the American side to be manufactured, he and others would soon start mills on this side of the line."

THE CANADA LUMBERMAN

DEVOTED TO THE LUMBER AND WOOD WORKING INTERESTS OF THE DOMINION.

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A. G. MORTIMER, PETERBOROUGH, ONT.

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The CANADA LUMBERMAN is filed at the Offices of MESSRS SAMUEL DEACON & Co., 154 Leadenhall Street, London, England, who also receive advertisements and subscriptions for this paper.

Our Readers who write to Advertisers in this Journal, will oblige both the advertiser and Publisher by mentioning the "Canada Lumberman."

PETERBOROUGH, ONT, FEBRUARY, 1887.

THE experiment has been tried with success in England of painting the ends of logs and timber with glue to prevent them from checking while they are drying.

THE *Southern Lumberman* remarks that there is just a little too much of the 'boom' business in the central Southern States at present for healthy business trade.

THE business transacted in the patent branch (Department of Agriculture), Ottawa, during the past twelve months, shows an enormous increase over preceding years. The revenue derived from patents was somewhat over $74,000.

IT has been decided by the authorities at Ottawa, that material and apparatus required in the construction of the St. Clair tunnel will be entitled to come in duty free. These will include hoisting, elevating and pumping machinery. The work is international, and will be of equal advantage to the two countries which it will unite by means of a railway under the waters of Saint Clair River.

A GENTLEMAN whose time is devoted to the handling of Michigan pine, is reported to have said : "The Canada pine does not possess those fine qualities that are found in the Michigan product. A black knot and a fine shake—a hair shake I call it—are characteristics of the Canada stock from the northern shore or Georgian Bay country. However, what comes to this market is mostly select stock, and finds ready sale."

MR. W. W. Johnson, local managerfor Messrs. Dunn, Wyman & Co , has forwarded the annual circular from which the following figures are gleaned : The total failures in the United States for 1886 were 9,834; for Canada in 1886 there were 1,252. In 1885 the failures in the United States were 10,637; in Canada 1,256. The liabilities of the Canadian failures for 1885 were $8,861,609 ; for 1886, $10,386,884. The failures in the United States were, in 1881, 5,582; in 1882, 6,738 ; in 1883, 9,184; in 1884, 10,968. In Canada in 1881 the failures numbered 635; in 1882, 787 ; in 1883, 1,384; in 1884, 1,327.

WE know of no publication that is worth of greater praise by lovers of the beautiful in art and floriculture than *Vick's Floral Guide*, the 1887 edition of which is just to hand. We have been favored with the *Guide* for some years, but the last production seems to excel all others in general beauty, number and elegance of floral and vegetable illustrations, and the large variety of subjects treated. The work is invaluable not only for its handsome chromo sketches, but also for the valuable practical articles intended both for amateur and practical gardeners. Mr. Vick has won for himself a world-wide reputation as a florist, and his immense business at Rochester, N.Y. is an indication of his success.

ABOUT the most elaborate thing in the way of trade publications that we have yet seen came to hand a few days ago, in the shape of an extra holiday edition of the *North-Western Lumberman*. In looking over its contents we find 79 pages (9x13 inches) of advertisements, 39 pages of lumber and logging railroad statistics, and 2 pages of general matter, making 120 pages in all. Its typographical appearance and general make up is in every way creditable, and its list of contents will doubtless prove of considerable value to the trade.

CANADIANS have heard considerable of late concerning the crop-destroying rabbit of Australia, but this does not appear to be the only animal plague of that country. The decay of the forests is traced by Rev. P. Macpherson, of the Royal Society of New South Wales, to the opossums. After much investigation it was ascertained that a single animal would devour about 200 leaves of the eucalyptus, or blue gum tree, in a night; proving that the 18,000 opossums killed annually in one county of Victoria were sufficient to destroy upward of 13,000 trees and lay bare a space of 700 acres, or more than a square mile.

ONE great mistake, says an exchange, which inexperienced advertisers almost invariably make, is to expect too much from an advertisement immediately after its insertion. A new advertiser almost always thinks that large numbers of orders ought to follow the insertion of his advertisement for, say, three or four months. He overlooks the fact that many readers do not at first feel acquainted with him and his wares. They want to see his name in print for a good while before they are willing to forward an order. This is not the case with every one, but it is with a great many. The shrewdest advertisers keep their name and goods prominently before the trade all the time, so that when a man for instance, wants to order any particular article, he will immediately think of them, and referring to the paper for their address, will write for catalogue and prices.

WE have been favored by the publishers of *The Office*, New York City, with a copy of "Dutton's Analytical Book-Keeping Chart." This work is unique, and because of its pointed brevity and simple analysis, will be specially valuable to a numerous class, who may be designated as self-made book-keepers, and who have neither the time nor patience to unravel the long and intricate course of instruction given in most of the text books. The work shows the reasons for the laws of book-keeping by discovering the wants and requirements of business. It also shows the relation of every transaction to the required record and the relations of accounts to each other. The chart, which is inserted in the form of a folding plate, is complete in itself without the accompanying text, but the latter serves to increase its usefulness and to explain many points which might possibly be overlooked without such assistance. This little book is neatly bound in cloth with gilt side title, and is of convenient size and shape for the pocket. Price $1.00, post paid.

WEATHER prognostications are not so common now as they used to be, owing to a scarcity of "prophets." Mr. Vennor, who caused quite a stir in this line for some years, has passed to the silent majority, leaving Professor Wiggins almost alone in the field. To make matters still worse (?) the Dominion Government is reported to have informed the last named "weather indicator" that he must either give up weather prophesying or lose his position as a government employee, and as he has not been heard from of late it is to be presumed that he chose the wiser course. Evidently the government in taking such a step wished to relieve itself of any responsibility which might arise should any difficulty be experienced through the non-fulfillment of the Professor's prophesies. In addition to this the government is wise in selecting for civil servants men only possessing fair common sense. But if Professor Wiggins has been silent others have aspired to the position, and freely stated that the present winter would be a mild one. If the weather since Christmas has not been sufficient to disprove what they imagined to be their weather foresight, then we dont know what a severe winter is, They might, however, verify their assertions by visiting the lumber camps just now, where they would very likely get a "warm" reception.

THE LUMBERMAN made a call a few days ago on the William Hamilton Manufacturing Company, Peterborough, and found the works running to their fullest capacity. Extensive additions were made to these works during the past summer, and the facilities so far increased that to-day this company can boast of being as large, if not the largest, manufacturers of saw mill machinery in Canada. From the high enconimus passed upon the machinery turned out of these works by some of the leading saw mill men of the country, we are safe in saying that no firm has a better reputation among the trade than the one here referred to. In addition to saw mill machinery, this company also manufacture engines and boilers of different kinds, etc. We understand that orders have recently come in from British Columbia, for two boilers, 5 feet in diameter, 14 feet long, and with 58 four inch tubes ; for a tubular heater; a smokestack 75 feet in height ; and for an engine. This machinery is for the Royal City Planing Mills, New Westminister. From Fairhead, Toronto an order for an upright boiler and two hoisting engines has been received. A large marine boiler, containing 138 three-inch tubes, is to be put under construction soon for one of the lake vessels. Added to this is a large amount of miscellaneous work, in which is a large contract for the supply of the iron work to be used at the Trent Valley Canal Works at Burleigh and Lovesick.

IN the course of an editorial article on the inertia of British manufacturers, the *Engineer* says—"We have on previous occasions spoken of the loss to Britain which results from inertia amongst our bridge builders. Some of this is due to the out-of-date regulations of our Board of Trade ; but so far has the British bridge-building trade become wedded to old methods of manufacture and terms of business, that American and Canadian Bridges are now being bought by English civil engineers for railways in course of construction, though not in either of those countries ; but we need not say in which. The orders going to those countries because really satisfactory bridges can be obtained to carry a given load, and with a guarantee for ten years, for a sum which is not more than 60 per cent. of the price demanded by English builders. The American and Canadian bridges are well designed, pin structures, in every way satisfying the engineers of the railway ; and the builder's price is for the bridges placed upon the piers and finished, the engineers having very little more trouble in the matter than to order them and test them ; while for the bridges for the same places, if ordered in England, the engineers would have to provide designs and specifications, follow the structures throughout their whole history to completion, and then pay about 40 per cent. more for them. In railway matters, again, the trans-atlantic constructors will provide rolling stock for prices and terms which afford facilities that probably not more than one English firm gives."

THE Harbor and Ferry Committee of the Belleville City Council, held a meeting on January 20th, for the purpose of discussing the term of a new agreement with the lumbermen with reference to tolls collected on logs passing through the harbor. Mr. David Gilmour, Trenton, Mr. W. R. Aylsworth, representing the Rathbun Company, and Mr. John Bell, Q.C., were present on behalf of the lumbermen. The old contract which was made in 1879 expired last September. Under that agreement the lumbermen furnished all the booms and piers necessary, and assumed all responsibility for the same. The city had to bear the expense of building any new booms required at a cost not to exceed $1,000, but the corporation having already spent $668 in that direction the city only had to pay a balance of $332. There was also a clause which provided that the city should pay ten per cent. of the amount of tolls collected for necessary repairs to the booms, and in the seven years that amounted to $214. But the city was relieved of all responsibility against breakage of the booms. The present tariff, the lumbermen complain, is excessive, but they propose that if the city will assume all responsibility, they will pay the tolls in the old schedule. If the corporation will not do this the lumbermen will ask a reduction in the tariff. After discussing the question for some time the committee asked Mr. Bell to put the proposition of the lumbermen in writing and submit it to the committee. The committee, however, is opposed to the city assuming any responsibility in the new contract.

THE recent change in the attitude of the Toronto *Mail* has caused such a stir in Conservative ranks that the question of starting a new daily paper in Toronto, as the chief organ of the Macdonald Government, has been mooted for some weeks, and at last the project has assumed tangible shape by the appearance, on Monday, January 24th, of the daily *Standard*, with Mr. Louis P. Kribbs, better known as "Pica," at the helm. The new paper aspires to step into the *Mail's* shoes, and promises to give the Conservative party an undivided support. The proprietors of several other journals, notably the Hamilton *Spectator* and the Toronto *World*, have sought to win the confidence of the party, but to all appearance Mr Kribbs has got the inside track. THE LUMBERMAN heartily congratulates "Henery Pica, Esq." on his step in advance, not because he is a Conservative, for we have nothing to do with politics, but because he is an old lumberman. Mr. Kribs spent most of his younger days in and around a saw mill, and it was only through his becoming connected with a country debating club that his natural literary ability showed itself. Finding that practice enabled him to write a tolerably good "essay," he gradually got tired of handling logs, and aspired to literary pursuits. THE LUMBERMAN first met him as the "white-haired" young man of the Toronto *News*, and with many others soon became favorably impressed. After two or three years connection with this journal as city editor, he was offered the position of Ottawa correspondent of the *Mail*, which position he has filled with credit for some months, but during the present crisis he has taken a step higher, and it is to be hoped that his ambition may be handsomely rewarded.

When opening correspondence with advertisers always mention that you saw their advertisement in the "Canada Lumberman."

EXCHANGE ECHOES.

Timber Trades Journal, London, Eng.

Several sellers express the opinion that whitewood battens are likely in some cases to be dearer than redwood, but we scarcely understand the grounds on which this opinion is based. It is doubtless the fact that many buyers in Scotland have a much larger trade in whitewood than in redwood, but in the southern districts we have little doubt that, prices being equal, redwood will always command a readier sale than whitewood.

Timber, London, Eng.

It was generally thought that the consumption, which had been failing for the past several years, had reached its lowest in 1885, but the year which has just closed has again experienced a serious decrease. An idea of this shortage may be clearly obtained from the fact that the consumption of deals, battens, and boards in 1885 was 166,453 standards; from this total it has declined to 146,801 standards in 1886. The statistics published by the Surrey Commercial Dock Company of their deliveries show 200,258 standards drawn from their yards n 1885, as against 177,433 in 1886—each succeeding year the quantities growing smaller. These figures tell their own expressive tale without comment.

Du'uth Herald,

Although Duluth has suffered such severe losses of saw mill property by fire during the past few years, it is gratifying to be able to note a decided increase in the amount of lumber cut during the past year, when compared with the cut of 1885. In 1885 the total amount of lumber sawed in the Duluth district was 81,000,000 feet; last year the total sawed was over 171,000,000 feet. Of this amount more than 94,000,000 was sawed in the Duluth mills, 63,000,000 in the mills at Cloquet, about 4,000,000 at Tower and Two Harbors and about 9 000,000 at the Junction and Thompson. The stock carried over to this season does not exceed 18,000,000 feet. The cut for the season of '86-7 is estimated at 134,000,000, of which 70,000,000 is credited to Cloquet, 45,000,000 to Duluth, 13,000 000 to the Junction 4,000,000 to Tower and 2,000,000 to Two Harbors.

Northwestern Lumberman.

The view is frequently expressed that price lists, sanctioned by lumber associations, are made by the wrong men. The proprietors of wholesale yards get together in wise conclave and formulats lists. Generally these proprietors are the money bags of the concerns they represent, but know very little about the details of yard business. They do not sell the lumber, or meet competition in city or country. The men who handle the business are generally junior partners or salaried men. These know something about prices and the state of trade. As a general thing the salaried men in the yards know more about stocks, the actual supply and demand, and real selling values, than the proprietors themselves. There are a few exceptions to this rule, but it will commonly apply. The men who do the talking by telephone from yard to yard are the individuals best informed about prices. So it will be seen that these men should formulate price lists. In order to make list prices approximate selling values, a committee for the purpose should be compo ed of salesmen, shipping clerks and superintendents, with a few proprietors sprinkled in to advise and keep the boys steady. In that way a fairly intelligent conclusion could be reached.

Ottawa Evening Journal.

The results of the elections for the Local Legislature indicate plainly how the contest for the Dominion is likely to end. Mr. Bronson scored a victory, not because he was a Government candidate, but by reason of his personal qualifications for public life. As a prominent, enterprising citizen, who had proved himself a faithful steward in every position which the public had called him to fill, he won the support and sympathy of all classes of the community. The city, though a recognized Conservative stronghold, demanded an intelligent, public spirited representative at Toronto, and made its selection accordingly, irrespective of party considerations. * * * In the Dominion contest on which we are now entering, party lines will, no doubt, be more clearly drawn. * * * Apart altogether from the grave issues presented to the people in this contest, there can be little doubt that their votes will be cast for the Conservative candidates. It is no reflection upon Mr, McIntyre's character to say that Mr. Perley is his superior in every way as a representative citizen. Every claim which was put forward by the Liberal party on behalf of Mr. Bronson for the Local Legislature applies with equal force to Mr. Perley for the Dominion House, with this additional one, which should not be overlooked for a moment, that the Conservative candidate is, besides, largely connected with the railway interest, which, next to the lumber trade, has done most to place the prosperity of Ottawa upon a safe and permanent basis. To Mr. Perley and the enterprising men associated with him in the Canada Atlantic Railway project we are indebted for the splendid facilities for travel and traffic which we possess. One by one the other roads have dropped into the hands of the Pacific Railway Co., leaving the Canada Atlantic Railway as the only competing route to and from the Capital. His enterprise and public spirit in connection with this one project alone entitle him to the gratitude of the public.

Northwestern Lumberman.

At the beginning of the year, having ascertained from his books how he stands, it is proper for every business man to spend a little time in carefully considering what improvements in his ways of doing business he can make in 1887. It is probable that the majority of retail dealers will discover that they have too many accounts on their books. Some of these accounts are perfectly good and will be paid promptly, others will be paid to suit the own sweet will of the men against whom they are charged, still others, in all probability, will never be paid. The average retail dealer will feel after looking over these accounts that he has given two much credit; that he has been too good to his customers; that in his efforts to roll up sales he has been unfaithful to his own interests. Every large business house has its credit man whose duty it is to investigate the financial standing of all who apply for goods on time. Honor is a jewel, and there are poor men whose word can be depended on every time so far as it is in their power to make it good, but no large concern gives but little credit where it does not think that collections can be forced if necessary. Thousands of retailers go on another principle entirely. The impression seems to prevail with too many that the great point is to sell goods regardless of whether they will ever be paid for. Right at this point is where the retail dealer of moderate means can begin to reform his methods. He ought to learn that it is better to have lumber in pile than to sell it where there is a doubt regarding the liability of the buyer, and even if the buyer is reliable, to sell for cash every time he possibly can.

The Bay City Lumberman Gazette.

Notwithstanding the $2 duty on lumber imported into the United States from the Dominion of Canada, the amount is not insignificant by any means, and this leads to the query, what would be the effect if this duty were removed? It would obviously result in flooding the American market with Canadian lumber, and to that extent result disadvantageously not only to our own manufacturers, but to the labor element engaged in that industry on this side of the line. There is nothing in the list which demonstrates more clearly the disastrous results which would accrue to labor, as well as to industrial pursuits in the United States as the lumber business as at present conducted, under a free trade policy; and it requires very little foresight to understand that if the duty on lumber were removed, our lumbering establishments which have been built up under a governmental policy of protection, would soon begin to languish and exhibit signs of decay; in fact it must inevitable prove a blight on the business, and necessitate at once the reduction of the wages of the operatives in order to meet the competition of Canadian cheap labor. It seems incomprehensible that there should be any considerable element among the people who would desire such a result. Ottawa is the center of the Canadian industry. More lumber was sold and exported from Ottawa to the United States during the first quarter of the past year than ever during the same period in history. The cut this season will be fully up to, if not in excess of the average. The total amount of lumber manufactured by the Ottawa mills during the past season is placed at 288,000,000 feet. The principal destinations of the consignments sent from Ottawa to the United States were Burlington, Albany, New York and Boston.

The Timberman, Chicago.

Some genius about a planing mill, has invented a device for unloading the wagons on which the lumber is hauled for dressing, which is so simple and practical that it is a wonder, as it usually is in such cases, that it was not thought of before. The platform on which the lumber is ordinarily piled as it comes into the mill, is raised to just about the height of a wagon, so that, as the load is backed up, the rear end projects over it, A slight depression in the roadway, just in front of the platform, permits the wagon to drop a few inches, and allows the weight of the load to rest upon the edge of the platform. Close to this edge, a live roll is placed, which is given a positive motion by a link belt connection, and behind it are put ordinary dead rolls at suitable distances. The operation of the device will be apparent without further explanation. As soon as the load of lumber rests upon the live roll, it begins moving into the mill, seemingly of its own accord, and sooner than a half dozen boards could be removed from the load by hand, the entire jag is quietly rolled into the mill without handling. It is best to place rollers on the wagon also, in order to make the load move easily and promptly as soon as it rests upon the live roll. To a planing mill operator doing a large busines and who is compelled to employ a number of men and teams to handle the lumber that comes to be dressed, the value of this little device will be perceived at a glance. The saving in time makes it possible to do the same amount of work with a less number of teams, and with a notable economy of labor for the teamster. It has been applied to the new mill of the Ludington, Wells & Van Schaick Company, at Menominee, Mich., where an ordinary six-inch wrought iron pipe, polished, is used for the live roll, being connected with the line shaft with suitable belts and pulleys to secure the proper speed. The beauty of the arrangement is that it is not patented, and may be used by any one. It is said to have been invented by a man at Eau Claire, who certainly deserves the thanks of the planing-mill fraternity for his ingenuity.

THE MIRAMICHI WOOD TRADE.

WE are in receipt of Mr. J. B. Snowball's Miramichi Wood Trade Circular for the year 1886, dated Chatham, Miramichi, January 3rd, 1887. It reads as follows:

The business of the past year has been on as restricted a scale as predicted, but although the export from the principal Spruce Ports has been curtailed, still it is worthy of note that from Nova Scotia, as well as from the smaller ports in New Brunswick (places not having our heavy stumpage tax to contend with) the export has been increased. This has brought the total export nearly up to that of last year. The business however, has not been profitable, and although freights ruled lower than in any previous season, the consumer and not the producer, received the benefit; and it may be said that a feeling of depression still hangs over the trade here.

The freight market opened at from 40/ to 45/ Miramichi to United Kingdom ports—according to port—and closed at about 42/ to U. K., being a strong contrast to the rates paid in 1873, which ranged from 90/ to 120/. The shipments from this port were, this year, less than half what they were in 1877, 1880 or 1883, and the smallest since 1870. We do not, however, expect a further decrease, in view of the fact that the sawing power has been doubled since the latter date and half that power has been idle during the past season.

Last year I referred to the heavy tax imposed by the Province of New Brunswick on all wood cut from Provincial or Crown lands. No reduction has so far been made, although individually, members of the Local Government promised a rebate previous to the last general election. To show the inequality of this tax I may state that in Nova Scotia there is no direct stumpage charge levied by the government. The timber lands there are largely owned by the operators; any lands owned by the Government are sold to the first applicant for forty cents, or one and eight pence (1/8) stg., per acre, giving an absolute title. The Province sold in 1882—35,000 acres, 1884—37,000 acres, 1885—13,700 acres.

In the Province of Quebec there is a lease charge of two dollars per square mile for each mile of timber limits held by the operator, and a stumpage tax, in addition, of six cents on each spruce log cut down. A log is computed to be 13½ feet long; this brings the tax to about 70 cents per thousand super. feet, or 4/ stg. per standard.

In the Province of Ontario, timber lands are leased the same as in Quebec, at two dollars, or 8/ stg. per mile, the holder having a continuous lease—as in Quebec—without fear of molestation as long as the annual fees are paid. The stumpage in Ontario is ten cents per 200 feet board measure, or 50 cents per thousand super. feet, the same as in the Province of Quebec.

In New Brunswick, timber lands are leased at eight dollars per square mile and four dollars per square mile for subsequent annual renewals, and these renewals are limited to ten years from date of lease. The first cost is thus four times, and renewals double the rates of the highest of the other provinces, and a stumpage tax of $1 25 per thousand super. feet is collected, against 50 cents, the highest for the other provinces.

In Quebec and Ontario the quantities on which dues are payable are ascertained at the place of sale, while in this Province, the scaling is done in the woods, thus subjecting the operator to all losses contingent upon transit. The operator in New Brunswick has, also, to lodge and board the Government scalers and their assistants free of charge—an imposition unknown elsewhere in Canada; and while payment of timber dues is required in New Brunswick on 1st August each year, the time of such payment in the other provinces is 30th Nov., a difference of four months.

The Trade justly complains of the inequality of the government charges on this staple industry of the province, and the severity of the timber regulations in other respects—the main features above stated indicating the disadvantages resulting therefrom to New Brunswick operators—conditions which there is reason to believe will be somewhat modified in the near future.

The stocks of both manufactured and unmanufactured woods on hand are estimated at 25 million superficial feet, against 17 millions last year, 26 millions in 1884 and 40 millions in 1883. This winter's operations in the forest are on quite as restricted a scale as those of last year. Last winter and spring were very favorable, both for logging and brook-driving, and all the stock got out came to market. Unless this season it equally favorable we will have a smaller output.

The Montreal Star.

THE MONTREAL STAR is making a name as one of the newspaper successes of the day, both in its daily and weekly issues. The circulation of the Daily last year averaged over 25,000 copies and during the North-West rebellion reached close on 35,000, while the circulation of the weekly has reached the enormous figure of 120,000. THE STAR claims to have attained this success through its merits as a first class family newspaper, as distinguished from a mere political or local organ, but although not pretending to be a political paper in any extreme sense of the term, its political news is second to none, and its circulation has given it a marked influence in national as well as local affairs. Its progress has been extraordinary, as ten or 12 years ago it had only a very limited circulation.

CHIPS AND SAWDUST.

The saw mill at Ompah, Ont., has lately changed hands.

Tett Bros. are rebuilding Salmon Lake dam which broke away last spring.

British Columbia cedar shingles are being shipped eastward to Puget Sound.

Mr. Simmons has his new planing mill at Newcastle almost ready to be put in operation.

A cooper shop and heading factory is to be established by Mr. John Matthews at Kendall, Ont.

There was more lumber turned out this year by the Ottawa mills than any previous year.

The township of Ryde, Muskoka district, boasts of six saw-mills. Five of them are steam mills.

The mill-owners of Turtle Creek, N. B., commenced stream-driving and sawing since the recent rains.

The Windsor cotton factory, Windsor, N. S., is working overtime until 9 oclock at night filling orders.

Mr. Kyle of Brockville, and J. E. Brown, of Delta, Ont., have started an iron pump factory at the latter place.

The Enterprise, Ont., milling company is putting in a new water wheel. It intends to saw shingles and lumber.

Messrs. A. W. Parkin & Son, of Lindsay, are at work getting timbers ready to rebuild their saw and shingle mill.

John Heard & Co., Amherstburg, want $6,000 as a condition of removing their spoke and wheel works to St. Thomas.

W. B. Phelps & Son, of Philipsville, Ont, are putting up a shanty and getting ready to take out ties and shingle wood.

The engine and boiler house of Woodward & Isbister, Petrolia, Ont., was totally destroyed by fire recently. Loss $1,000; partially insured.

A Kippewa correspondent says: "Owing to the lack of encouragement for square timber, none is being taken out this winter in this vicinity.

A load of lumber sleighs was shipped a few days ago from Gravenhurst to Lakefield, the first manufactured goods except lumber ever shipped from that point.

The Battleford *Herald* says the Prince Brothers have removed their saw mill machinery to the banks of the Saskatchewan, to save the haulage of logs from their rafts.

Mr. H. R. Archer, of Newbury, Ont., is reported to have sold two hundred acres of timber lands, concession one, Mosa, to saw mill men of Chatham, for eight thousand dollars.

Mr. Menno Bechtel's saw mill, planing mill, bolt heading and cheese factory at Wellesley, Ont., was recently moved from its original site to a new one near the edge of the mill dam.

B. Caldwell & Sons saw mill at Wilbur Station, Ont., has been shut down for a few weeks for the purpose of having some repairs made before starting the shingle mill for the winter.

H. McCrae & Son, foundrymen and machinists, Tilsonburg, Ont., have received a large order from the London Pottery Co. for machinery for the pottery the Company is erecting in London

One hundred and seventy vessels loaded with deals in Miramichi this season, of which sixty were British, fifty-seven were Norwegian, and the balance were distributed among various nationalities.

Messrs Lord & Hurdman, lumber merchants, of Ottawa, shipped to their shanties on the Kippawa a few days ago two car loads of shanty teams, which will be used in finishing up the season's work.

The Rathbun company having completed the work of surveying the Napanee and Tamworth Railway, Mr. Butler, the engineer, will at once commence the survey of the Gananoque and Perth railway.

Messrs, John Bertram & Sons, Dundas, lately cast a bed-plate thirty-six feet long for a planing machine which is designed to take in work six feet square. Between eight and nine tons of iron were required for the casting.

Alex Fair's saw and shingle mill, at Omemee, with a lot of shingles and lumber, was destroyed by fire recently. It was by sharp fighting that the flour mill near by was saved, The cause of the fire is unknown. Loss about $5 000; no insurance.

The greatest portion of last season's cut, at Ottawa, has been disposed of. Stocks are about the same as during the same period last year. Prices, if anything, are a little stiffer and the sales to English dealers have somewhat increased. The outlook is regarded as favorable.

A lumber mill owned by Warner, Purves & Snearer, located at Pleasant Point, N. B., above the falls, has been burned with about 5 000 feet of lumber. The mill was valued at $20,000 and there was an insurance of $10,000 upon it A lamp upset in the engine room and set fire to some shavings. Burns the watchman was cut off from all communication and was rescued in a senseless condition. The mill was partly destroyed in 1872.

It is reported that a local syndicate has sold to an English syndicate the Hastings mill property at Burrard Inlet, B. C., for $300,000. The property was three years ago purchased from Heateley & Co., of San Francisco, for $265,000, and now includes a large portion of the Vancouver town site.

A correspondent writes from Folger's Switch, Ont: There is a good opening here for a steam saw mill, it being close to the railway with a large section of country lying north and west of this place, full of pine and cedar, that could be hauled to the switch in the winter if there was a mill there to cut it.

In a discussion of the Port Arthur Board of Trade upon the best means of saving the pine timber burned over in forest fires this year, it was stated by a large lumber operator that one hundred million feet of pine had been so burned over and if not cut down the present winter, would be ruined by worms next summer.

Mr George H. Bailey late of the firm of J. R Booth, lumber merchants, of Ottawa, and Mr. V. Holbrooke, son of Mr. G. M. Holbrooke, of the same place, have opened extensive lumber yards in LeSuer, Minnesota, and are doing well. The many friends of Messrs. Holbrocke & Bailey will be pleased to hear of their success.

A gentleman down from the lumbering districts of the Upper Ottawa says everything is rushing in the log-making and drawing line. The only complaint seems to be that the ice on the smaller lakes is anything but good. This is attributed to the heavy fall of snow which took place immediately after the lakes were frozen over.

A veteran saw mill man remarks that the more work you can put on a small piece of wood the more money you make. The man who cuts and hauls logs by wagon to the mill hardly earns feed for himself and team. The man who saws the log into rough lumber barely makes wages for the hands. The men who works the lumber up into finished stuff can have a pretty good chance to make a profit.

Permits to take out ties and wood in Ontario along the C P. R. have been granted by Crown timber agent Margach, of Port Arthur, to the following Winnipeg parties: Dennison Bros., whose permit covers the district from the Manitoba line east to Eagle River; Egan Bros, to cut 125 000 ties in the district extending from English River to Savanne. The H. B. Co. are also applying for a permit to take out a large number of ties.

A Calgary, N W. T., dispatch says: The Eau Lumber Company have given a contract for a million feet of logs to be cut on their limits by the proprietors of the Kanauaskis lime kilns. The company's saw mill at this point is nearing completion, but they will not likely begin sawing for the market till the spring comes in. Those who have visited the mill recently have been struck with the solid manner in which the structure has been put up. The large engine room is of sand. stone on a granite foundation, and is built to last no end of time. It gives accomodation for a large 120 horse power engine and three huge boilers. It is improbable the company will keep as many as fifty hands about the mill when active operations begin.

Messrs Duncan McArthur, W. R. Allan, F. A. Fairchild, R. D. Bathgate, Archibald Wright and C. W. Betts all of Winnipeg, app y to the Governor-in-Council for letters patent incorporating them, a body corporate and politic under the corporate name of "The Rocky Mountain Mining and Lumber Company (Limited)," for the purpose of carrying on a mining and lumbering business within the Dominion of Canada, also for the purpose of the said company, to build, equip and operate tramways, sailing and steam vessels for the carriage of lumber, timber, minerals or mineral ores or any other production by said company; to purchase build and erect stamp mil s, saw and planing mills, or any one or more thereof. The head office of the company will be at Winnipeg.

A Point Wolf, N. B., correspondent of the Albert *Maple Leaf* writes: Perhaps a few items in reference to the lumbering operations carried on here by C. M. Botwick & Co., of St. John, would be acceptable. I would say that their mill commenced sawing May 15 and shut down Dec. 3. In that time 5,000,000 feet of deals and boards were sawn and 4 000 000 lath cut. The deals have all been shipped to St. John for reshipment to Europe except 500,000 feet which are snugly piled in the lumber yard. The boards, scantling and lath were sold in Boston and New York. There are about 1 000,000 feet of old logs in the pond and streams, which would have been cut also if there had been good river driving in the early autumn. This mill, which is said to turn out as good lumber as any on the Bay shore, is driven during spring and autumn by water, and during the dry season by steam, having a 50-horse power engine for that purpose. The following are some of the efficient men employed: James Campbell, general manager; W. Rattray, engineer; A. H. Nash, millwright; Nathan Cleveland, filer, and William Hubbard surveyor: The company has a large store here in connection with the business, over which W. M. Fowler has charge. Good wages are paid the millmen for which they can take goods out of the store or receive cash. Robert Connely has the contract for putting all the logs into the stream and he intends getting out 5,000,000 this winter for next summer's sawing.

Mr. Campbell, manager of Tilly's saw mill at Kingston, had one of his fingers cut off a few day's since.

The Rathbun Co., of Deseronto, intend lighting the steam barge Resolute with electric light next season.

It is rumoured that Conroy's mill at Deschenes will be worked again next spring. It only operated about two weeks of last season.

A man named Nomoenda, from New Brunswick, while engaged in felling a tree on the timber district of Booth and Gordon, on the Indian River, was seriously injured by a falling branch. He was taken to the Pembroke Hospital.

It is reported that several Tonawanda, N. Y., parties have purchased a large tract of pine in Pennsylvania, with a view of railroading the logs to Tonawanda for sawing They think they can save money on the cost of Michigan lumber.

A number of teams recently left Ottawa for the shanties to engage in drawing, the ruling price being $1 50 per day. They went to work for Messrs. Bronson, and Perley & Pattee, the teams for the latter going to the Montreal River.

Messrs. Grier & Co's new saw mill at the Chaudiere is progressing very favorably. The stone work is almost completed and work on the body of the building will shortly be commenced. The mill will be finished for the spring and ready for work.

A terrible accident occurred on Lake St. John, Jan'y 18th, Saguenay County, A large gang of lumberers were crossing the ice, when some twenty of them broke through. All were saved but two men named Whitton and Ryan, who were drowned.

The lumbermen in northern New York say that this is the best season for logging they have known for years. It began in November, and there had, up to recent date, been no interruption by bad weather. Some loggers will have their jobs complete by February 1st.

John M. Holliday, well known in the Chicago lumber trade, died very suddenly in New York on Wednesday, 19th Jan. He was connected with the firm of Cutler, White & Boice, and had been with that concern and its predecessors, Ferry & Brother, for the last ten years.

A car-load of grist mill machinery was shipped, some little time ago, by Mr. W. H. Petrie, of Brantford, to Soda Creek, British Columbia. He is now about to fill an order for saw-mill machinery for the same neighborhood. This machinery is transported overland in waggons some 400 miles after it leaves the C. P. R.

It is understood that the prices paid for Messrs. W. G. Ross and Son's spruce deals by Messrs. Dobell, Beckett & Co are, $40 for 1st, $22 for 2nd, and $20 for 3rd; it is not known whether charges and insurance are to be added. However, as these prices are net 1st May there would seem to be no charge for insurance on the buyers.

A Bay City firm is getting out oak timber in Huron county, which is being delivered at Kind station, and is destined for the Quebec market, and some of the pieces are of mammoth proportions. One stick recently delivered says the local paper, scaled 3,500 feet, and required five yoke of cattle to draw it. Very few people supposed that there was any oak timber in Huron county, which was worthy of mention.

It is understood that Messrs. J R Booth & Co. of Ottawa, have petitioned the Government to locate a light-house in South East Bay, Lake Nipissing, claiming that it would prove of great advantage to lumbermen. No action in the matter has yet been taken. The Marine Department proposed to erect two lighthouses in South Bay, on the same lake in accordance with the report of the Chief Engineer of the Department.

A Deseronto despatch says:—Continued cold weather since the first of December put the swamps in good condition for seven inches of snow which fell in this section about December 20, and 10 inches more on January 1. Help is plentiful, and wages range from $11 to 16. Hay and grain are very cheap, and logs should be put in at low figures this season About the average amount of logs will be got in. Dry lumber is scarce and prices firm for all grades.

A dispatch from St John, N. B., under date, Jan'y 18th, says:—A number of disasters to St. John vessels are reported to-day. The Schooner Speedwell ashore at Moosepeckieme is full of water. She was bound from St. John to New York with a cargo of 109,000 feet of boards, shipped by Messrs. Driscoll Bros. The schooner Afton, from St. John to Portland Me, went ashore during a storm at Cranberry Island, but there is a probability of her coming off again. Her cargo consists of 40,000 spruce boards. The barque Gunanilo, Capt. Oretto, which cleared at St, John, Nov. 13, for Penarth Roads, is supposed to have been lost. The Guanilo had on board 332,749 feet of deals, 33,562 feet ends and 47,096 scantling, shipped by Messrs. Stewart. Capt. Stuart, of the ship John McLeod, relates a terrible experience of his vessel in the China Sea in a typhoon for three days, The ship lost all her spars and nearly all her rigging. Although a new ship and perfectly tight there were four feet of water in her hold when the storm ceased.

RAILWAY LINKS.

GRAND TRUNK NEW SCHEMES.

THE tunnelling of the St. Clair River and the building of the Sault Branch are two such important schemes in connection with the Grand Trunk Railway that the following extract from Sir Henry Tyler's address at the last half-yearly meeting, referring to these subjects, will be read with interest :—

"There is another item of expenditure which I ought to mention, and which I have already told you of, and that is the tunnel under the St. Clair River. You are aware that we have a ferry at the foot of Lake Huron between Point Edward and Fort Gratiot, near Sarnia, which works very well, where we have very large steamers and where we carry the trains over, but of course it would be better if we could carry them through a tunnel for many reasons and it would save a very large amount every year. I told you we had found a point on the St. Clair River with Chicago and Lake Huron on one side, and opposite the Sarnia branch of the Great Western section on the other side, and it is comparatively a small work to join those two lines by a tunnel under the river. The river is only 36 feet deep, and according to boring the rock is 90 feet below the surface of the water. The distance under water is only half a mile, and the tunnel will only be a mile long altogether, including approaches on both sides, and the piece of line, including the tunnel for connecting the Chicago and Grand Trunk with the Great Western section, will be only 2¾ miles long. By making that line we shall save six miles in distance, and we shall save £10 000 a year, even if the tunnel cost as much as £400 000 to make it. It is, therefore a very desirable thing to do. We have taken borings at an expense of four or five hundred pounds upon it, but we now propose to thoroughly test it before any expense is incurred, and to make a driftway six feet in diameter under the river; and an American contractor, General Suez Smith, has seen Mr. Hickson, and he is ready to undertake that work for $59,000, assuring its completion, because he is perfectly satisfied—having examined the spot, and being accustomed to work of that description—he is perfectly satisfied that he can do all we want in making the driftway and completing it in eight months for $59,000—something under £12 000—and we propose to expend that, but that will not make much of the three millions up. Now, there is another matter which I ought to mention to you, although it does not involve any immediate expenditure. I should mention that as far as that tunnel under the St. Clair River is concerned that we shall not come to ask you for the money for that. That is to say, it will not require to be taken out of the Grand Trunk resources, because if the tunnel is made it will be a very valuable property. It will have its own traffic to depend upon, and, like the International Bridge, it will have its own revenue, and there will be no difficulty in raising the money to make that tunnel without going upon the resources of the Grand Trunk Company. The next thing is the line which has been proposed for some years to connect our Midland system with Sault Ste. Marie. Sault Ste. Marie is a very interesting spot. The falls of Ste. Marie are those which take the waters from Lake Superior to Lake Huron. At the Sault there is a lock to avoid the rapids, by which steamers from Lake Superior go to Lake Huron and *vice versa*. There has been a Canadian charter for making a bridge at the Sault for some years, and a charter for making the line of the Midland system up to that place, and both charters are in the hands and under the control of the Grand Trunk Railway. There are also indications of lines being made to connect the Northern Pacific with the Sault Ste. Marie. Mr. McMillan, who is a friend of ours —a wealthy man in Detroit—had the line in his control there for a length of time, and by connecting the line with the Canadian Pacific, and having Ashland at the other end, that will complete the communication between Sault and the Northern Pacific. You will understand that a line connecting the Northern Pacific with the Grand Trunk will be a line of very great importanee. Here you have, on the one side, the Northern Pacific, with 2,000 miles of lines, connected with 1,500 miles of the Grand Trunk on the other side Any connection between those systems must be a very important connection. You will be very glad to hear that the Northern Pacific looks upon it with greater favor than we do. They say that the Northern Pacific and the Grand Trunk are natural allies, and that before long we must manage to get communications made between them somehow or other. Do not suppose I am contemplating this in opposition to the Canadian Pacific. This is a matter which has been contemplated by us for years. We have not been able to stir in it in times of depression, but we have gone so far that surveys were made years ago. It is an old project, and a very important one, and I am not prepared to go further in it than to say that we are negotiating with the Northern Pacific, and they are considering the question of making a line on their side, and we shall have to consider the question of how to make a line on the other side. I do hope we shall be able, the line being such a very important one, to make it with its own resources and without troubling the Grand Trunk with any guarantee. I am not prepared to say anything more at present."

The vote in Guelph on the by-law to grant $175,000 to the Guelph Junction Railway, which will afford the Royal City competition, was carried by a vote of 745 to 144.

The *Manitoban* thinks that sufficient evidence that the Hudson's Bay Railway is to be built is seen in the fact that several new freight cars have arrived at Winnipeg from Montreal, lettered "Winnipeg & Hudson's Bay Railway" and loaded with steel rails for the company.

The *Railway Age*, an American journal, says :—"The Canadian Pacific management has completed arrangements with the Boston and Lowell road, by which its cars will run to Boston, making that city, it is stated, its principal water terminus. Next summer it will probably reach down the coast into Florida, and perhaps throw a bridge across from Key West to Caracas, from whence the occupation of South America will be easily accomplished."

The Maskinonge and Nipissing is chartered to build 350 miles from Louisville, Que., on the Canada Pacific Railway, westerly to a point on the shore road, at or near Lake Nipissing. This, it is said, will shorten the distance for North-West traffic to Quebec about 200 miles. The country through which the road will pass is, in a large measure, heavily timbered, and iron, plumbago and building stone are reported at various places in large quantities. The incorporators are Messrs. Thos. W. Ferry, Grand Haven, Mich.; James J. White, Ottawa; John H. Verrall, and E. H. Talbott, Chicago.

Judging by the number of applications for new charters and extensions of old ones, the Dominion Parliament will have a great deal of railway legislation to attend to at its next session. The Railway Committee of the House of Commons, to which is committed the work of examining the bills in detail and checking, where necessary, legislation calculated to interfere with existing rights, is one of the largest and most important of all the Standing Committees of the House. It is made up of the best representatives of all sections, and probably meets oftener and works harder than any other committee —*Railway Life*.

The Oshawa *Reformer* says :—"The best railway project we have yet heard proposed in the interests of the town is that in which some of our citizens are now moving for the construction of a railway from the Oshawa harbor to Bobcaygeon, in the heart of the lumber region, with power of extension to Kinmount and thence in a due line north to Calendar station on the C. P. R. at Lake Nipissing. This line will cross the ridges and the C. P. R. at a very favorable point, a little east of Raglan and will run south and east of Lake Scugog, through Cartwright and Manvers, along the wide and fertile valley of Pigeon creek to Omemee and thence to Bobcaygeon. It will connect with the C. P. R. and Midland systems, and passing through good territory in the counties of Ontario, Durham, Victoria, Peterborough and Haliburton will enlist in its favor the parliamentary representatives of these counties and will receive municipal bonuses and command grants from both governments."

The Montreal *Star* says :—The decision of the Supreme Court in favor of the Canadian Pacific Railway regarding its right to complete the extension between Port Moody and Vancouver has, according to the British Columbia papers, given a great impetus to the terminal city. The real estate market has gone up with a boom, and capitalists who were holding on until a decision was arrived at are now investing heavily. The company has already asked for tenders for the grading of the uncompleted portion between Port Moody and the terminus, and the early completion of the railway will doubtless increase the population and bring a large volume of trade, both transit and otherwise, to the terminal city.

WOOD-WORKING PATENTS.

The following list of patents relating to the wood-working interests, granted by the U. S. Patent Office, January 11th, 1887, is specially reported by Franklin H. Hough, Solicitor of American and Foreign Patents, 925 F. Street, N. W., Washington D. C., who will furnish copies of patents for 25 cents each :—

356,066,—Moulding and stave machine,—C. L. Goehring, Allegheny, Pa.

355,704,—Saw Coping,—C. Morrow, Kansas City, Mo.

355,708,—Saw-Drag,—D. M. Omwake and W. P. McGee, Manchester, Iowa.

356,082,—Saw-guide,—D. J. Murray, Wausau, Wis.

356,035,—Saw-mill Band,—M. Garland, Bay City, Mich.

355,692,—Saw-set,—C. C. Harris, Denver, Colorado.

355,912,—Saw-swaging machine—W. G. Baumgardner, Flier City, Michigan.

355,059,—Saws, device for dressing the teeth of,—G. W. Cutshaw, Bedford, Ky.

355,710,—Shingle-sawing machine.—W. J. Perkins, Grand Rapids, Mich.

356,098,—Boring wood or metal, machine for,—H. F. Bundy, Welcome, N. Y.

356,220,—Saw mills, Saw-catcher for band,—G. H. Zschech, Indianapolis, Indiana.

356,086,—Sawing-machine, Scroll,—H. L. Beach, Montrose, Pa.

356 280,—Sawing wooden gutters, Machine for,— E. E. Elder, Lynn, Mass.

356,286,—Wood Machine for cutting across the grain,—F. Mankey, Williamsport, Penn.

354,256,—Chuck, Lathe,—A. H. Stetson, Brookline, Mass.

354,266,—Log Roller,—L. G. Orme, Paducah, Ky.

354,325,—Saws,—J. R. Little and C. T. Stoddard, West Stewardstown, N. H.

354,407,—Saw-mill, Band,—J. L. Gage, Chicago, Ill.

354,207,—Saw-mill dog.—J. C. Miller, Dunkirk, Ohio.

354 114,—Saw-swage,—J. E. Emerson, Beaver Falls, Pa.

354,167,—Saws, Device for setting,—C. Morrill, Jersey City, N. J.

HOW THEIR MONEY IS SPENT.

The *Paper Trade Journal* publishes the following illustrated table, showing how United States money is spent, as shown by the official statistics for 1885. We would be sorry to see such a record in Canada :—

Liquor, $900,000,000.

Tobacco, $600,000,000

Bread, $505,000 000.

Meat $303,000 000.

Iron and Steel, $290,000,000.

Sawed Lumber, $223,000 000.

Cotton Goods, $216,000,000.

Boots and Shoes, $196 000,000.

Sugar and Molasses, $155,000,000.

Public Education, $85,000,000.

Home and Foreign Missions, $5,500,000.

In round numbers three billion four hundred and eighty-two million five hundred thousand dollars, ($3,482 500,000,) divided as above.

The above figures show that our liquors cost nine hundred million dollars ($900,000,000.)

One-eighth more than all our meat and bread.

Three times as much as our iron and steel.

Ten times as much as our public education.

Our tobacco costs six hundred million dollars ($600,000,000,) or

One-fifth more than our bread.

Twice as much as our meat and iron.

Three times as much as our boots and shoes.

Seven times as much as our public education.

Our liquors and tobacco cost one billion five hundred million dollars ($1,500,000,000,) or

Three times as much as our bread.

Five times as much as our meat and iron.

Seven times as much as our meat and lumber.

Seventeen times as much as our public education, and these two items alone cost more than four-fifths of all the rest.

OUTLOOK FOR THE LUMBER TRADE.

THE local lumber market in Ottawa at present is very quiet, and for the past two weeks there have been no shipments of any account. The amount of dry lumber here is small in proportion to the cut. Mill owners are very firm in prices, all asking an advance and in some cases a large advance in prices on last year's prices. On the other hand buyers are holding back and do not seem at all anxious to buy. The amount of lumber sold of the new cut up to the present date is very much less than that at same date of the previous year's cut. Buyers are not inclined to close at prices asked, and therefore shipments are slow. Another great hindrance is the scarcity of box cars.

OUTSIDE ADVICES.

The Montreal *Trade Review* says : "There is a better feeling in New York than has prevailed for some time past. Stocks are held firmly. Trade with the British West Indies is quiet, and with Africa and Australia it is dull. There is a marked improvement in the River Plate trade. There has been further charters. In White Pine the new year opened near the zero line, and Jack Frost holds a tight grip on boom stock. The demand is comparatively light, but as the season advances a good trade is anticipated. Winter rail rates render it uncertain what the cost of transportation will be, for railroad companies have a happy faculty of weighing all the snow and ice which accumulates during a passage through several states; and, as this stock is necessarily shipped on open platform cars, the difference in weight is no inconsiderable factor. The arrivals of spruce have been light. There are but few cargoes on the way, and there are no orders; and will not be thrown upon the open market. Prices which remain unchanged are purely nominal, as there is little or nothing done. Laths show a decline of five cents since our last. The market for yellow pine is decidedly firm in tone. A better feeling prevails, and a further advance is not unlikely. For foreign shipment the inquiries continue to be large, and southern mills are stiff in their holdings. Many of the railroads are in the market with schedules of all sizes, some of them for large quantities."

WANTED.

The publisher of the CANADA LUMBERMAN desires thoroughly reliable and competent correspondents at the following named places :—

Kingston, Ontario.
Quebec City, Quebec.
St. John, New Brunswick.
Halifax, Nova Scotia.
Winnipeg, Manitoba.
Victoria, British Columbia.

The duty of each correspondent will be to give a review of his local market for the month preceding the date of issue, and the ruling quotations for different kinds of lumber, &c. For terms and any other information, address

A. G. MORTIMER,
Peterborough, Ont.

TRADE REVIEW.

TORONTO.

From Our Own Correspondent.

TORONTO, Jan. 24th, 1887.

Regarding the Toronto market, trade has hardly begun for the year. The cold weather with so much snow has prevented anything like outdoor work and consequently building has been almost entirely suspended. The recent thaw has, however, given a start to some work, and the indications in all sections of the city are such that just as soon as the weather permits there will be a considerable amount of building done.

The class of buildings to be erected this year are very various. Dwelling houses, factories, warehouses, banks, churches, possibly a City Hall and certainly the Parliament Buildings, although the latter will not be completed for three or four years to come.

The feeling in prices is to firmness and possibly before very long an advance in some lines. Certainly bill stuff will be in demand, and in this connection hemlock should prove an important factor.

The N & N. W. R. R. has, during the past ten days, been in rather a demoralized state. What with the burning of their round-house and several engines at Allandale, the snow blockade, and the scarcity of coal, they have not been able to move much freight in the way of lumber These are items even the C. P. R could not say they are, or would be, proof against.

The following are the ruling quotations in this city at present :—

Mill cull boards and scantling	$10 00
Shipping cull boards, promiscuous widths	12 00
" stocks	13 00
Scantling and joist, up to 16 ft	13 00
" " " 18 ft	14 00
" " " 20 ft	15 00
" " " 22 ft	16 00
" " 24 ft	17 00
" " " 26 ft	18 00
" " " 28 ft	19 00
" " " 30 ft	20 00
" " " 32 ft	21 00
" " " 34 ft	22 50@22 50
" " " 36 ft	24 00
" " " 38 ft	27 00
" " 40 to 44 ft	30 00
Cutting up planks 1½ and thicker dry	20 00@25 00
" " boards "	20 00
Dressing stocks	16 00@18 00
Picks Am. inspection	30 00
Three uppers, Am. inspection	40 00

B. M.

1½-inch flooring, dressed	25 00@30 00
1½ " " rough	14 00@15 00
1¼ " " dressed	23 00@25 00
" " undressed	14 00
" " dressed	16 00@20 00
" " undressed	12 00@14 00
½ Beaded Sheeting, dressed	18 00@20 00
Clapboarding, dressed	12 50
XXX sawn shingles, ℔ M	2 75@ 2 90
Sawn Lath	2 25
Red oak	20 00@25 00
White "	25 00@30 00
Basswood, No. 1 & 2	18 00@20 00
Cherry, No. 1 & 2	50 00@60 00
White ash 1 & 2	25 00@30 00
Black ash 1 & 2	20 00@25 00

MONTREAL LUMBER MARKET.

MONTREAL, Jan. 25th, 1887.

The year opened very satisfactorily for the lumber trade, and the distribution to date shows a considerable increase over the corresponding portion of last year. Country business in the middle of the month was very slow, owing to the heavy snow storms which blocked up the roads; however it has improved somewhat latterly, and there is a good demand at the yards, and for carloads also. Prices remain steady and unchanged.

The following is a statement showing the value of lumber, etc., exported from Montreal during the past year :—

Logs	$ 3,950
Deals	2,008,193
Planks &c	81,007
Square timber	4,800
Other Lumber	6,746
Total	$2,104,696

Montreal has every reason to congratulate itself on the enormous proportions which its lumber business has assumed in comparison with past years. At the first meeting of the new Board of Trade held on the 12th January, the report of the Council recommended to the attention of their successors the necessity for an extension of wharf accommodation and wharf facilities This, it was stated, would be greatly beneficial to traders in the lumber business, which was increasing so rapidly. As an example of the volume of this trade, it may be stated that the shipment of deals to Great Britain the past season was largely in excess of any previous year. During open water of 1886, 45,594, St. Petersburg standards were shipped, against 39,393 standards in 1885, and 23,368 standards in 1884. The shipments of sawn lumber which is principally to South America, was also very large, although not quite up to the year before in volume; the figures being 28.912.376 feet last year, against 37.162,100 feet in 1885. It appears that in 1877 only ten vessels left port with 3,400,000 feet; in 1884 there left, for South America alone, 47 vessels carrying 24,386,373 feet, and for Europe over 100 vessels carrying 76,873,578 feet; and in 1885 there were 84,282,275 feet exported to Europe. Hence the necessity for something substantial in the way of increased wharfage to be done at once,

Messrs. Dobell & Co., of Liverpool, in their monthly timber circular dated, Liverpool 1st January. say: "We have had a heavier import during December than last year, but considering the intervention of the holidays, the consumption may be regarded as satisfactory, and the stocks held, though ample for the trade doing, show a considerable reduction on previous years. If a satisfactory settlement of our home politics be arrived at without reverting to a general election. and the immediate future of the peace of Europe be re established, we think we may look forward to the year we have just entered upon with confidence."

The following are the quotations of the yards here :—

Pine, 1st quality, ℔ M	$00 00@40 00
Pine 2nd " "	00 00@30 00
Pine, shipping culls, ℔ M	14 00@16 00
Pine 4th quality deals ℔ M	10 00@12 00
Pine, mill culls, ℔ M	8 00@10 00
Spruce, ℔M	10 00@13 00
Hemlock, ℔ M	9 00@10 00
Ash, run of log culls out, ℔ M	20 00@25 00
Bass, " " ℔ M	18 00@20 00
Oak, ℔ M	40 00@50 00
Walnut ℔ M	60 00 100 00
Cherry, ℔ M	80 00 100 00
Butternut, ℔ M	35 00@40 00
Birch, ℔ M	20 00@25 00
Hard Maple, ℔ M	25 00@30 00
Lath, ℔ M	1 50@ 0 00
Shingles, 1st, ℔ M	2 00@ 3 00
Shingles, 2nd, ℔ M	2 50@ 0 00

OSWEGO, N.Y.

From Our Own Correspondent.

Three uppers	$46 00@47 00
Picking	36 00@37 00
Cutting up	26 00@27 00
Fine Common	22 00@25 00
Common	14 00@18 00
Culls	12 00@15 00
Mill run lots	19 00@21 00
Sidings, selected, 1 in	28 00@36 00
" 1½ in	30 00@38 00
Mill run, 1x10, 13 to 16 ft	19 00@21 00
Selected	24 00@26 00
Shippers	14 00@16 00
Mill run, 1¼x10	15 00@17 00
Selected	21 00@30 00
Shippers	14 00@16 00
Mill run, 1 & 1½ in, strips	19 00@21 00
Selected	32 00@34 00
Culls	12 00@15 00
1x6 selected for clapboards	32 00@34 00
Shingles, XXX, 18 in. pine	3 65@ 3 80
XXX Cedar	3 30@ 3 50
Lath 1½, No 1	1 80@ 2 00
No 2	1 60@ 1 80
Ash, 1st & 2nd 1 to 4 in	16 00@20 00
Basswood, 1st & 2nd, 1 & 1½ inch	20 00@22 00
" culls, " "	11 00@12 00
Hard Maple, ℔ M	23 00@25 00
Lath, ℔ M	1 50@ 0 00
Shingles, 1st, ℔ M	2 00@ 3 00
Shingles, 2nd, ℔ M	2 50@ 0 00

CORDWOOD.

Long Maple, per cord	$ 6 00@6 50
Long Birch "	6 00@0 00
Long Beech "	5 00@5 50
Tamarack "	5 00@0 00

ALBANY.

Pine, clear, ℔ M	$55 00@60 00
Pine, fourths	50 00@57 00
Pine, selects	42 00@44 00
Pine, good box	22 00@23 00
Pine, common box	13 00@15 00
Pine 10-in. plank, each	00 45@00 47
Pine, 10-in. plank, culls, each	00 25@00 27
Pine boards, 10-in	00 30@00 32
Pine, 10-in. boards, culls	00 16@00 20
Pine, 10-in. boards, 16 ft., ℔ M	28 00@32 00
Pine, 12-in. boards, 16 ft	28 00@32 00
Pine, 12-in. boards, 13 ft	28 00
Pine, 1¼ in. siding, select	40 00@43 00
Pine, 1¼-in. siding, common	15 00@18 00
Pine, 1-in. siding, select	40 00@42 00
Pine, inch siding, common	13 00@15 00
Spruce, boards, each	00 00@00 16
Spruce, plank, 1¼-in., each	00 00@00 20
Spruce, plank, 2-in., each	00 00@00 30
Spruce, wall strips, each	00 00@00 12
Hemlock, boards, each	00 00@00 14
Hemlock, joist, 4x6, each	00 00@00 32
Hemlock, joist, 2¼x4, each	00 00@00 14
Hemlock, wall strips, 2x4, each	00 00@00 11
Black walnut, good, ℔ M	100 @120 00
Black waluut, ⅞ inch	80 00@90 00
Black walnut, ¾ inch	00 00@85 00
Scaymore, 1-inch	28 00@30 00
Scaymore, ⅞-inch	21 00@23 00
White wood, 1-inch and thicker	38 00@40 00
White wood, ⅞-inch	28 00@30 00
Ash, good, ℔ M	40 00@43 00
Ash, second quality, ℔ M	25 00@30 00
Cherry, good, ℔ M	60 00@85 00
Cherry, common, ℔ M	25 00@30 00
Oak, good, ℔ M	40 00@43 00
Oak, second quality, ℔ M	20 00@25 00
Basswood, ℔ M	25 00@30 00
Hickory, ℔ M	00 00@40 00
Maple, Canada, ℔ M	28 00@30 00
Maple, American, per M	26 00@28 00
Chestnut, ℔ M	38 00@40 00
Shingles, shaved, pine, ℔ M	0 00@ 6 50
" 2nd quality	0 00@ 5 50
" extra, sawed, pine	4 30@ 4 00
" clear, "	0 00@ 3 00
" cedar, mixed	0 00@ 3 13
" cedar, XXX	0 00@ 0 00
" hemlock	2 25@ 2 37
Lath, hemlock, ℔ M	0 00@ 2 35
Lath, spruce, "	0 00@ 2 20

CHICAGO.

JAN. 22nd.—The condition of the lumber trade at large is mainly indicated by a firm holding of stocks, and a confidence that the outlook is favorable for spring trade. Actual business in the way of sales and distribution is mostly confined to railway stuff from the mills, and car strips from the yards and mills. The wholesale dealers are now looking after stocks of logs and lumber at the mills—that is, such of them as do not depend on buying by the cargo after the sawing season opens.

The season thus far has been very favorable for logging, and from every point, where active operations are being carried on, some predictions that this season's input will be unusually large. There may be conditions hereafter adverse to the successful finish of the logging season, but the probabilities are that there will be no lack of food for the mills next season, and that the supply will be so large that it will induce the crowding of production.

Piece Stuff, short green	$ 9 25@ 9 50
Piece stuff, short dry	10 50 11 00
Piece stuff, long	11 00 14 00
Boards and strips, No. 2	11 00@13 00
Boards and strips, medium	12 00 15 00
Boards and strips, No. 1	15 00 20 00
Shingles, standard	2 00 2 10
Shingles, extra	2 25 2 45
Shingles, cedar, standard	1 65 1 70
Shingles, cedar, extra	1 90 1 95
Lath, white pine	1 50 1 60
Lath, Norway	1 40 1 50

RECEIPTS FOR WEEK ENDING JAN. 20.

	Lumber.	Shingles.
1887	5,455,000	343,000
1886	3,080,000	692,000

FROM JAN. 1, TO JAN. 20, INCLUSIVE.

	Lumber.	Shingles.
1887	15,113,000	2,724,000
1886	8,894,000	1,876,000
Increase	6,219,000	848,000

STOCK ON HAND JAN. 1.

	1887.	1886.	1885.
Lumber	571,027,112	626,692,473	660,936,272
Shingles	462,329,900	428,313,350	336,700,492
Lath	57,542,609	95,653,678	68,905,506
Pickets	2,470,854	4,446 752	2,335,858
Cedar posts	203,096	1,962,947	571,004

EASTERN FREIGHT RATES.

FROM CHICAGO AND COMMON POINTS ON CAR LOAD LOTS OF HARD AND SOFT LUMBER.

To New York	25c.
Boston	30c.
Philadelphia	28c.
Baltimore	22c.
Washington	22c.
Albany	24c.
Troy	24c.
Buffalo and Pittsburgh	15c.
Shenectady	24c.
Wheeling	15c.
Suspension Bridge	15c.
Salamanca	15c.
Black Rock	15c.
Dunkirk	15c.
Erie	15c.
Toronto	15c.

LAKE FREIGHTS.

From Muskegon, green	1 62½
From Whitehall	1 62½
From Ludington	1 75
From Manistee	1 37½@1 87½
From Menominee, dry	2 00
From Menominee, green	2 00
From Cheboyan	2 00
From Bay City,	3 00
From Oscoda, dry	3 75
From Alpena, dry	2 50

DETROIT, MICH.

Uppers, 4x4	$48 00
5" 6x4 & 8x4	50 00
3 & 4 in	50 00
Selects, 4x4	42 00
5x4, 6x4 & 8x4	45 00
Fine common, 4x4	35 00
5x4, 6x4 & 8x4	38 00
Shop, 4x4	22 00
5x4, 6x4 & 8x4	25 00
Flooring, selected common	20 00
No. 1 common	18 00
No. 1 fencing	16 50
Roofing, D. & M	16 00
Siding, clear	22 00
A	21 00
B	19 00
C	14 00
Ceiling, select common	25 00
Ceiling, No. 1 common	22 00
No. 1 fencing	20 00
Stocks, 1x12 & 1x10, No 1	18 00
1x12 & 1x10, No. 2	14 00
1x12 & 1x10, No. 3	11 00
Ship culls	10 00
Mill Culls	8 00
Bill stuff ordinary sizes :	
12 to 16 ft	11 00
18 to 20 ft	12 00
22 to 24 ft	13 00
26 to 28 ft	14 00
30 to 34 ft	16 00
Shingles clear, 18 in. Ex	3 30
10 in. clear, 18 in	2 30
6 in. clear, 18 in	2 00
6 in stocks clear, Ex	4 00
5 in. " "	4 50
Lath, per M pcs	2 50

Add for S. 1 or 2 S. $1 ℔ M

SAGINAW VALLEY.

LUMBERMAN'S GAZETTE OFFICE,
BAY CITY, Mich., Jan. 24, 1887.

Owing to the exceedingly heavy snowstorm, which impeded work in the woods, and was followed by three days of almost uninterrupted rain, the average lumberman in the Saginaw valley has endeavored to content himself by settling quietly back in his chair, and casting care to the dogs. He has not been annoyed by proposed purchasers, and in this has not been disappointed, for the reason that he did not expect to see any of them. He has therefore had plenty of time to "sum up the situation" as it were, and draw his own conclusions. The result has been that he finds himself in a very good-natured frame of mind; because as he sees fit to express himself, the outlook for business in 1887 is of the most assuring character. The business skies are full of promise, and there is almost a certainty of such a demand as will insure against any break in prices; but it is not at all improbable that there will be an advance. With such a prospect it is no wonder that the manufacturers feel sanguine, and are disposed to await the arrival of buyers with the utmost display of equanimity.

CARGO QUOTATIONS.

Shipping culls	$ 8 50@11 00
Common	15 00@22 00
3-uppers	37 00@40 00
Bill stuff	8 50@10 00
Norway bill stuff	8 50@10 00
Under straight	
Measure	15 00@24 00
Shingles, XXX	2 85@ 3 00
Shingles clear butts	1 85@ 2 00
White pine ath	1 75

YARD TRADE.

3 uppers wide and thick	43 00@45 00
Do. 1 in	40 00@42 00
Selects	35 00@38 00
Fine common	27 00@30 00
1, 1¼, 1½, 2 in. cut ups	20 00@25 00
No. 1 base, 7, 8 and 9 in selects	35 00
No. 2 do. (fine common)	27 00
No. 1 floor strips	40 00
No. 2 "	27 00
No. 3 "	17 00
Fencing	12 00@15 00
Fencing, coarse common	8 00
Fencing, mill culls	4 00@ 6 00
No. 1 stock 12 in	14 00@15 00
No. 2 stocks	11 00@12 00
Wide common	12 00@15 00
Piece stuff and timber	9 00@10 00
12, 14, 16, 18 ft	9 00@12 00
Do. do. 20 ft	12 75
Lath	1 50@ 1 00
Lath No. 2 (cul)	1 25
Shingles XXX	3 15@ 3 [illegible]
Clear butts	1 90@ 2 00

DRESSING.

Surfacing	1 00
Dressing and matching	2 00
Making drop siding	2 25
Making bevel siding and ceiling	3 00

ADVERTISEMENTS

Those wishing to **BUY** or **SELL TIMBER LANDS, LUMBER** or **SECOND HAND MACHINERY** will find THE CANADA LUMBERMAN an excellent medium in which to make known their wants. Advertisements of this character will be inserted at the low rate of **1 CENT A WORD**, cash to accompany the order in every case. Address.

A. G. MORTIMER, Publisher,
Peterborough, Ont.

NEW YORK CITY.

SPECIAL CONTRACTS.

Pine, very choice and ex. drv	$65 00@75 00
Pine, good	55 00@60 00
Pine, shipping box	21 00@22 50
Pine, common box	18 00@20 00
Pine common box ¾	16 00@18 00
Pine, tally plank 1½ 10 in	00 44@00 50
Pine, tally plank 1½ 2nd qual	00 35@00 38
Pine, tally plank 1½ culls	00 30@00 32
Pine, tally boards dres'd good	00 32@00 35
Pine, tally boards dressed common	00 28@00 30
Pine, strip boards culls	00 18@00 20
Pine, strip boards merc'table	00 20@00 22
Pine, strip boards clear	00 25@00 26
Pine, strip plank, dr clear	00 33@00 35
Spruce boards dressed	00 25@00 28
Spruce, plank, 1½ inch each	00 28@ 0 30
Spruce, plank 2 in each	00 38@00 40
Spruce plank 1½ in dressed	00 28@00 30
Spruce plank 2in dressed	00 43@00 45
Spruce wall strips	00 16@00 18
Spruce timber	20 00@22 00
Hemlock boards each	00 18@00 20
Hemlock joist, 2½x4	00 17@00 19
Hemlock joist 3x4	00 18@00 20
Hemlock joist 4x6	00 40@00 44
Ash, good	55 00@ ....
Oak	55 00@65 00
Maple cull	25 00@30 00

Cargo rates 10 per cent. off.

EXTRA SELECTIONS.

Maple good	45 00@50 00
Cheatnut	45 00@52 00
Cyprus, 1, 1½, 2 and 2½ in	33 00@40 00
Black Walnut good to choice	140 00@160 00
Black Walnut ¾	80 00@100 00
Black Walnut selected and seasoned	150 00@175 00
Black Walnut counters	00 22@28 00
Black Walnut 5x5	150 00@160 00
Black Walnut 6x6	160 00@170 00
Black Walnut 7x7	175 00@180 00
Black Walnut 8x8	175 00@180 00
Cherry wide	100 00@120 00
Cherry, ordinary	70 00@80 00
Whitewood inch	45 00@50 00
Whitewood ¾ in	35 00@40 00
Whi e wood ¾ panel	45 00@50 00
Shingles ex. shaved pine 18 in	8 00@ 9 50
Shingles ex. sawed pine 18 in	5 75@ 6 00
Shingles clear sawed pine 16 in	4 50@ 5 00
Shingles cypres 24x7	22 00@24 00
Shingles cypress 20x6	00 00@14 00
Yellow pine dressed flooring	30 00@40 00
Yellow pine girder	25 00@35 00
Locust posts, 8 ft	00 18@00 20
do 10ft	00 24@90 25
do 12ft	00 29@00 34
Chestnut posts	00 03@00 3½

TONAWANDA.

CARGO LOTS—MICHIGAN INSPECTION.

Three uppers	$42 00@44 00
Common	18 00@24 00
Culls	10 00@13 00

YARD PRICES—CAR LOTS.

3 uppers, inch	$44 00@46 00
3 uppers, plank	45 00@50 00
Pickings, inch	36 00@38 00
Pickings, 1¼ in. to 2 in	38 00@42 00
Fine Common	32 00@34 00
Fine Common, thicker	35 00
Cutting up	25 00@30 00
Shelving, 12 in. and up	27 00@30 00
Coffin boards, 12 in. and up	16 00@18 00
Dressing stocks	17 00@20 00
Dressing sidings	19 00@22 00
Common stocks	14 00@15 00
Common sidings	15 00@17 00
Common box	12 00@13 00
Shingles, XXX, 18 in. sawed	3 40@ 3 50
Do. clear butts, sawed	2 20@ 2 30
Shingles, XXX 16 in. cut ⅛ sq	@ 3 00
Do. XX do	@ 2 75
Lath	1 90

LIVERPOOL.

The new year of 1887 opens with a favorable stock sheet in all, except one or two items, and should there be any revival at all in trade the bulk of it must be right.

Quebec pine timber is in a position never before experienced in this market; the total of waney and square being 305,000 against 615,000 last year, and this, with a consumption considerably in advance, viz: 116,000 against 76,000, means that any demand at all for this wood during the next few months must reduce the stock to a mere nothing before the next import commences. Really good prime pine is especially scarce, and waney has gone very freely during the last month.

The principal movement lately has been in waney pine, of which about 100,000 feet has gone into consumption during the last fortnight, I notice also that the Quebec birch lately landed has been sold to consumers and also that sawn pitch pine has been going pretty freely from the yard. so that by the time of the new arrivals of the latter wood there will be very little of the old stock left on hand.

Pitch pine presents very startling figures, particularly in sawn, viz., 216,000 against 684,000 last year, and this with a consumption of 86,000 last month bodes well for the fresh arrivals, one or two of which ought to be close at hand.

Pine deals appear rather heavy, and as it always the case at this time of the year, the demand is languid generally, reviving in February. I hear that 3rds for next season are very scarce in Canada.

The severity of the weather recently experienced in this part of the country in common with other districts has had the customary effect of limiting the amount of business to a very narrow compass. Under the most favorable circumstances little is done in the market until this month is well advanced; and. therefore, no great amount of disappointment can be felt if the demand still appears to be limited.

One thing is certain, and that is that the upland carriers' wharves seem to have but small quantities on the way to country buyers, though this may be materially altered within a short time from the present. Sellers of most descriptions of goods are firm holders, and do not any longer appear to have that anxiety to push sales which has been a marked feature in their transactions during the past year.

The public sales of whitewoods held by Messrs. Alfred Dobell & Co., on Friday last, the 7th inst., drew together a good company, many consumers from the country being present, and, taking the proceeding as a whole, the result must have proved satisfactory.

The cargo of sawn pitch pine, per *Pegasus*, from Darien. was firmly held, although some prejudice might be held against it on account of it being the cargo of a vessel wrecked on the coast, but the timber itself had not been in any way injured. The balance withdrawn from the auction sale was readily placed by private treaty.—*Timber Trades Journal.*

LONDON, ENGLAND.

Timber says:—Our forecast regarding London trade we regret to say, has proved to be only too correct, as in addition to the troubles that have come to light between the above date and the end of the year, we have now to chronicle three further suspensions of considerable magnitude. The first of these, that of Messrs. P. Wyndham & Co,, became known on Monday; this was followed on Wednesday by that of Messrs. J. M. Ross & Co., and yesterday Messrs. Esdaile & Co. issued notice of a meeting of creditors. Of the two latter named firms one member of each is on the Council of the Timber Trades Association, one being the President, and the suspension of these firms naturally caused considerable excitement and comment in the Trade, the like of which has not been known since the sensation caused by the failure of Messrs. A. J. King & Co. some five years ago, It is, of course, more than probable that some minor suspensions may take place in connection with the three firms mentioned. This series of disasters naturally has a very prejudicial effect on the trade, and business in the meantime is well nigh at a standstill. In unsettled times like the present many wild rumours get freely bandied about; and although it is as well to treat all such gossip with the greatest circumspection, yet we fear we can hardly expect that we have not seen the end of the present troubles. Some firms must have difficulty in maintaining their position, as financial facilities are certain to be greatly curtailed until the effect of the recent difficulties has had time to subside.

GLASGOW.

General trade has this week got under way again after the pause for the new year holidays. No auctions are yet announced by timber brokers here, and business is felt to be quiet.

Some large railway contracts for oak planks were lately fixed: these goods arrived in parcels per steamers, from New York, weekly, form an increasing part of the wood trade. Last year's import of sawn wood per steam liners from the States was much larger than that of 1885. The stock of spruce deals on hand at present is small, especially in Lower Port, and there have been inquiries lately for spruce; of some special sizes wanted there were none in stock.

Deliveries of Ameri an deals and planks from Yorkhill Yards, Glasgow. in December last were 100 038 pieces; in November, 89.128 pieces; and October, 93 420 pieces; the average monthly delivery over the whole year was 71,100 pieces, so that the foregoing figures show a marked increase during the last quarter of the year.

A computation has been made of the tonnage of vessels at present being built in Clyde shipyards, and th- total is stated to be 114,755 tons. Some very important contracts were made within the last few weeks.

There have been no arrivals of wood goods to note at Greenock or Port Glasgow, and imports at Glasgow are only one Cargo, consisting of Dalhousie pine deals, &c., besides various parcels of wood per steamers from New York.

When opening a correspondence with advertisers always mention that you saw their advertisement in the "Canada Lumberman."

THE CANADIAN NORTHWEST.

GEO. W. HOTCHKISS, Secretary of the Lumberman's Exchange, recently returned from a trip over the Canadian Pacific from Winnipeg to Vancouver, and makes a report regarding the same, which will create surprise among those who have been in the habit of looking upon the Northwest territories as arid, desolate plains—the home of the blizzard, and the manufactory of snow. Mr. H. speaks of populous cities lining the route of this road, backed by a fertile wheat belt, already containing a very large population of prosperous, contented farmers. There are at least a dozen towns and cities with populations of from one to five thousand located on the first 300 miles of road west of Winnipeg. West of Qu'Appelle, three hundred miles out from Winnipeg, the country is better adapted to herding, and is the region into which many thousand of Texas and Montana cattle have been driven during the last three or four months. The feed is rich and the climate is moderate. The temperature in this region is caused by a steady, warm breeze, known, locally, as the Chinook wind, which rises near the headwaters of the Peace River, and blows steadily from the Northwest, throughout the length and breadth of the provinces of Alberta and Assinobia. during the winter months.

The Canadian Pacific has been open to the public for about six months, and runs one passenger train daily each way. Each train is fitted with Pullman sleepers, dining room cars. etc. The trip from Montreal to Vancouver is made in six days. The road does the bulk of tea carrying trade for the Canadas at very low rates, in order to divert the business in that direction. The management has been beset with, "it will never pay," "it is such folly," and such like encouragement that was provoked contemporaneous with the building of our own Union Pacific. Like our venture, this road, now that it is opened, promises from the start to be a monument to the enterprise of the syndicate who built it, and a gold mine to the stockholders,

Near Cochrane, seventy-five miles east of the Rocky Mountains, the Eau Claire Lumber Co. have just completed a circular saw-mill, gaining their supplies by Elbow river, from foot-hills south of the road. South of Cassils. twenty-five miles, is the mill of Louis Sands, of Manistee, which manufactured last year 2,000,000 feet of lumber.

From the Rocky Mountains to the coast, a distance of four hundred miles. there is little timber that is of value to lumbermen. The mountain sides are covered with a dense growth of fir. The line of road near the coast presents very little attraction to the lumber trade.

Vancouver island is covered with a dense forest of Douglas fir, similar to that of Washington Ter., and Oregon. This timber is interspersed with a small percentage of red cedar, of which Mr. Hotchkiss displays some beautiful samples.

All streams of the Western slope are gold-bearing, in connection with which will be remembered the Carribou mining excitement twenty years ago. This field being reached by the new road, is attracting a large number of gold hunters. Valuable quartz discoveries, both in gold and silver, are being daily announced. Vancouver, the Western terminus of the road in January, 1886, was made up of the Hastings saw-mills and complement of shanties. June 12th it had a population of 2,000. June 13th it was totally destroyed by fire and thirteen lives lost, by December 1, 1886, the town was rebuilt, and contained a population of 5,000.

Mr. Hotchkiss states that the low temperature of the Winnipeg region is accompanied by a dryness of atmosphere. which renders a forty-degree temperature more endurable than a zero atmosphere. It is evident that the hitherto prevailing opinion regarding the British possessions of the Northwest has been erroneous, and that this region is destined to reach a greater degree of development than has heretofore been considered possible. The railroad company received a grant from the British government of a strip five miles wide on each side of the road. They think much of the future of the country, as is evidenced by holding this land out of the market. All the improved farms are outside of this five mile limit. Timber land is worth from two and one-half to ten dollars per acre. The homestead laws are similar to those of the United States —*Saw-mill Gazette*

Esdaile & Co., extensive timber merchants and saw-mill proprietors, of London, Eng, have failed.

When the Hudson's Bay Railway is completed, it will reach latitude 59½ degrees, making it the most northerly railway in America. At present the Manitoba & North-Western claims that distinction, reaching almost to latitude 51, with a promise of reaching higher than 53 in a short time when connection is made with Prince Albert.

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WANTED—A trustworthy and pushing man to represent the CANADA LUMBERMAN on the road, capable of writing up the lumber and wood-working industries, solicit subscriptions and advertisements, and do general business. One acquainted with this branch of trade preferred. Must be perfectly sober and able to furnish good references. Apply personally, or address

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Publisher, Peterborough, On

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TORONTO, ONTARIO,

Office No. 9 Victoria Street.

WANTED.

A SITUATION AS SALESMAN, Inspector or in Office in connection with the Wholesale or Retail Lumber Trade. Have had several years experience in the Retail Trade, also in the Export Trade to Britain. Acquainted with the detail of R. R. and Ocean Freight and Shipping. Address Lock Box 33,

INGERSOLL, ONT.

YOU can live at home, and make more money at work for us, than at anything else in this world. Capital not needed; you are started free. Both sexes; all ages. Any one can do the work. Large earnings sure from first start. Costly outfit and terms free. Better not delay. Costs you nothing to send us your address and find out; if you are wise you will do so at once. H. HALLETT & CO., Portland, Maine.

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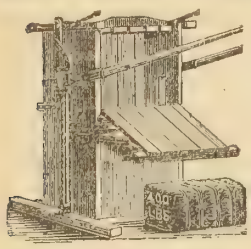

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$1.25 SCRIBNER'S LUMBER and LOG BOOK, and the CANADA LUMBERMAN for one year, sent, post paid, on receipt of **$1.25**. This book contains tables for finding the correct measurement of scantlings, boards, planks, cubical contents of square and round timber, saw-logs by Doyle's rule, stave and heading bolt tables, cord wood, prices of lumber per foot, speed of circular saws, weights of wood, strength of rope, felling of trees, growth of trees, tables of wages by the month, price of standard logs, interest tables, etc., etc., to which is added 60 pages of new tables, making 160 pages in all. It is the most complete book of the kind ever published. It is worth many times the price of the subscription, and no lumberman or wood-worker can afford to be without it.

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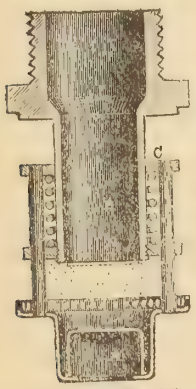

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REGULAR SALES will be held during the year 1886, as follows:

Tuesday,	*April 6th,*	*Tuesday,*	*August 10th,*
do	*May 11th,*	*do*	*September 7th,*
do	*June 8th,*	*do*	*October 5th,*
do	*July 13th,*	*do*	*November 2nd,*

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Our method of procuring for our subscribers the most reliable information is through solicitors of the highest standing, and from other equally reliable sources in the several localities indicated, who are under contract with us to supply the necessary information promptly.

The Landed Enquiry Department of this Agency, the only institution of this kind known, is invaluable to Solicitors, Loan, Investment, and Insurance Companies, Estate Agents, and others, preventing fraudulent land transactions resulting from misrepresentations.

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Another important feature in connection with this department is, that subscribers depositing accounts for collection will, if requested, be furnished with a Form of Script, on which will be entered the name of each debtor, the amount owing, and a full report of the prospects of collection, and providing that the receipts thereof be paid to bearer only, thus enabling subscribers to realize on their outstanding accounts.

The Agency will forward at least once in three months, or oftener if desired, a report and statement of all accounts in hand.

NOTE.—The offices of the Agency are open to the Solicitors and subscribers for reference to our numerous maps, atlasses, directories and correspondence, and for the transaction of business with their clients and customers when in Toronto.

W. SMITH, Manager.

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ARRIVE.—5 31 a. m., 8.39 a. m., 6.42 p. m.

Going West.

PETERBOROUGH DEPART.—8.39 a. m., 6.42 p. m., 5.31 a. m.

ARRIVE.—11.31 p.m., 7.53 p.m., 10.56 a. m.

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MINING REGULATIONS

To Govern the Disposal of

MINERAL LANDS OTHER THAN COAL LANDS,

1886.

THESE REGULATIONS shall be applicable to all Dominion Lands containing gold, silver, cinnabar, lead, tin, copper, petroleum, iron, or other mineral deposits of economic value, with the exception of coal.

Any person may explore vacant Dominion Lands not appropriated or reserved by Government for other purposes, and may search therein, either by surface or subterranean prospecting, for mineral deposits, with a view to obtaining under the Regulations a mining location for the same, but no mining location or mining claim shall be granted until the discovery of the vein, lode, or deposit of mineral or metal within the limits of the location or claim.

QUARTZ MINING.

A location for mining, except for iron, on veins, lodes, or ledges of quartz or other rock in place, shall not exceed forty acres in area. Its length shall not be more than three times its breadth, and its surface boundary shall be four straight lines, the opposite sides of which shall be parallel, except where prior locations would prevent, in which case it may be of such a shape as may be approved of by the Superintendent of Mines.

Any person having discovered a mineral deposit may obtain a mining location therefor, in the manner set forth in the Regulations which provide for the character of the survey and the marks necessary to designate the location on the ground.

When the location has been marked conformably to the requirements of the Regulations, the claimant shall, within sixty days thereafter, file with the local agent in the Dominion Lands Office for the district, in which the location is situated, a declaration or oath setting forth the circumstances of his discovery, and describing, as nearly as may be, the locality and dimensions of the claim marked out by him as aforesaid; and shall, along with such declaration, pay to the said agent an entry fee of FIVE DOLLARS. The agent's receipt for such fee will be the claimant's authority to enter possession of the location applied for.

At any time before the expiration of FIVE years from the date of his obtaining the agent's receipt, it shall be open to the claimant to purchase the location on filing with the local agent proof that he has expended not less than FIVE HUNDRED DOLLARS in actual mining operation on the same; but the claimant is required before the expiration of each of the five years, to prove that he has performed not less than ONE HUNDRED DOLLARS' worth of labor during the the year in the actual development of his claim, and at the same time obtain a renewal of his location receipt, for which he is required to pay a fee of FIVE DOLLARS.

The price to be paid for a mining location shall be at the rate of FIVE DOLLARS PER ACRE, cash, and the sum of FIFTY DOLLARS extra for the survey of same.

Not more than one mining location shall be granted to any individual claimant upon the same lode or vein.

IRON.—The Minister of the Interior may grant a location for the mining of iron, not exceeding 160 acres in area, which shall be bounded by north and south, and east and west lines astronomically, and its breadth shall equal its length, Provided, that should any person making an application purporting to be for the purpose of mining iron thus obtain, whether in good faith or fraudulently, possession of a valuable mineral deposit other than iron, his right in such deposit shall be restricted to the area prescribed by the Regulations for other minerals, and the rest of the location shall revert to the Crown for such disposition as the Minister may direct.

The Regulations also provide for the manner in which land may be acquired for milling purposes, reduction works, or other works incidental to mining operations.

Locations taken up prior to this date may, until the 1st of August, 1886, be re-marked and re-entered in conformity with the Regulations without payment of new fees, in cases where no existing interests would thereby be prejudicially affected

PLACER MINING.

The Regulations laid down in respect of quartz mining shall be applicable to placer mining as far as they relate to entries, entry fees, assignments, marking of localities, agents' receipts, and generally where they can be applied.

The nature and size of placer mining claims are provided for in the Regulations, including bar, dry, bench, creek or hill diggings, and the RIGHTS AND DUTIES OF MINERS are fully set forth.

The regulations apply also to

RED-ROCK FLUMES, DRAINAGE OF MINES AND DITCHES.

The GENERAL PROVISIONS of the Regulations include the interpretation of expressions used therein; how disputes shall be heard and adjudicated upon; under what circumstances miners shall be entitled to absent themselves from their locations or diggings, etc., etc.

THE SCHEDULE OF MINING REGULATIONS.

Contain the *forms* to be observed in the drawing up of all documents, such as:—"Application and affidavit of discoverer of quartz mine." "Receipt for fee paid by applicant for mining location" "Receipt for fee on extension of time for purchase of a mining location." "Patent of a mining location." "Certificate of the assignment of a mining location." "Application for grant for placer mining and affidavit of applicant." "Grant for placer mining." "Certificate of the assignment of a placer mining claim." "Grant to a bed-rock Flume Company." "Grant for Drainage." "Grant of right to divert water and construct ditches."

Since the publication, in 1884, of the Mining Regulation to govern the disposal of Dominion Mineral Lands, the same have been carefully and thoroughly revised with a view to ensure ample protection to the public interests and at the same time to encourage the prospector and miner in order that the mineral resources may be made valuable by development.

COPIES OF THE REGULATIONS MAY BE OBTAINED UPON APPLICATION TO THE DEPARTMENT OF THE INTERIOR.

A. M. BURGESS,

Deputy Minister of the Interior.

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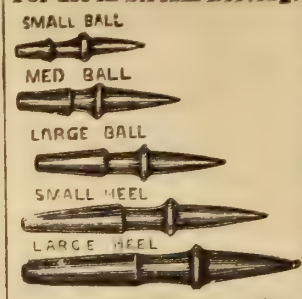

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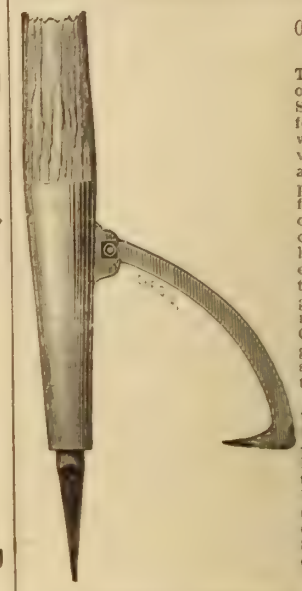
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Notice to Contractors.

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for New Examining Warehouse, &c., Ottawa," will be received at this office until TUESDAY, 1st March, for the several works required in the erection and completion of the

New Examining Warehouse, &c.,

—AT—

—OTTAWA.—

Plans and specifications can be seen at the Department of Public Works, Ottawa, on and after MONDAY 14th February.

Intending contractors should personally visit the site and make themselves fully cognizant of the work to be done, according to the said plans and specifications, before putting in their tenders.

Persons tendering are further notified that tenders will not be considered unless made on the printed forms supplied, and signed with their actual signatures.

Each tender must be accompanied by an *accepted* bank cheque, made payable to the order of the Honorable the Minister of Public Works, *equal to five per cent.* of the amount of the tender, which will be forfeited if the party decline to enter into a contract when called upon to do so, or if he fail to complete the work contracted for. If the tender be not accepted the cheque will be returned.

The Department does not bind itself to accept the lowest of any tender.

By order,

A. GOBEIL,
Secretary.

Department of Public Works,
Ottawa, January 27th, 1887.

Notice to Contractors

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for Dredge Scows," will be received until Monday, the 14th day of February next, inclusively, for the construction and delivery of

Two Side-Dumping Dredge Scows,

in accordance with a plan and specification to be seen on and after Monday, the 31st day of January inst., at the following places, viz:—Office of Mr. James Nelson, Montreal; Public Works Department, Ottawa; Custom House, Kingston; and at the Custom House, St. Catharines, where printed forms of tender can be obtained.

Persons desirous of tendering are notified that tenders will not be considered unless made on the printed forms supplied, the blanks properly filled in, and signed with their actual signatures.

Each tender must be accompanied by an *accepted* bank cheque made payable to the order of the Honorable the Minister of Public Works, *equal to five per cent* of the amount of the tender, which will be forfeited if the party decline to enter into a contract when called upon to do so, or if he fail to complete the work contracted for. If the tender be not accepted, the cheque will be returned.

The Department does not bind itself to accept the lowest or any tender.

By order,
A. GOBEIL,
Secretary.

Department of Public Works,
Ottawa, January 24th, 1887.

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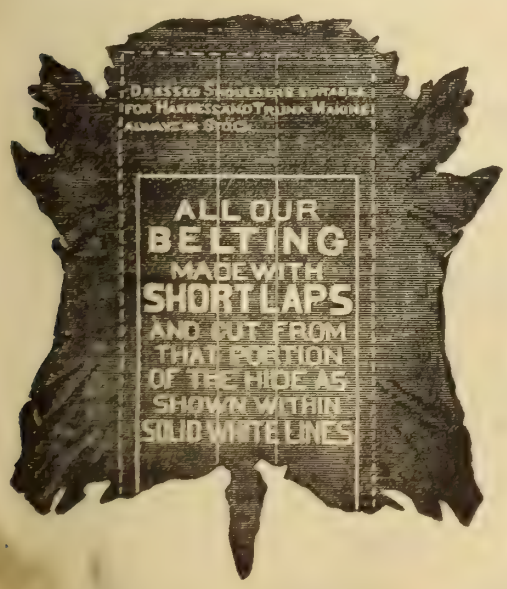

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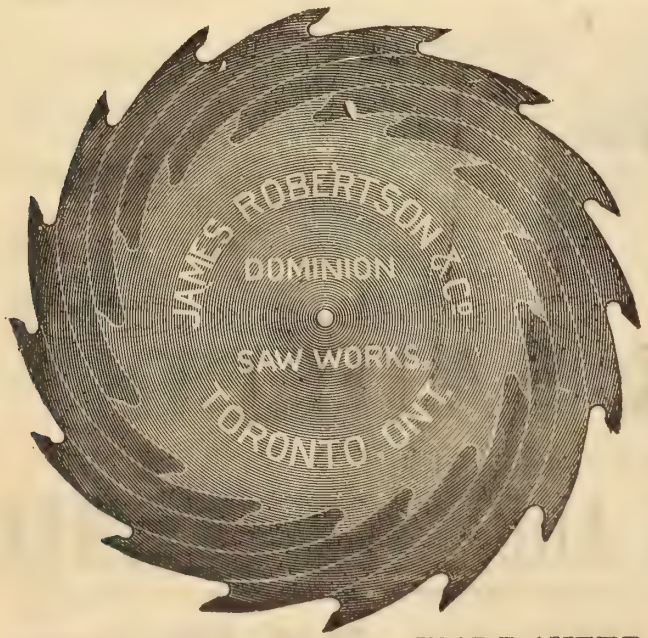

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THE CANADA LUMBERMAN

AND MILLERS' MANUFACTURERS' AND MINERS GAZETTE.

PUBLISHED MONTHLY By A. G. MORTIMER.

The only Newspaper devoted to the Lumber and Woodworking Industries of the Dominion.

SUBSCRIPTION $1.00 PER ANNUM.

VOL. 7. PETERBOROUGH, ONT., MARCH, 1887. NO. 3.

THE OPENING SEASON.

IF any value is to be placed on indications, an early and vigorous opening of the spring trade in lumber is one of the things that may fairly be expected of the near future. We find business starting up on every hand. Orders are beginning to flow in to the distributing markets, and these are but the precursors of the business soon to result from the flood of inquiries which wholesale lumber merchants have been getting for weeks back. Everywhere there is an anxiety to know about stocks and values—to feel the pulse of trade, and to measure, as far as it can be done, the resources of the country in the way of present supplies The strong feeling among holders, and the manifest rising tendency of values, contribute to produce a feeling of anxiety among those who are or must be buyers, and to hasten the placing of orders. The situation has all the buoyancy and strength which comes with an advancing market, and wholesale merchants have all the cheerfulness which comes from such conditions

In the outlook now spread out to the view of the lumber trades there is one feature that is frequently spoken of, always with more or less apprehension—the possibility of labor disturbances. The present strike along the docks in New York is pointed at as the probable beginning of a disturbance likely to extend into various lines of industry, and by reason of that possibility, forming an element of uncertainty that is necessarily disturbing and annoying. All calculations must be made with this possibility of labor troubles in view, and it must therefore prove a factor, whether it turns out only a bugbear or not. No one will venture an undertaking without regarding it, and without so carefully restricting his enterprise as to avoid, as far as may be, the evil consequences of such disturbances if they come To plan otherwise than this would be incautious and even dangerous in the extreme, and would be without justification in a management ordinarily careful

It is not improper to consider, however, whether the conditions actually existing may not be such as to warrant a hope, at least of a practical escape from any such upheaval of the labor element as occurred last year. Experience seems to show that strikes are less apt to occur when labor is generally employed than when there is a large contingent of idlers. If this be true, as a principle, there is some encouragement to be got from the fact that labor is pretty likely to have plenty to do during the present season and to that extent may escape the temptation to mischief which is always present when idleness abounds. Then the rate of wages is likely to be fair, and should be satisfactory. That it will be satisfactory, unfortunately does not necessarily follow. But this fact that men are averaging good pay, and stand in no peril of starvation, or of any hardship from insufficient means, will have some influence in keeping them from strikes, which many are beginning to learn are more costly to the working men than to their employers. If it were not for the labor unions, for the demagogues that control them, and for the principle they have established of ordering great strikes for merely revengeful and retaliatory ends, it might be safe to predict comparative immunity from labor uprisings during the present year. But these unlucky facts stand boldly out in the prospect, and makes the one great blot on the fair picture that would otherwise present itself.

But even with this possibility of a whirl with the trades unions to interfere with the perfect hopefulness of the outlook, the expectation of the business man, and especially the lumberman, is justifiably of a busy and profitable season. It will not do to scan too carefully all the dark elements in the problem, and ignore all the bright ones The chances that the wrong will not come uppermost are at least even, so that in discounting the future half the probability must be given to the other side. The unexampled health of the country in a business way must be given its due weight, and it is not to be forgotton that in especial the lumber businsss is in a condition of prosperity that has but few parallels in its history. It is to be remembered that there is in first and second hands but a limited supply of stock, and that among retail holders the supplies are proportionately even lighter. It cannot be therefore, but that every foot of dry lumber that is now in pile in the northwest, whether at mill points or in distributing yards, will be required to meet the actual consumptive demands of the spring and early summer. Such stock possesses for this very reason an intrinsic value that should be recognized and appreciated by every holder. Generally it is, and it is this fact that makes the present market so strong, and the rising tendency of prices so pronounced. If the trade does not take advantage of the present conditions, it will make the greatest mistake possible—one which the annals of the business have never recorded, and which it is to be hoped there will never be the necessity of placing therein.—*Chicago Lumberman.*

FOREST RESOURCES OF THE NATION.

THE following circular issued by the Chicago Lumberman's Exchange and approved by the Lumber Manufacturers' association of the northwest, has been sent out:

It is desired to enlist your sympathy and assistance in an endeavour to obtain an inventory of the forest resources of the nation. It is a work which can properly be accomplished only by the Forestry Division of the Bureau of Agriculture, and we learn from reliable sources that the amount allotted to that Division from the annual appropriation to the Bureau, is utterly inadequate to accomplish any useful purpose. It is desired that the Division of Forestry should place men in the various states, as rapidly as circumstances will permit, with instructions to ascertain: 1st. The amount of the various kinds of standing timber, classified. 2nd. The extent of the improved farming land—with such other useful information as may suggest itself to the Chief of Division.

And why is it desirable that this information should be obtained?

As a nation we are scarcely more than 100 years old, and yet in that time the forests of Maine, Vermont, New Hampspire, New York and Pennsylvannia have parted entirely with the vast supplies of white pine which once covered their forests, and their good oak is also gone. In these states only hemlock, spruce and hardwood, mainly of second growth, and of a vastly inferior grade as compared with the original timber growth, is to be found. Michigan which but 50 years ago was estimated to contain 150,000,000,000 (one hundred and fifty billion feet), is set down in the census report for 1880 at but 32,000,000,000 feet, while the annual manufacture equals 5,000,000,000 feet. Wisconsin in the same time has been reduced from an original supply fully equal to Michigan, to an estimate of 44,000,000,000 feet in 1880. Minnesota with an original growth of perhaps 30,000,000,000 feet, was in 1880 estimated at but 11,000,000,000 remaining.

These three last named states are supplying lumber at the ate of not far from 10,000,000,000 per year, and if the census estimates were reasonably correct, the year 1890 should show an almost entire extinction of the white pine supply of the northwest.

While perhaps the estimates were far too low, the poorer grade of the supply of each succeeding year is speaking as no figures can do of the fact that the pine supply of the northwest is drawing uncomfortably nigh to a period of utter exhaustion. Of oak, which for many years was a staple production of Michigan, it may truthfully be said that it has disappeared, for a while a large amount of inferior timber suited only for saw logs may yet remain, the seeker after staves and quare timber for ship building is compelled to look to other and more remote regions

The vast timber resources of states further south, as Ohio and Indiana, have been culled over until little is to be found except that which but a few years ago was rejected as of no value. With an average consumption demand equaling 500 feet per capital the 60,000,000 people of the United States require 30,000,000,000 feet per year of the sawed products of the forests, in addition to their fire wood.

How long the now extensive forests of the south can stand the strain, which (with a smaller population) has so nearly exhausted the once supposed inexhaustable forests of the north is an interesting problem.

Our Canadian neighbors who have been hitherto thought the possessors of unlimited forests of pine have already taken the alarm, and ascertaining that in eight years the timber trade of Montreal has increased from 3,800 000 feet in 1878, to over 100,000,000 feet in 1886, now propose to increase the export duty upon the manufactured product, in order to conserve and protect her forests from speedy extinction. Under these circumstances, is it not for the interest and advantage of every citizen of the United States, be he farmer, merchant, professional man or laborer, that a reliable inventory of the present and still remaining forests resources of the country should be speedily undertaken, in order that with an intelligent appreciation of the facts waste may be prevented and the commercial, agricultural and manufacturing interests of the nation, may, to the fullest extent be benefitted.

It is firmly believed that when the importance of the subject shall be appreciated by our legislators, there will be no delay in providing the bureau of forestry of the United States with ample means for inventoring the timber resources. To this end your influence and vote is requested.

Importance of Thin-Blade Saws.

The Germans use at the present day among their furniture-makers, carpenters and joiners, thirteen different varieties of saws, each one of which has its own peculiar size of the teeth, as well as a different relatlion of teeth to each other. How important the thin saw-blake is, not only as a means to save power, but also as a means to save wood, can be seen from the following: A log of walnut, four meteres long and one meter in diameter, cut into twenty pieces the new horizontal saw frame, saves thirty millimeters of wood when compared with the cutting of the old-fashioned vertical saw. This is equal to a profit of $9 to $12. For Germany, where annually 100,000 cubic meters of this wood is used in various industries, this would represent a saving of $37,500 to $50,000.

John W. Perry, Lumberman, Coles Island, has assigned.

CANADIAN WOODS FOR CARRIAGE BUILDING.

A COUPLE of months ago THE LUMBERMAN briefly referred to a paper read at a meeting of the Institute of British Carriage Manufacturers, by Professor John Macoun, Botanist to the Canadian Government, on the "Timbers of Canada suitable for Carriage-making" Through the courtesy of Mr. Macoun, we are now enabled to produce his remarks almost in full, and coming as it does at a time when the excitement of an election contest precludes any great amount of news concerning the lumber trade, we have no doubt but that one and all of our readers will feel a personal interest in the remarks of this talanted gentleman. Among those present at the meeting above referred to was Sir Philip Cunliffe-Owen, K. C. M. G., chairman), the Hon G. Quinett, (Canada,) Messrs. A Ransome, L. Ransome, Ira Cornwall, J. Burn, Bishop & Son, Allison, F. Joplin. C Chapman, A W. Wright, (General Commercial Agent for Dominion Government,) E. B Biggar, (New Brunswick,) G N. Hooper, and many others.

Professor Macoun, on rising, said: Gentlemen, although my remarks will chiefly refer to woods used in carriage building, I feel convinced that my audience will bear with me while I make a rapid sketch of the lumbering business and point out on the accompanying map the localities where it is chiefly carried on. New Brunswick, Quebec and Ontario are the chief seats of the timber trade, and there is not a river in these three provinces where a saw log will float but has its sawmills or its lumbering firms. In northern New Brunswick there are still extensive forests of maple beech, ash, basswood, birch, oak, poplar and elm, of very great size, besides large tracts covered with hemlock, black and white spruce, red and white pine, as well as swamps of larch and cedar. Owing to their positions these forests remain untouched, and when a projected line of railway is built, large supplies of timber for every branch of business will be laid open to commerce. I particularize this region because it is nearer the seaboard than any other untouched locality. At present spruce and pine, with a little ash, are the only woods exported.

Quebec has been exporting pine timber for generations, and still has very large quantities, but it is chiefly confined to the upper waters of the various streams entering the St. Lawrence. The same hardwoods which occur in New Brunswick are still in abundance, but are getting more difficult of access owing to the advance of settlement. Cedar, larch, and spruce are abundant, and were the demand greater there would be more produced.

Northern Ontario possesses the most extensive pine forests now existing in Canada, perhaps in America. These extend from the Ottawa river on the east to Lake Superior on the west, and lie on both sides of the Canadian Pacific Railway. West of Lake Superior there are extensive tracts covered with pine, spruce, larch and cedar, part of which is being utilized, while the greater portion is being destroyed by fire. The hardwoods mentioned as growing in the other provinces are more abundant in Ontario, and the species are in much greater variety. In the Ontario forest sixty-five species of trees grow in profusion, while in England only fourteen are found native.

A belt of timber composed of poplar, spruce and larch, and one species of pine (*Pinus Banksiana*), extends from the meridian of Lake Superior westward to the Rocky Mountains, with a depth of about ten degrees of latitude. This belt contains much fine timber, especially in the river valleys, part of which will find an outlet by Hudson Bay

The Rocky Mountains and British Columbia contain in their recesses the finest coniferous forest on the continent. This, if properly looked after, would be a source of profit for centuries but past experience tells me that a few short years will see only blackened stumps and fire-scathed trees, where the stately fir and cedar show their crowns of waving green as the breeze passes through their tops two hundred feet above the earth.

From the data just given, it can be easily shown that there can be no uncertainty about the supply. I am afraid that our people would cut down too much and have no profit on their labor. Were there a timber bureau or exchange organized in connection with the contemplated Imperial Institute, dealers might be made aware of the anticipated wants of consumers, and producers could be instructed accordingly. There need be no fear of the supply of spruce and larch, and of the courser kinds of pine lumber, giving out, as we have immense tracts, unfitted for agriculture, covered with this class of timber. It is true that fires do great damage every year, but that applies more particularly to pine forests, as these grow on dry and generally sandy soil. Fire passing through a Canadian forest simply means the re-covering of the land with a different variety of tree, as pine lands, if the soil be fairly good, seldom become covered with pines again.

I may be permitted at this stage to make a few practical remarks on forest conservation and practical forestry in general. The Imperial Parliament has taken up the matter of a School of Forestry for England, and much discussion has taken place regarding it, and much useful information has been elicited by the Parliamentary Committee appointed two years since. In looking over the evidence I was struck with the clear-sightedness of a number of the witnesses, though I could see that their environment was rather restricted, and their views partook of their surroundings. As I am acquainted with the conditions under which the 110 species of Canadian forest trees exist, flourish and mature, from the Atlantic to the Pacific, I may be permitted just here to make one or two broad statements. Before doing so, however, I may state that, should any gentleman desire it, I will give him, at another time, the soils, localities and atmospheric conditions under which each and every species flourishes in Canada. For over thirty years I have studied the flora and climate of Canada, and collected every species of tree in its native habitat so that answering questions as above requires no preparation.

Mixed forests are always the best in Canada when size of trunk is considered. Lumbermen prefer the pine to be in groves, as it costs less to get it to the water. No two species of tree have ashes containing the same constituents, hence the more diverse the ashes the better suited to plant together. Conifers produce little ash, but deciduous trees much; therefore I would mix by having say, a pine and an oak. The pine has a pyramidal top and grows faster than an oak, while the latter has a broad top and is slow of growth. Pine (*Pinus strobus*) and oak (*Quercus alba* and *rubra*) grow together in many districts of Canada, and both are very healthy. Larch requires undrained soil, and can thus resist a hot climate, but a constant supply of moisture at the roots or a cool moist atmosphere are its essentials.

Let me give you an actual forest picture, as seen in many districts in Canada. You stand on a hummock in the centre of a tamarac (larch) swamp, all around you are small larches, scarcely rising twenty feet above the swamp, which is composed of species of sphagnum and hypnum, and interspersed with ericaceous shrubs. Far in the distance you see trees of other kinds, and you walk towards them As you proceed the trees become larger and are soon of a merchantable size. Soon cedar (*Thuja occidentalis*) begins to mix with the larch, the soil gets firmer, the sphagnum disappears and you are in a cedar swamp. The larches are now very large. Still passing outwards a few black ash (*Fraxinus sambucifolia*) are met, and these soon predominate, and you are in a black ash swamp. Reaching almost dry ground you meet with soft maple (*Acer rubrum*) and American or swamp elm (*Ulmus americana*). These extend to the margin of the wet ground, and you now meet with beech, birch, maple, white ash, rock elm, and the various other hardwood species of dry and arable soils. In many cases this good land is traversed by ridges of gravel or gravel and sand, and here you will find oak and pine growing together, seldom the one to the exclusion of the other, in the central parts of Ontario; but north, only pine is found, and south, only oak in such places. These are the conditions under which a few of our trees live and go through their round of existence.

It is now time to come closer to the real object of the lecture and introduce what is ostensibly the subject of my discourse—'Canadian Timbers suitable for Carriage-building.' I have been permitted, however at a later stage, to make some remarks on species suited for other purposes.

List of elastic woods valuable for carriage building:—

1. Shell bark hickory (*Carya alba*).
2. Bitter-nut hickory (*Carya amara*).
3. White heart Hickory (*Carya tomentosa*).
4. Pig nut hickory (*Carya porcina*)
5. White ash (*Fraxinus americana*).
6. Black ash (*Fraxinus sambucifolia*).
7. Rim or red ash (*Fraxinus pubescens*).
8. Chestnut (*Castanea vulgaris*).
9. Cherry or black birch (*Betula lenta*).

I ELASTICITY.

Ash and hickory are noted everywhere for this property, but in commerce only two species are taken into account—White ash (*Fraxinus americana*) and shell-bark hickory (*Carya alba*). It is well known, however, that all the Canadian species of ash possess this property in an eminent degree, and both black and red ash have been used from time immemorial by the American Indians in the manufacture of baskets, on account of it. Red ash, or Rim ash obtained the latter name from the early settler in Canada, because, when hammered, each year's growth separated from its fellow and enabled the Indians to get the thin ribbon like pieces which they use in their basket work. Much has been spoken and even written on the great value of 'second growth' ash and hickory, yet a clear conception of what is meant seldom enters the mind. In England I have heard of the superiority of English ash as a species, but this I deny, and assert as a fact that it is due to the conditions under which it is grown. English ash is grown on lawns and in the hedge-row; ours, which reaches England in square logs, in the close forest, where it is protected from both storm and sunshine. Second-growth ash, on the other hand, is young timber grown in the corners of fences in the old settlements, or young forest growth which has sprung into existence since the old was cut or burnt away, and has been produced under the same conditions. The same remarks are applicable to hickory, and the wood grown in the old forest bears no comparison with the second growth.

I consider elasticity a property of young wood, and the greater the exposure the more it is produced Should this be a fact—and I have no doubt of it—there is no reason why Canada could not produce all the ash and hickory for every variety of agricultural implement and vehicle required in England. We have millions of acres of waste lands growing up with young wood, which to-day are of no value, but which in twenty years, if merely let alone, would fully supply the English market as well as our own.

LIST OF WOODS NOTED FOR TOUGHNESS.

1. Basswood (*Tilia americana*).
2. Common or white elm (*Ulmus americana*).
3. Rock elm (*Ulmus racemosa*).
4. Slippery elm (*Ulmus fulva*).
5. Beech (*Fagus ferruginea*)
6. Hornbeam (*Carpinus americana*).
7. Ironwood (*Ostrya virginica*).
8. Walnut (*Juglans nigra*)
9. Butter-nut (*Juglans cinerea*).
10. White oak (*Quercus alba*).
11. Blue oak (*Quercus bicolor*).
12. Pin oak (*Quercus palustris*)
13. Grey oak (*Quercus macrocarpa*).
14. Sycamore (*Platanus occidentalis*).
15. Red maple (*Acer rubrum*).
16. Whitewood (*Liriodendron tulipifera*).
17. Whitewood, Cottonwood (*Populus monilifera*).

II TOUGHNESS.

Toughness and elasticity, although often combined in the same wood, as in the various species of elm, are not necessarily produced under the same conditions. Elasticity, as I mentioned above, is a youthful state, while toughness is produced from the interlacing of the fibres, and is found at all ages. Our three elms, common or swamp elm (*Ulmus americana*), rock elm (*U. racemosa*), and slippery elm (*U. fulva*), are in their young state so tough that in many cases it is impossible to split them. I have seen thousands of young elms ranging from six inches to eighteen inches cut down close to our railways and burned up on the ground because they were so tough that they were almost useless for firewood, and not worth the labour of converting into firewood. Did English purchasers and Canadian producers understand their business better these small trees would be cut up in Canada of the required size, or merely cut into plank and shipped to England when partly dried. Or, better still, English capital, managed by competent men in the interest of the manufacturer or dealers in England, could produce just what was wanted and forward direct, so that the heavy charges now paid to middlemen could be dispensed with. I see no reason why Englishmen cannot look upon Canada as an integral part of the Empire, and place their money there with the same freedom they do in this little island.

Another tough and invaluable wood to the carriage builder is basswood (*Tilia americana*). Besides its lightness and easiness to work, it possesses the valuable property of retaining any shape required by the builder, and for the bodies and panels of carriages is unsurpassed. In both Canada and the United States it if considered a valuable wood for every purpose requiring lightness and strength. Our manufacturers use it for sounding-boards for pianos, as it will not warp, for chair bottoms, sleighs, fanning mills, and other purposes of a like nature. Bowls and woodenware generally are made from it, besides many toys and various little articles To the cabinetmaker it is also valuable, as it can be stained any color, and often passes for much more costly wood. Whitewood is also a valuable wood, but is becoming scarce in Canada as it is confined to the western part of Ontario, chiefly along Lake Erie. It has been asserted with much truth that Canadian oak is far inferior to English, but the fault lies more in the conditions of growth than in any specific distinction. English elm, ash, and oak are grown in the open ground, and hence are as tough as they possibly can be, while only the full grown forest tree is shipped from Canada. No trees of these genera are cut for export in our forests, except those that will square a certain size, and therefore the timber exported is our most brittle and weak. We have now in Canada around the old settlements, in fence corners, and in the forest, cut many years ago an enormous quantity of young wood ranging from twenty to sixty years of age which is considered of no value, as there is no demand for it. This is the class of wood you want and cannot get, because your own country does not produce enough of it. You reject our forest-grown wood and say it is of second-class quality, and tell us our woods are far inferior to yours. I retort by telling you that you can get the wood you desire by changing your mode of purchase Let any competent man go out to Canada and have a lot of young oak, ash, elm, and hickory sawed up into plank of the size you want, let it be partly seasoned, and then shipped direct to the manufacturer. Then you will get good cheap raw material, and with your machinery and skilled workmen there is no reason why you cannot build carriages of better quality more cheaply than you do at present.

So that you may understand the ignorance that prevails in Canada regarding our own woods, I will relate one or two instances of this character. Last autumn I was collecting samples of wood for the Indian and Colonial Exhibition, and went for that purpose to the Niagara peninsula. At Queenstown Heights I purchased a lot of second-growth hickory for hammer handles for the use of the Geological Survey, and at

Niagara Town, Clifton, and St. Catherines I found hickory almost the principal firewood, and piled up in every person's yard At the manufactories in St Catharines I learn they use imported hickory, and put their own in the fire, while west of them, on the line of the Canada Southern Railway, numerous sawmills were at work cutting hickory into spokes and hubs for the American market. I visited the mills myself, and saw them at work. One of the chief causes of our gross ignorance is the want of a Forestry Department and staff of competent men to enlighten the people. Each province owns its wild lands, and each settler his farm, and reckless waste and wanton destruction are the order of the day. The people are gradually becoming aware of the alarming waste caused by fire and the permanent change taking place in the climate. The probabilities are that the Dominion Government may take the matter up at an early day, and at least the worst features of the constant burnings be somewhat curtailed.

III. HARDNESS.

Nearly all the woods mentioned in the lists are hard when dry. Some of them are so hard that in daylight fire will be seen to fly from the axe when they are being cut for firewood. Ash, hickory, all the oaks, beech, hornbeam and ironwood become very hard when dry. Basswood, elm of the various kinds, willow, poplar, and some other woods, do not become so hard but they are very difficult to cut, as the axe will indent them but not start a chip, owing to their toughness.

IV. WOODS SUITED FOR CABINETMAKING AND FURNITURE.

In the foregoing remarks I have abstained from saying anything about the beauty of many of our woods and their great value for cabinetmaking and all kinds of furniture. Many woods, of great beauty for panels of doors and inside work in rooms, are to be had at a small cost in Canada. The more abundant of these woods are black ash, Douglas fir, black walnut, butternut, cherry, pine, cedar, birch, tulip-tree or whitewood, chestnut, white ash, maple, oak, sycamore, and some others. An examination of the articles of furniture, doors,&c., in the Exhibit on will illustrate this part of the subject better than I can, but these billets, which I now show you, will give you at least a faint idea of their varied appearance ond contrast of colours. The Douglas fir, is easily worked, and has that warmth of colour so admired in pitch pine, but is free from the resin that interferes with its working. Sycamore (*Platanus occidentalis*), black walnut, maple and ash are well known, and need only be mentioned; but one fact should not be lost sight of—that all these are easily worked, and of more value on that account. We have had logs of black birch, black walnut, black ash, basswood and slippery elm exposed to the English climate since spring, and there is not the least appearance of checking up to date in any one of them. This to me is a fact that should not be lost sight of, as wood that dries without a flaw ought to be good.

V. COOPERAGE.

Oak seems to have the first place for wine and beer barrels, and Quebec staves have held their own for many years Birch staves are found to be an excellent substitute for vinegar and many other barrels, and Mr. Ransome proved the other day that black ash is well adapted for the same purpose. Pine, cedar, and many other woods are suitable for dry barrels. In this line of business our easily worked woods are unapproachable.

VI. PULP FOR PAPERMAKING.

In conversation with a gentleman the other day, I discovered that large importations of wood pulp were being made from Norway and Sweden into England. Now, it may not be a surprise to any of my audience when I say that we have in Canada more land covered with poplar alone than the whole area of Norway, Sweden and Finland; that these poplar lands are in every province, and with the exception of the Northwest, are the poorest of the lands. As poplar (*Populus tremuloides*) grows rapidly, we can fill any orders that may be made upon us without exhausting the supply. Much of the spruce required for common purposes comes now from these same countries; and this, too, we can furnish, as a belt of spruce crosses the watersheds of all the rivers flowing into the Gulf and River St Lawrence and Hudson's Bay.

VII. DETERIORATION AFTER CUTTING.

Many trees, under certain conditions, rot easily, while under other conditions, they are almost imperishable. Basswood was early considered a poor wood for fencing, as it rotted so easily. Observation showed that with the bark on it soon rotted, but without the bark it remained sound. The same thing is true of elm, but in a lesser degree. Beech rots very quick if exposed to the elements, but under shelter remains sound. If covered by water it will remain sound for a long time. Oak, if exposed to the weather, loses its sap wood, but the old wood remains sound for many years. I believe all young timber should either be put in water immediately after it is cut or put under shelter, as the young wood begins to rot very quickly if it is alternately wetted and dried. It follows, then, that deterioration takes place to a far greater extent than we imagine by letting young trees lie out in all weathers with their bark on, as they cannot resist wet without having been first dried.

I believe that any attempt to ship our hardwoods to this country without a proper understanding of the subject will result in failure. Basswood sent to England in the usual way would be both an unsightly and an inferior wood, but if sawed into boards at once in Canada and dried would be both beautiful and of excellent quality. Its natural colour is a light yellow, but it takes a stain so easily that it can be made of any colour. Our practical men know the great beauty of our common woods, but few know how to treat them to preserve their strength and colour My own opinion is that only two plans can be adopted—soaking in water long enough to remove or change the character of the sap, or sawing up the wood into planks or boards and drying at once Unless this is done you cannot expect to get such stock as our local manufacturers use. Deterioration by discoloration or incipient decay, or even by fungus growth, can easily be proved to arise from decomposition or fermentation of the sap or the albuminious matter laid up in the wood cells for the next year's growth All the maples, birches, poplars, and lindens are noted for their loss of colour owing to these changes. The action of the winter's frost in the case of the maple changes the albuminous matter into cane sugar, while in the sap of the birch it produces grape sugar.

This would seem to indicate that the sap also undergoes fermentation when the tree is cut down and the logs are exposed to the weather. In removing the starchy matter from the cells we remove the chief cause of decay and of weakness, and must have a closer-grained, lighter, tougher, and more elastic wood.

By the present method of shipping square logs, one-fourth of the best part of the tree is left on the ground and another seventh is lost before it passes into the hands of the mechanic. In this way over one-third of the wood is wasted, and the old overgrown trees, with very inferior heartwood, are the only ones that reach the English market If the plan indicated above were adopted, half-grown trees, as well as old ones, would be taken and sawed at once to the required thickness or size. After rejecting the heartwood, bark, and other useless portions, a material would be left which all practical men can see must far excel that now sold on the English market. Beauty of grain, toughness, and elasticity are combined in the wood of young trees and hence such ought to be chosen, and their supply in Canada is practically inexhaustible.

In speaking to an English audience composed of practical men, I feel bound to show that the superiority of English woods is not due to any inherent quality, but merely to the fact that you take the best of yours and get the worst of ours. Give our woods, grown under the same conditions, and of the same age as yours, the same treatment, and I have no fear for the results. The ash and oak I saw in Mr. Lucas's factory told their own tale, the bark being just as sound as the wood, showing conclusively that it was sawed up shortly after being felled. To be of any real value carriages must be constructed of well-selected and well-seasoned timber, and to all desiring such I would say look to Canada for your raw material.

VIII. AMERICAN VIEW OF THEIR TIMBER SUPPLY.

We are threatened with a want of sufficient quantity of timber to meet the actual necessities of life.

Twenty millions of people are living in dwellings chiefly constructed of wood. Their barns and outbuildings are of wood, and the fencing of their farms, more expensive than their other improvements, is of wood, and all these are perishable with time. Moreover, our sixty thousand miles of railroad consume annually immense quantities of timber. Twenty-one thousand six hundred cords of wood are daily consumed in running railway trains three hundred and twenty thousand miles each twenty-four hours. Sixty thousand miles of road require twenty-five hundred ties to the mile, and as they must be replaced every five years an annual consumption of thirty million ties is required. We will soon construct each year ten thousand miles of new road equiring twenty-five million more ties, and when we add to all these sources of forest destruction the wood required in the fencing of these railroads, the half-million telegraph-poles which each year will be required, and the vast amount of the destruction of forests by flood or fire, we must be absolutely startled with the conviction that whole provinces of wood which have required a hundred years to grow are each year being swept away, while nothing is done by either public authority or private zeal to supply the place of that which is destroyed or protect in any measure that which exists. These are 'hard facts,' and whether people mind them or not to-day, they will give them some thought hereafter.

In France the forests were cut down with the utmost recklessness, and for the last thirty years her fertile valleys have been swept by terrible floods, carrying away all kinds of property and covering the rich soil with gravel and sand. In Russia the forests are beginning to disappear, and a law is now in force making it illegal to use anything but coal for fuel on the railroads.

The timber lands of Germany are under the special protection of the Government, while in Japan every one who cuts down a tree is compelled at once to plant another.

The experience of these countries foreshadows that of our thoughtless men, and reckless corporations may go on stripping the land of its forests, but at last every one will be convinced of the necessity for a change.

PRACTICAL VIEWS FROM NEW BRUNSWICK.

Mr. John D. Howe, of the firm of J. & J. D. Howe, furniture manufacturers, of St. John, New Brunswick, the designer of the magnificent wood trophy shown by the Government of New Brunswick at the Colonial and Indian Exhibition, says: 'Authorities differ as to whether our supply of what is generally looked upon as our marketable lumber is diminishing. Be this as it may, we still have enormous supplies of these woods. Independent of these it is a well known fact that immense tracts of our lands are covered with most valuable woods generally considered of little value, but which will eventually yield a more profitable article of export than either pine or spruce, as the latter are now handled. The poplar, white birch, basswood, maple, and other deciduous varieties of our forests if cut and shipped in the ordinary manner of shipping spruce and pine, would in most cases prove a failure. In order to make their export a success their nature and peculiarities must be well understood, and a desirable amount of intelligence and skill brought to bear in their manufacture. We might as well attempt to send away our grass or grain as we take them off the fields, without curing, as to export these woods without seasoning and manufacturing into desirable sizes or articles for which they are best suited. Our poplar, which is very abundant, is valuable for many purposes; it is very white in colour, and of light weight. It becomes hard and tough when dry, and is susceptible of a very high degree of polish. On account of the hardness of this wood it is considered superior to pine or spruce, where narrow stock is required, for flooring and other interior finish. It can also be largely used for cabinetwork, tool-handles, paper-pulp, and many other purposes.

'Basswood, like the poplar, is even more liable to spoil after the tree is cut down. Like all other vegetable substances, there is not any remedy for it after decay sets in. The early stages of decay, or souring of the sap, as it is called, should be carefully guarded against; it alike destroys the colour of the wood and the firmness of its grain. It destroys the qualities which render it so valuable for many purposes, such as carriage bodies, furniture, interior finish, &c. It takes walnut or mahogany stain equal if not superior to any other wood, and makes a pleasing finish in its natural colour—pale yellow.

'The white birch, although not so liable as the basswood, poplar, and maple to deteriorate while green, or before the sap or moisture leaves it, requires careful treatment in order to preserve its strength and colour. The many purposes to which this valuable wood may be applied are too numerous to mention. Large quantities are now being shipped to Europe in the shape of spool bobbins blocks, &c. It is becoming exceedingly popular for first-class flooring, and for this purpose should be cut on the *rift* rather than on the slash of the grain. Maple and beech are also excellent for flooring, but their chief value is for tool stocks and handles, agricultural implements, lasts, and an almost endless variety of articles requiring a strength and hardness that will resist wear.

'The preference given to English plane stock and tool-handles is not due (as the prevailing opinion puts it) to the material used by those makers being superior to ours. It is rather attributable to their proper method of treatment of it. The trees are cut down in the proper season, while the sap is down; they are then blocked out to suitable sizes and dried, not allowing the sun to check or dampness to heat or mould it. On no account is the log allowed to remain uncut for any length of time, either in or out of the water. There is not any class of woodwork where the proper cutting and curing of wood is of so great importance as in its preparation for wood-engraving. Our rock maple if prepared according to the foregoing observation, becomes dense and capable of receiving almost as large a number of lines to the inch as boxwood; in other words, it is suitable for fine work If the same wood was allowed to remain in bulk for any length of time, even in the log or plank, or (worse still) a close pile, it would become worthless for wood-engraving.'

Mr. Howe continues; 'It is to be regretted that the beauty and nature of our native woods have not been better understood and properly appreciated. This is probably due to their abundance, but it is not any reason why we should not make the most of what we have so plentiful. It is hoped that when it becomes apparent that we still possess a valuable supply of timber that it will not receive the same ruthless and greedy treatment that the pine, spruce, and hemlock have received in the past.'

In again referring to the proper preservation and seasoning of timber, while Mr. Howe's remarks apply to some lumber or material not exceeding three or four inches in thickness, the same cannot be applied to cases where it is used in larger bulk, as in the case of that used for shipbuilding. For these purposes another eminent authority says: 'The decay of woods by the growth of fungus, denominated dry rot, may be traced to the putrefying of the sap (as alluded to by Mr. Howe) when this has been left within the pores of the timber in the same condition as it exists in the living tree. The various means employed to arrest this destructive fermentation are either to wash out the sap by long soaking in water, aided by the action of the sun, to dry up the sap, either naturally by exposure to the sun and wind, or artifically by heated currents of air' Nearly all authorities agree that there is great advantage in having our woods properly seasoned in this climate. A firm of dealers in wooden ware, writing from Liverpool recently, commented most strongly upon the subject, and stated that *the advantage*

of having the woods seasoned in New Brunswick climate gives manufacturers an undoubted advantage.

With the foregoing facts before us, it cannot but be admitted that the consumers are much better served by having the woods cut up and seasoned in this country. They obtain better material unquestionably. The saving in raw material should insure lower prices for them, and the saving in freight is a considerable item.

At the conclusion of Professor Macoun's interesting and valuable address, which was received with great applause, a valuable discussion took place.

BALANCING PULLEYS.

IF a pulley is placed on a mandrel that is too loose for the bore, and one of the set screws tightened just to hold it in place, the wheel is not going to be brought to a perfect balance by placing the shaft on narrow edged bars and weighting the lightest side till the wheel will stand in any position. Neither will it do to wedge an arbor on all sides with shingle nails filed to a point with the object of bringing the mandrel in the centre for the purpose of balancing Leaving the wheel to stand loose on the shaft while the arbor is rolling on the bars will give a much better result, but to get a wheel anywhere near perfect in balance a nice true mandrel must be used that will let the wheel drive on to the centre, and made to rest between two narrow straight-edged bars that have been tested with a spirit level. This gives a revolving motion so delicate that it stands next to the knife edge in accuracy and requires but the slightest weight to throw the wheel out of balance. The pulley will have a tendency to roll back and forth when placed on the bars. and this is sometimes taken advantage of in finding the lightest side of the wheel, as it is as important to find the place where the balancing weight is to be added, as it is to determine the amount that is to be attached to the weight of the wheel. During the rocking motion of the wheel a mark is made on the rim at the same height from the supporting bars, as the wheel comes to rest on each forward and backward movement. The central position taken from these points locates the lightest side of the wheel in about the manner that the dead centre of an engine is found by blocking under the crosshead, and throwing over the fly-wheel till it is brought up by the same stop again, and dividing the movement in halves. The wheel is then rolled around till the lighted side stands level with the mandrel. This brings the centre of gravity the farthest to one side of the central line of the wheel, and assumes some of the good qualities of a balancing scale. A weight sufficient to hold the wheel in this position will be all that is needed to keep it equally poised in any part of the circle.—*Boston Journal of Commerce.*

TIMBER AND DEAL FREIGHTS.

(*To the Editor of the Journal of Commerce of 24th January.*)

SIR,—It is much to be regretted that notwithstanding the anticipations of an improvement in trade all round, the first charters which have been made from Quebec this season are at rates little, if anything, better than those of last year. There is no doubt that the ruinously low freights which have ruled at Quebec and the deal and pitch pine parts during recent times are and have been owing in the greater measure to the reckless competition of owners having vessels engaged in these trades, especially North of Europe ships which appear to accept anything merchants think fit to offer. Last year prospects looked fairly good shortly after the opening of the season at Quebec, but, as usual, the market was spoiled by owners and captains rushing in and accepting whatever rates suited shippers and merchants to offer. The shipbrokers at Quebec complained of the action of the shipowners and captains in frustrating their efforts to establish an advance in freights. Shipowners have been acting under a sense of unreasoning panic, each trying to outstrip his neighbor in the race to ruin —grasping at anything and everything for the sake of employment, and apparently losing sight of the hopelessly unremunerative nature of their operations. From all quarters come complaints of the loss and of shipowners being reduced to the brink of insolvency, yet they make no effort to save themselves. It is self-evident that it is impossible for this state of affairs to continue ; the end must be very near at hand with a great many owners now. If a combined effort is not made to put freights up a general bankruptcy of owners of wooden vessels must inevitably ensue. Combinations and trades unions are resorted to and adopted in other industries when those interested find things arrived at a point which does not afford a living, and there should be no insuperable difficulty of shipowners entering into a combination for mutual protection. It must come to this, or universal ruin for the present owners of the large amount of wooden tonnage afloat, amounting to several millions of tons register, and representing many millions of money. To all appearances, under existing circumstances, the ships must pass into other hands at mere nominal prices, and perhaps new owners may be deluded into the experiment of running them at rates of freight which do not pay expenses, but they must speedily awake to the fact that the game is not worth the candle. This experiment has already been tried, in a measure, by foreigners, who have been acquiring ships at ridiculously low prices, as compared to their cost and intrinsic values, but the majority have discovered by this time that even under these conditions the result is disastrous.

There is no good reason why freights from Quebec should be less than 25s per load for timber, and from the deal and pitch pine ports 60s and 100s per standard respec ively. These rates would be easily obtained if shipowners will resolve to accept no less and stick firmly to that resolution. The trade can well afford it, wood goods have been selling at absurdidly low prices for some years past, and no one interested appears to be any the better off for it, except, perhaps, the consumers of the goods, who have, probably, been lining their pockets at the expense of the producers and shipowners. The trade was in a much more healthy condition when p ices were considerably higher than they are now, and any movement in the direction of a return to better rates should be welcomed by the shippers, carriers and merchants. Anyhow, it is a quest on of life or death with the shipowners, and it rests with them whether they will make a stand for existence or quietly submit to extinction.

It may be said, in addition, that if owners abroad would give positive instructions to their agents in England not to fix their ships at such ridiculously low rates it would be some help towards getting freight up. British shipowners are anxious to hold off, but when they see foreigners rushing in and snapping at everything, they are obliged, in self defence, to accept what they can get,

It is utterly impossible for ships to pay expenses out of such a rate as 19s to 20s per load from Quebec, as instanced by the following particulars of a voyage made last summer by a ves-el of 950 tons register under favourable circumstances as to outward freight and all possible economy as to expenses, viz. :—

Disbursement at port of departure, including provisions and outfit		£302
Disbursement at Queb c		367
Insurance on hull and freight out and home		269
Disbursement at port of discharge, including captain's and crew's wages		392
Brokerage on timber charter		14
Sundry commissions		49
		£1,393
Freight out to Quebec	£ 200	
Net freight from Quebec to a port in U. K. at 19s 6d per load	1,084	—£1284
Loss on the voyage		£ 109

SHIPOWNER.

THE TREATMENT OF FOREST SEEDS.

WM SAUNDERS, F. R. S, C., Director of the Central Experimental Farm, Ottawa has issued the first Bulletin relating to the workings of that establishment Among many other things of interest we find the following remarks regarding the treatment of forest seeds.

The great importance of encouraging and stimulating tree planting among the farmers, especially in the Northwest Provinces, is beyond dispute. It is felt also that this can only be accomplished on the scale of magnitude required by the planting of suitable forest tree seeds, which can be gathered from the native trees growing in the Provinces or purchased at a small cost. This lea ls us to add a few words of advice on the general treatment of forest tree seeds.

Many of the tree seeds which mature early are better sown soon after they are gath red This applies especially to the several varieties of elm and to the soft maple. The hard maple, box elder and ash seeds keep well over winter, provided they are stored in a cool place and not allowed to get too dry. Acorns, nuts and stone fruits are most successfully planted in the autumn, but if kept over winter should be mixed with moist sand and exposed to frost and planted as early as possible in the spring, taking care that they are not at any time left in masses under conditions so as to heat. Many failures with seed arise from not sowing it in partial shade. If seeds are exposed alternately to hot sunshine and cold, while they are swelling, they will frequently rot before they appear above the surface. The requisite shade may be obtained by the use of brush wood, or a light layer of corn stalks or straw, removing this as soon as the seedlings are up and fairly established. Many nurserymen enclose their seedbeds with wooden frames, on which are laid light frames made of one-inch strips and covered with cotton or muslin. These are convenient and can be provided at small cost. Seedlings of evergreen trees grow slowly and require to be shaded and kept moist during hot weather all through the first year of their growth and sometimes longer. Seeds take some time to swell their coats after being placed in the ground, hence, if planted dry, they should be sown as soon as soil can be had to cover them. Germination may be hastened, especially with seeds of hard texture, by pouring hot water on them and allowing them to soak for twenty-four hours before sowing.

Seeds sometimes fail to grow from being planted too deep. The larger nuts and acorns should be covered with soil about as deep as the seed is thick ; other smaller seeds should not be covered with more than half an inch of mellow soil, pressed gently with the back of a spade so as to make the earth firm around them, and when the young seedlings appear they should be carefully weeded. Occassionally seeds will remain in the ground until the following season without germinating. Should any fail to grow by the time spring is over. and on examination the kernels are found sound, the seedbeds should be kept weeded and shaded until the next season.

Anyone desirous of securing a copy of the Bulletin referred to can do so by addressing the Experimental Farm, Ottawa.

British Trade With Canada.

The export and import trade between the United Kingdom and Canada in the month ended the 31st ult. shows a total export from the United Kingdom to the Dominion, of £505,769 contrasted with £435,467 in January of last year, an expansion of £70,302. equal to 16 per cent. Of horses £750, in value was shipped to Canada in excess of last year. Articles of food and drink show a falling off, and in raw materials, wool exhibits an increase of £2,200. The expansion in cotton piece goods is £20,975, being £137,038 last month against £116,029 for the corresponding period. Of linen piece goods there was £3,700 more shipped than in the first month of 1886, and of silk broadstuffs £2 600. Woollen fabrics show a falling off of £7,400, but in worsted fabrics there was an increase of £18,500, and in carpets of £6,000. Hardware and cutlery were shipped £300 in excess of January last year. The exports of iron show a marked increase, the total being £42,640, as compared with £17.111, an increase of £25,529, or 149 per cent. The increased value of the exports of machinery is £500 in steam engines, and £400 in other kinds. An increase of £12,400 is shown in haberdashery, £2,300 in earthen and china ware, and £5 800 in seed oil, but in apparel and slopes there was a decrease of £700 and in stationery of £900. As to the imports from Canada to the United Kingdom the total last month amounted in value to £50,373 against £35,150 in January, 1886, showing an increase of £16,223, equal to 47 per cent. Of wheat, £7,695 came to hand, none being imported in the corresponding month. Flour shows an increase of £7,400; butter, £3,400 ; and cheese, £2,300 ; but in cured and salted fish a decrease of £2,300 is exhibited. The imports of copper ore were $8 400 more in January last year, but the lumber trade shows a decided falling off, the quantity of hewn wood received being only £24 in value, or a decrease of £3.716, and of sawn wood £7 012, a reduction of £6,900.

The Duty on Sawn Lumber.

A well-known lumber merchant says the duty of $2 per thousand feet, which was imposed by the Government last session on all unsawn lumber exported from Canada to the States, has had the effect of stopping the taking of Canadian lumber by Americans. The few Americans who had the misfortune to have large limits on their hands at the time the tax was imposed have either disposed of them to Canadian firms or erected mills on the Canadian side, where they sawed up the lumber and then exported it free of duty to the other side. Since this duty was imposed Canadian lumbermen have had much brighter prospects, and he thought that ere long our lumbermen of the Lake Superior and Georgian Bay districts would be able to compete with their neighbors across the line.

Taper Pike Poles.

We direct the attention of our readers to the advertisement on page 15 of this issue, of W. Forsyth, Peterborough This gentleman has lately gone into the manufacture of Taper Pike poles, which is something entirely new to the Canadian trade. A large number of the leading lumbermen in Eastern Ontario are already using this article and consider it by far the best that has yet been introduced. When an article of merit is placed on the market and once tested, it generally finds a ready sale, as doubtless will be the case in this instance. Our readers would do well to send for a sample article.

No Voice For War.

In regard to the little hostile demonstration made by a few small politicians on account of the fishery troubles with Canada. no doubt the editor of the Orange, Texas, *Tribune* voices, in a rough way, the sentiments of every Confederate veteran in the following paragraph.

"Well, we say let 'em fight. We don't care, but we don't want any of it in our'n. We used to be quite ardent and patriotic, but that was when we were too young to know any better, but we have gotten gloriously over all that as we have come to the conclusion that we would rather go down the shady side of life with a whole hide than to have our name recorded on the sacred pages of history, if we have to cross over the flood loaded with lead to get it recorded."

To Prevent Dry Rot.

It has been ascertained that timber which has been floated in water for a considerable time is no longer liable to the attack of dry rot. The albumen and salts are slowly dissolved out, thus depriving the fungus of the nutriment needful for its development. A French experimenter has shown that fresh sawdust rots away in a few years in damp earth, whereas sawdust from which the soluble matters have been soaked by water remains unchanged under like circumstances.

CHIPS AND SAWDUST.

Mr. J. Warren, of Cobden, purposes erecting a large sash and door factory in that village.

Messrs. Rowe, Avery & Hare, of Hampton, Ont., intend running the saw mill at that place.

A. D. McNab and R. C. Campbell have opened a new lumber shanty near Golden Lake, Ont.

Mr. Wm. Robinson is said to have leased the sawmill at Furnace Falls from Parry & Mills.

The Rathbun Company will take out about sixty thousand railway ties around Calabogie this winter.

L. J. Hughson & Co., lumber, Sarnia, Ontario, are succeeded by the Muskoka Mill and Lumber Company.

The closing down of the box factory at Waubaushene has thrown quite a number of men and boys out of employment.

A gentleman from Perth is trying to get a site for a small mill which he intends erecting in the spring at Calabogie, Ont.

Messrs. Shurly & Dietrich, of Galt, have received a large order for their lance tooth cross-cut saws from the Western States.

It is reported that Mr. McRossie, lumberman, of Kingston, is about to build a large mill on the Madawaska river near Calabogie, Ont.

Chew Bros'. mill, at Midland, is running constantly cutting the oak recently purchased from Mr. S. Frazer. The timber is turning out well.

Boyd Caldwell's mill at Wilbur Station, Ont., started to cut shingles on Jan 1st., and will cut all winter. Donaldson's mill will also run all winter.

Ottawa lumbermen report sales to be slow, prices high and purchasers holding back and do not seem inclined to buy. Scarcity of box cars is a great hindrance to the shipment.

The Export Lumber Company of New York is credited with having recently purchased the entire cut of McLaughlin Bros., Ottawa, Ont. The purchase amounted to about $500,000.

The A. Mfg. Co's men and teams have been in the lumber woods west of the Albert Mines, N. B., about three months, and at the present time have more than 5,000 logs yarded.

Grant's shanties on the Bonnechere intend breaking up on account of the deep snow and thickness of the crust, as it is impossible for horses to work owing to their legs being badly cut.

The suit, involving 25,000,000 feet of lumber, between the liquidator of the Rainy Lake Lumber Co., Rat Portage, Ont., and the Union Bank of Toronto, was decided in favor of the bank.

The celebrated suit involving 2,500,000 feet of lumber between the liquidator of the Rainy Lake Lumber Co. and the Union Bank, has been decided in favor of the bank by the supreme court.

W. A. Quinton, M. P. P., has about 70 men lumbering in the vicinity of Loch Lomond and 25 men in the woods in Lancaster, N. B. Mr. Quinton will get out a large quantity of logs this winter.

The Chatham Manufacturing Company have secured a valuable tract of timber land in the vicinity of Newbury. There are walnut, chestnut, oak, white ash and other timbers of good quality on the limit.

In 1877, Montreal shipped to Great Britain 3,400 000 feet of lumber, and to South America 8,000,000 feet. In 1886 the shipments to Great Britain amounted to 98,000,000 and to South America 21,500,000 feet.

For the want of snow lumbering operations in New Brunswick have been somewhat curtailed. Patrick Long intends putting in about 1,000,000 feet on the Kennebecasis river this winter for Freeze Bros., of Penobsquis.

Rat Portage *Progress*:—We understand that Mr. Mather is sending a gang of men under the superintendence of Des'. Marris, up to Rainy River to build a boom to facilitate the transportation of his logs the coming spring.

The Glencoe sash and door factory is to be rebuilt by Messrs. Huston, Hopkins and Stevenson, who are about to purchase a couple of lots near the railway station from A. P. McDonald for the purpose. The new building will be of brick.

The lumbermen on the Gatineau report that there is more snow this year in the bush and on the open and rivers than has been seen for a number of years in that district, and they say that if the spring comes with a rush all the rivers will be swollen greatly.

Reports from Baltimore, N. B., state that times are dull there this winter. Very little lumber is being cut. William and Edward Stevens will get in about 20,000 feet at their mill for spring sawing. George Irwin will get in 10,000 feet or upwards at his mill.

Mr. T. P. Pierce gives notice in the *Canada Gazette* that he has purchased the property of the Cobourg, Peterborough and Marmora Railway and Mining Company, and will apply to Parliament for an Act authorizing him to build the road and operate the mines.

In some of the shanties up the Ottawa river log cutting for some time past has been curtailed for a want of means of getting the logs to the ice. Teams suitable for the work are in some cases getting $1 75 a day and the demand is brisk. Snow is reported to be deep in the woods at present.

Mr. Hooper, President of the British Carriage Manufacturers, after a tour throughout Ontario and Quebec, is writing a book upon our hard woods. He advocates the utilization of our immense and injurious waste of sawdust by mixing with pitch or something similar and pressing into bricks to be converted into charcoal, for which there is a great demand in England.

James Connelly, who has had charge of one of Mr. J. R. Booth's shanties on South River, returned home recently suffering acutely from injuries received while working in the woods. It appears that while loading a sleigh a log slipped from its position on the rollway and passed over his body, breaking several of his ribs and otherwise severely injuring him. It is thought he will speedily recover.

It is stated that the largest tree in California is to be found in Tulare Co. It is four hundred and thirty-eight feet in circumference. To comprehend the size of this tree, one has only to reflect that a building forty-five feet square could be set on the butt for a foundation, if the tree were cut down, and not project over the sides. "The Father of the Forest" seems to be a fitting name for such a monster.

Fine specimens of French walnut have come as high as $2 a pound. Ebony is as costly as French walnut. It often brings as much as $300 a ton, providing the wood is of the finest quality. Five dollars a pound is often asked and received for exceptionally fine pieces. Rosewood and mahogany are popular woods and are always in demand. The best mahogany comes from San Domingo. Rosewood is worth from three to six cents a pound.

Below we give a statement of the quantity of logs and timber that will go down the French River in the spring:—Ontario Lumber Co., 20,000,000 feet of logs, and 50,000 cubic board pine. Georgian Bay Lumber Co., 200,000 board pine. McLean & Co., 6 000,000 feet of logs. Sluch & Co., 6 000,000 feet of logs. Whiting & Co., 4,000,000 feet of logs. L. & H. McLean, 5,000,000 feet of logs. Power & Co., 7,000,000 feet of logs. Oscoda Salt and Lumber Co., 8,000,000 feet of Tonawanda timber. Emery Lumber Co., 18,000,000 feet of logs.

A Winnipeg lumber dealer states that at the present reckoning, the number of feet of lumber in Winnipeg and points between that city and Port Arthur, including the latter place, is estimated to be between twenty and twenty-five millions. It is claimed that at this season last year there were about forty-five million feet, and present prices are pretty stiff in consequence of the limited stocks held by dealers. They report no heavy transfers, but are perfectly satisfied with the outlook, as considerable activity is expected in the province and the west when the building season opens.

A correspondent writing from Winnipeg to the *Mechanical and Milling News* has the following regarding the lumber trade:—A number of lumbering companies have their headquarters at Winnipeg, but there is now only one mill which saws in the city. The logs for this mill are procured from tributaries of the Red River which flow into the river from the east side. Supplies of timber from this source are pretty well exhausted. The companies represented here have their mills at Keewatin and Rat Portage, on the Lake of the Woods, and some on Lake Winnipeg. There are also supplies of timber on Lake Manitoba and Winnipegoosis, and on the streams and tributaries of the head waters of the Assiniboine, in the northern portion of the Province, but these have only been available for local purposes. The great central portion of the Northwest is devoid of timber to a great extent, though the Wood mountains and Cypress Hills supply some timber districts. In the Cypress Hills there is a saw mill which does a considerable trade in supplying the stations along the C. P. R., in the central parts of the territories with lumber. The lumber is hauled to Maple Creek, on the C. P. R., 600 miles west of Winnipeg, from which the mill is about thirty miles distant. Calgary promises to be a centre of the lumber industry of considerable importance, and will likely be the chief supply depot for the far-western country. Already several companies have their headquarters there, and a large mill is in course of erection. There is plenty of timber tributary to the Bow river west of Calgary, whilst the mountains furnish almost an unlimited supply. The lumber trade has been demoralized here ever since the boom days of 1882, and is only now being placed on a firm footing. At that time anything in the shape of lumber was bought up immediately on arrival at exorbitant prices, and the mills were unable to keep up with the demand. In the following year, however, the business was greatly overdone. Stocks became excessive, and prices were demoralized by a course of cutting which was vigorously indulged in by all the firms. Surplus stocks have now been reduced and during the present year there is every indication that the trade will be a satisfactory one. The log crop in the district tributary to Winnipeg will be somewhat larger than last year, but will not be excessive, and dealers expect to do a paying business for 1887.

GENERAL INFORMATION.

A curious application has recently been made of electricity to condense dusts and fumes. If air filled with smoke is charged with electricity the smoke at once flies to the sides of the containing vessel in a way that appears almost magical. In the same way, electricity will cause fine dusts which are in suspension, and which are often very difficult to remove from the air, to condense, or coagulate so as to be easily removable.

Take care (says *Power and Transmission*) how you let any machine oil or lubricator come into contact with a cut or scratch on your hand or arm, as serious blood-poisoning may result. In the manufacture of some of these machine oils fat from diseased and decomposed animals is used. All physicians know how poisonous such matter is. The only safe-guard is not to let any spot where the skin is broken be touched by any machine oil or lubricator.

A sash, door and blind maker says there is more waste of lumber in the business than is always taken into account. Says he: "A man figures that his lumber costs him so much, his labor so much and his interest, taxes, insurance and what not so much more, and that there ought to be so much left for profit; but when he comes to figure up at the end of the year, he has to inventory his plant at all it cost him to make his books balance." This will apply to others besides the sash, door and blind makers.

On the 27th ult., the annual meeting of the Canadian Rubber Company was held in Montreal. Directors were chosen as under:—President, Andrew Allan; vice-president, James Benning; Directors—William Withal, H. M. Allan, Hugh McLennan, Arthur Prevost, H. A. Allan, Francis Scholes and J. B. Larmonth. Some days ago, this old and successful company gave a festival to their employes, numbering nearly 1,000, the occasion being the opening of a new wing which has just been added to the already extensive premises.

An important enterprise nearing completion on the Pacific coast is the postal telegraph in course of construction between Westminster and San Francisco. From the latter point to the British Columbia boundary is about 1,100 miles, and from thence connection is made with the Canadian Pacific telegraph system. All parts from Victoria and other points on Vancouver Island, thence eastward to Winnipeg are brought into direct communication with the Atlantic seaboard and European cable. Altogether there are included about 60,000 miles of wire.

Canadian shipping has considerably diminished during the past year, the statistics of all the Maritime Provinces showing a decline. There were struck off the list of registered tonnage in Nova Scotia, New Brunswick and Prince Edward Island, in 1886, 290 vessels, aggregating 72,346 tons, while the newly registered for the year numbered 215 and 34 643 tons showing a net falling off of 76 vessels of 37,703 tons. While at five ports of registration in Nova Scotia there was an increase in tonnage; such did not occur at all in either New Brunswick or Prince Edward Island.

Shoe pegs require 100,000 cords of timber annually in their manufacture; matches, 300,000; lasts and boot trees, 500,000. All this is of the most superior quality, straight grained and clear of knots and gnarls. To raise the telegraph poles of the country required 800 000 trees, and 300,000 more are required for annual repair. The railway ties of the country annually consume 75,000 acres of timber at least thirty years old, and the fencing of railways represents $45,000,000 and the annual repair $15,000,000. These are but a moiety of what is required of the United States forest supply. The burning of brick alone requires 2,000 000 cords of wood annually.

The improved French method of preserving wood by the application of lime is found to work well. The plan is to pile the planks in a tank, and to put over all a layer of quicklime, which is gradually slaked with water. Timber for mines requires about a week to be thoroughly impregnated, and other wood more or less time according to its thickness. The material acquires remarkable consistence and hardness it is stated, on being subjected to this simple process, and the assertion is made that it will never rot. Beachwood prepared in this way for hammers and other tools for iron work is found to acquire the hardness of oak, without parting with any of its well known elasticity and toughness, and it also lasts longer.

An English Journal enumerates the following as among the inventions which are specially needed at the present time:—Macaroni machinery, good red lead pencils, type writers that will work on account books and record books indelible stamp cancelling ink, a practical car starter, a good railway car ventilator, better horse shoes, locomotive headlights, an instrument for measuring the velocity of wind currents, apparatus for measuring the depth of the sea without sounding by line, piano-lid hinge which shall be flush on the outside, good fluid India ink for draughtsmen, a good metallic railway tie, an effective cut off for locomotives, a method of alloying copper and iron, and a molding material for iron and brass casting, capable of giving a mold that can be used over and over again.

THE CANADA LUMBERMAN

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Our Readers who write to Advertisers in this Journal, will oblige both the advertiser and Publisher by mentioning the "Canada Lumberman."

PETERBOROUGH, ONT., MARCH, 1887.

IT is authoritively stated that the Export Lumber Company, of New York, has contracted for 41,000,000 feet of timber in Canada, involving a consideration of nearly $700,000.

MR. ALEXANDER MCEWEN, timber merchant, Caithness Steam Saw mills, Wick, N. B., has taken into partnership his son, John McEwen and his son Alexander James McEwen, both of them having been for many years associated with him in the business, and henceforth the style of the firm will be Alexander McEwen & Sons, timber merchants, Wick, N. B.

THE Lieutenant-Governor of Ontario, in his speech from the Throne, on the occasion of the opening of the Ontario Legislature, February 10th, said that the question of the right to the timber and minerals in the territory awarded to Ontario by the Privy Council, has been carried to the Supreme Court where it stands for judgment. Will the people ever hear the last of this question?

THE heavy tax imposed by the Province of New Brunswick on all wood cut from Provincial or Crown Lands, seems to have had a bad effect on the trade. Every influence has been brought to bear on the representatives of the Local Legislature to make a reduction on this tax, but so far nothing has been done in the matter, It is to be hoped that something satisfactory to the lumbermen will be done in this matter at the next session of the Provincial Parliament.

THE *Journal of Commerce*, Montreal, lately presented figures showing the decline of Quebec's lumber and timber shipping interests, and a corresponding increase at Montreal. The decline at Quebec is seen in this, that in 1877, vessels to the number of 796 cleared from that port, loaded with an aggregate of 670,627 tons of lumber and timber, while in 1886 the number of vessels was only 325, with cargoes aggregating 250,635 tons. In 1877 only 10 vessels cleared from Montreal, with 3,400,000 feet of lumber and timber; but in 1886 the amount of superficial feet of lumber and timber shipments amounted to 98,277,000 feet.

"BOOK-KEEPING for Country Storekeepers" is the suggestive title of an article published in the February issue of *The Offi* from the pen of Mr. E. R. C. Clarkson, of Toronto, Ont. Mr. Clarkson's effort is to show how country store keepers may keep their accounts so as to know how they stand at all times, and steer clear of the shoals of insolvency. His paper is accompanied by some illustrations of journal forms differing in some of their features from the conventional book-keeping of the schools, but the use of which would facilitate the commendable results that he has in view. *The Office* is published at 205 Broadway, New York, and every issue is replete with articles of interest and importance to accountants and business men.

THE projected bridge across the St. Lawrence river, at Quebec, has been the cause of much discussion among the members of the city council of the ancient capital, but from latest accounts it seems that the resolutions on the subject have now received the sanction of that body. It is estimated that to erect a bridge of a character desired, that three millions of dollars will have to be raised. The harbor commissioner of Quebec proposes to submit the trade of the port to a tax sufficent to pay the interest on this sum of money, but it is not likely that his idea will be carried out, for the reason that it is not entirely a local work.

OUR American contemporaries are discussing the merits and demerits of a new company which has lately been organized by some of the Pacific coast lumbermen, to test the efficacy of a plan of controlling the market for their output—that of actually marketing the entire mill product through a special corporation. The new company will purchase the lumber from the mills, and distribute it wherever a market may be found, either local or export. It is expected that by this method competition will be avoided, expenses lightened, and profits increased. The prospects are that the new idea will prove a success, so long as the business retains manageable proportions, but no longer.

ON pages 4 and 5 of this issue of the LUMBERMAN we publish an almost complete report of the lecture delivered by Prof. John Macoun, F. L. S., F. R. S C., before the Carriage Makers Institute, in London, Eng. It is so full of interest and vital importance to Canadian lumbermen, that we have no doubt but that all our readers will give it a careful reading. We are pretty safe in asserting that no other man in Canada is better posted in "lumber lore" than Mr. Macoun, and it is a pleasure to note that he is bringing his knowledge into practical use. It is a satisfaction to be able to inform our readers that this gentleman will hereafter be a regular contributor to the LUMBERMAN.

AMONG the many attractions at the late ice carnival in Montreal was the Lumbermen's Camp, which was appropriately placed under large trees on Phillips Square. Within the camp the scene was a typical one, true to life in every particular. In the centre blazed a large fire of logs, while over this was suspended the *chandleres*, in which are concocked the *soupe aux pois* and other such delicacies. At one end are arranged the sleeping bunks, providing room for ten men. In the rear extension is the cook's shanty, and the dining table. Here a regular bill-of-fare was provided at a nominal figure, and from all accounts a large number of people availed themselves of the novelty provided. Mr. W. Parker acted as *chef de cuisine*.

So far as can be learned from different sources throughout the Dominion, the lumber trade has had no reason to complain of the amount of business done, and the probabilities are that trade will continue to increase. During January there was an advance of 50 per cent. over the business of the corresponding year. Prices rule about the same, with a prospect of an advance in certain quarters. In the Ottawa district it is said that lumbermen are indifferent about having more logs cut this season until a better opportunity offers to have them taken out. In all probability the cut will be large during the coming season, and with the already perceptible improvement in the English market, it can fairly be conceded that the export will far exceed that of last year.

IT is expected that the Provincial Governments of Ontario and Quebec will withdraw from the existing arrangement for the collection of the timber dues in the Ottawa district. At present the Dominion slide dues, and Ontario and Quebec timber duties are collected by the Ottawa Crown timber office, the expense of maintaining the same being borne jointly by the Dominion Government and the Governments of the two Provinces, the appointment of the officials resting with the Dominion authorities. The Provincial Governments seem to think that a more economical arrangement might be made, by which the Crown timber revenues of the two Provinces may be collected jointly without reference to the Federal Government.

AN English exchange in reviewing the lumber trade of that country during the year 1886, points out that a deficiency existed of 803,787 loads of timber, compared with the year previous. London, as the leviathan of the trade, fell short by 170,000 loads; Liverpool, which is unrivalled for second place, 87,000; Barrow gave way 22,000 loads; Bristol, 36,000; Cardiff, only 15,000; Gloucester 37,000; Grimsby, 66,000; Hartlepool, 48,000; and Hull, the capital of the east coast, only 19,000; Lynn, 13,000; Newcastle, 20,000; Newport (Mon.), 59,000 (a very fluctuating market); Plymouth, 8,000; Shields (N. & S.), 22,000; Sunderland, 29,000; Swansea, 14,000; Wisbech, 16,000. Then Scottish ports: Aberdeen, 41,000; Alloa, 10,000; Dundee, 7,000; Grangemouth, 56,000; Granton, 19,000; and Greenock, 17,000 loads. Then in Ireland: Belfast is 12,000; Dublin, 19,000; Waterford, 3,000 loads short of their supply in 1885.

A HALF century's incessant onslaught by saw mills and tanneries on the once dense forests of pine and hemlock in the counties of Northwestern Pennsylvania and the adjoining counties of New York State, has at last virtually exhausted them. Out of 150 immense tanneries in operation fifteen years ago, it is said that there is not enough bark left to keep more than half a dozen in operation to-day, and not more than one of these can be run over three years longer. The same state of affairs exists in Wayne County, which, ten years ago, sent annually to market 125,000,000 feet of hemlock lumber. To-day not more than one-quarter of that amount is cut In Canada we find ourselves in a similar position, and the fact is be regretted for the reason that it is only of late that the true value of hemlock has been recognized by cabinet makers and others engaged in the utilization of wood.

ADVICES from Miramichi ports indicate that although the export from the principal spruce ports has been curtailed, that from Nova Scotia, as well as from the smaller ports in New Brunswick—places not having the heavy stumpage tax to contend with—the export has been increased. This has brought the total export for 1886 nearly up to that of 1885. Notwithstanding this, and also the fact that freights ruled lower than in any previous season, the business has been unprofitable, the consumer and not the producer receiving the benefit. The shipments from this port during 1886 were less than half what that they were in 1877, 1880 or 1883, but it is not expected that any further decrease will take place, in view of the fact that the sawing power has lately been doubled, and only part of this was utilized during the past season. The stocks of both manufactured and unmanufactured woods on hand are estimated at twenty-five millions superficial feet.

AN investigation was lately undertaken in the Michigan legislature looking to the abolishment of those dens of iniquity called "stockades," which abound in the lumber and mining regions of the northern peninsula of that state An exchange in commenting on this subject uses the following strong but expressive language: "Ordinary debauchery, when under the eye of municipal police, is shocking enough, but when the lowest order of brutes, in the semblance of men, seek the seclusion of the almost illimitable forest, and there establish houses of prostitution, into which they entice the dissolute of both sexes, and where horrors and cruelties too deep for conception can be perpetrated without scrutiny of law, it becomes a damnable disgrace to any class of men who wink at it, and a double-dyed stain on the state that permits it. And when ignorant or unsuspecting girls, whether wholly innocent or not, are inveigled from their city homes, and spirited away to become slaves in such dens, as has in several instances been proved, the outrage becomes so intense and stupendous that words are impotent to adequately characterize it."

WITH the object of more thoroughly introducing the CANADA LUMBERMAN to the trade of Canada, the United States and England, we have undertaken the work of issuing, on Friday 1st April, next, a special edition of six thousand copies. Every effort is being made to make this edition, both in size and nature of contents, in advance of anything yet introduced by the trade press of Canada. Some of the best authorities on the lumber trade, in every Province of the Dominion, will contribute to make this special effort a success, and one worthy of the great industry whose interests it is intended to represent. By reference to the prospectus to be found on page 18 of this issue, full particulars regarding advertising space, etc., are make known. At no other season of the year will an investment in advertising pay so well as at present, and it is to be hoped that wholesale lumber merchants, manufacturers and others, will make free use of the pages of THE LUMBERMAN next issue. It is intended that every man engaged in the lumbering and wood-working branches of trade in Canada, will receive a copy of this issue. The wants of anyone making application by letter will be promptly attended to.

THE month that has intervened since the last issue of THE LUMBERMAN, is one which will long be remembered by Canadians as a period of political turmoil second to none in the annals of this country. For three weeks previous to election day business was practically at a standstill, and men were left to indulge to their heart's content in the discussion of the vital issues before the country. Fortunately, the elections in this country are hurried through in a few weeks, instead of piecemeal and periodical elections months ahead of the time when officials and legislators enter on their duties, as is the case in the United States. The one great issue of the late campaign was that of the National Policy, and notwithstanding Mr. Blake's expressions of friendship towards a protective tariff, the issue became none the less interesting and on this the electors cast their votes. The question of secession in Nova Scotia came in for a considerable amount of discussion from both sides, and it is pleasing to note that a large majority of the people of that Province are still loyal to confederation. The Nova Scotian difficulty will doubtless be settled by concession and possibly a re-arrangement of the tariff. This province has as much Home Rule as Ireland would gladly

accept, and more freedom to talk secession than would be allowed her as one of the United States. From among the successful candidates we find more than one prominent lumberman, while there are also to be found others who fought the fight, but came out less victorious. After the election of representatives to the Ontario Legislature THE LUMBERMAN had the pleasure of congratulating Mr Brouson, of Ottawa, on his success. It is now an equal pleasure to extend to Mr. Perley, the Conservative candidate, our congratulations also, with the hope that both he and the other members of the fraternity he represents, may successfully watch the interests of the lumber trade whenever any measure effecting the same may arise in the House.

IN a letter to the *Saw Mill Gazette*, on the cause of fires in wood-working establishments, Mr. A. Christofel, of Brooklyn, N.Y., calls particular attention to what he calls "draft-back," which, he says, "is nothing more nor less than a gas explosion. This has caused the destruction by fire of a great many mills, and is the result of improper stocking. Shavings have to burn from the top and never from the bottom, as a smouldering fire only makes smoke with very little heat. Wood or shavings contain many insidious vapors which, combining with the carbon of the charred shavings and the oxygen of the air, are likely to produce a violent explosion at any time. Whenever the fire is allowed to become too low and a large lot of shavings have been thrown into the furnace, do not leave the boiler before the flames and draft are fully established, and remove all lihgt combustible materials to a safe distance, and then there will be no danger."

NEWS.

Logs are coming over the Bay of Quinte Railway in large quantities.

Saginaw's rail shipments amounted to $132,000,000 in round figures last year.

The book-keeper in McMillan's mill at Winnipeg, was murdered a fortnight ago.

The cedar mill at Deseronto, is again running. About 100 men and boys are employed.

The Georgian Bay Lumber Company are taking out a quantity of square timber on Black River this season.

The Minneapolis and Ontario Lumber Co. has purchased fifteen hundred million feet of timber in British Columbia.

Operations in the woods around Quebec are going on briskly and a large output of logs will be the result when spring opens.

The season's cut of logs and lumber that will come down French River in the spring is 74,000,000 feet of the former and 250,000 feet of the latter.

Quarter-sawed lumber has become so popular with customers throughout the country, that a great many mills are devoting considerable attention to that class of work.

The well known firm of Messrs. Hall Bros. & Co., of Quebec, has been dissolved, Mr. Lewis F. Peters going out. The business is continued by the remaining partners.

A. Hirtle, the proprietor of a planing mill in Berlin has effected a compromise at 50 per cent. secured on liabilities of $3,000. His assets were covered by a chattel mortgage.

In bridging the Echo river for the Sault Ste. Marie branch of the Canadian Pacific railway, in the Algoma district, 9 000 piles will be required, instead of 2,000 that were first contracted for

Mr. Grier's new saw mill at the Chaudiere is assuming goodly proportions. The frame work is erected, and the roof which is of an oval shape is placed. The structure is a large one and of a very substantial nature.

The number of new buildings erected in Montreal last year was 699, with a value of $2,131 834 against 429 for previous year with a value of $1,728,945, the increase being 270 buildings and valuation of $402,889.

The recent wood dust explosions seem to have awakened a general interest in the matter. We trust wood dust explosions will not come to be of such common, every-day occurrence as saw mill boiler explosions.

The mill-owners at the Chaudiere have gangs of men employed in making all necessary repairs and getting the mills in perfect running order. It is reported that the cut at the mills this year will be larger than last.

Peter Watt, of Ompah, Ont., while working in one of McLaren's shanties was struck by a falling tree. He met with severe injuries, the bones of his shoulder being crushed and his hand pierced through with a knot.

It is stated in a Kingston exchange that the swamps and lumber district out on the Kingston and Pembroke Railway are covered with water; also that the country is in a bad state, and that the lumber trade is materially affected.

The Upper Ottawa Improvement Company have nearly completed the annual repairs on their booms and other works up the Ottawa. They are in readiness to stand the high floods which are expected this season owing to the great quantity of snow.

Sawdust thrown on a circular-saw table will render the hauling of heavy planks quite easy. The grains act as small rollers and reduce friction.

The last season's cut of lumber in the White Lake district is being shipped now Twenty eight teams are engaged in drawing it to Pakenham, eight of which are drawing for J. R & J. Gillies. About 2,000 feet constitutes a load, and one trip a day is made.

Mr. J. R. Booth, has a gang of men employed in making repairs and improvements in his large saw mill at the Chaudiere. A busy season is expected by the lumbermen as there will be no delay for logs, as large reserves have been left over from last season.

A large number of lumber shipments were unable to be made lately owing to the scarcity of cars. Prices are not quite so firm as they were a month ago and buyers are not investing so freely as last year. At this date last year the quantity of lumber sold far exceeded this year.

Mr. David Edgar, a well-known resident of Hamilton, passed away during the month. Deceased was for many years a builder, but for the last ten years or more gave his attention to his lumbering business at Mitchell. Mr. Edgar was highly esteemed and respected by all who knew him.

Reports from the Dumoine and Kippawa lumber shanties state that the cut this year has been much interfered with by the immense amount of snow in the bush which has rendered the drawing of lumber to the ice very difficult and tedious, as it is almost impossible to keep the roads open.

It is understood that Messrs. Dobell, Beckett & Co., of Quebec, have purchased Mr. Little's Three Rivers deals, 4th quality, being the balance of his 1886 cut. The price paid was $27 and all charges. Messrs McArthur Bros. & Co., of the same place are reported to have purchased H. E. Hall's 1886 spruce. Some 65,000 q.s.s. at $41 $24.50, $22, and all charges.

Mr. J. Bell, formerly of Cavan, has located in the township of Cartwright, Ont., and has put up a saw mill, which works well. He intends building a bank barn, 70 x 40, and a house 24 x 34, during the coming summer. He will also have a boat in which to give his friends, who may wander that way, a treat.

The Rathbun Company have at present 475 employes at their works in Deseronto alone, a larger number than were ever engaged at this time of year. All told, in their different agencies, lumbering operations, &c., they have at present over 2,000 men in their employment. This vast army gives some idea of the magnitude of the Company's operations.

There will soon be an end to the far-famed redwood forest of California. There are no fewer than nineteen lumber companies now engaged in cutting down the "big trees," and all the mills are in constant work, as the demand for the wood is practically unlimited. The country will, therefore, be cleared in a very few years, for nobody makes even an attempt at replanting.

There is considerable work under way in the shipyard department at Deseronto this winter The yacht Norah is being completely rebuilt The engine and boilers have been removed from the steamer Puritan and she has been otherwise dismantled with a view of converting her into a lumber and wood barge. The Rescue will be fitted out with a new engine, so as to enable Capt. Murray to beat, if possible, his record of last year. The Quinte is also receiving a new boiler and other craft are receiving a complete overhauling.

A White Lake correspondent says:—The lumber that was sawed here last summer in the two mills owned by Gillies and Paris respectively, is being drawn to Pakenham, preparatory to its being shipped on the train. Gillies employs eight teams, while six are drawing from Paris' lumber yard for Marshall & Co., of Brockville. There are also fourteen teams drawing from Stewart's mill at Waba Brook to Pakenham. The average loads are over two thousand feet some being over three thousand. These are not bad loads considering the state of the roads lately.

The total number of miles of timber licenses issued at the New Brunswick Crown Land Office during 1886 was 4,116½, consisting of 1,068 applications, as against 1,625 of the year previous. In nearly every case applications for renewal were made, while about 475 miles of new berths were taken, making the total number of miles of timber licenses renewed 3,641, and the number of miles of new timber applications sold 375. The total average of licenses issued during the year is considerably in advance of previous years. Of this extent of timber lands under licenses J. B. Snowball has 406 square miles; John McLaggan, 309½; Kennedy Burns, 265; Geo. McLeod, 218; Allan Ritchie, 213½; John Stewart, 145½; Wm. Richards, 140; G. C. King, 110; Hugh McLean, 109.

The following clipped from the East Saginaw *Courier*, refers to Wm. Merrill, of Norwich, Ont. The *Courier* several weeks ago gave a history of the case of Wm. Merrill against Joseph Wilson *et al.* It has been decided by Hon. J. H. Steere, Circuit Judge of Alger County. The Judge decides that the complainant is entitled to the relief prayed for in his bill. This gives Mr. Merrill title to 320 acres of pine land in Alger County under a deed given by him October 3, 1885. As previously stated, Mr. Merrill had placed in the hands of his agent 1000 acres of pine land in Alger County for sale, and as he claims, the 320 acres of land were held by Wilson and others through fraud, and filed his bill to set aside the pretended title held by them. The case will be carried to the Supreme Court.

J. S. H. Clark, of J. S. H. Clark & Co., wholesale and retail lumber dealers, Newark, N. J., has been in the valley. This firm handles about 15 000,000 feet of lumber from the Saginaw valley annually, shipping largely by rail. Asked his opinion as to the probable effect of the Inter State Commerce law, he said it was an unknown quantity, but he did not believe that it would seriously effect the lumber traffic. He has recently returned from a visit to British Columbia, having been interested with an English syndicate in a vast tract of pine timber on the Shuswap Lake, about 300 miles east of Port Moody, near the Canadian Pacific railroad. Mr. Clark disposed of his interest in the timber, regarding it as too much of a future. In other works there was too little market and too much competition for the cheaper grades of white pine.

A correspondent writing from Duluth furnishes some interesting figures in regard to the lumber business in the Zenith city. He says: A short time ago, a local paper of this city, the *News*, gave a very general report on the lumber industry of the city, and among the interesting matters mentioned was the fact that the cut of the Duluth district, including the mills of the St. Louis river and Tower has been 161,000,000 feet in the past year, besides 43,000,000 shingles and 22,000,000. Of this total, a very small amount, probably not more than 50,000,000 feet, is now in yards, and of this only 20,000,000 feet is in this city itself. The cut of the coming summer promises to be slightly larger, as 165,000,000 feet is being cut in the woods, and 10,000,000 more will be driven down in the spring. The depression in the Duluth lumber trade seems to be over, and the lumbermen of this district are looking for a good business during 1887.

The *National Builder* gives the following items for the use of nails:—For 1,000 shingles allow 3½ to 5 pounds fourpenny nails; or 3 to 3½ pounds threepenny nails. For 1,000 laths allow about 6 pounds threepenny fine nails. For 1,000 feet clapboards about 18 pounds sixpenny box. For 1,000 feet boarding boards, 20 pounds of eightpenny common. For 1,000 feet boarding boards, 25 pounds tenpenny common. For 1,000 feet top floors, square edge, 38 pounds tenpenny floor. For 1,000 feet top floors, square edge, 41 twelvepenny floor. For 1,000 feet top floors, matched, blind nailed, 35 pounds tenpenny floor. For 1,000 feet top floors, matched, blind nailed, 42 pounds twelvepenny floor. For 1,000 feet furring, 1x3, 45 pounds tenpenny common. For 1,000 feet furring, 1x2, 65 pounds tenpenny common. For 1,000 feet pine finished, about 30 pounds eightpenny finish.

The New Brunswick Trading Company are well to the front for the new year's business, and although little over a year in existence, have, during the past season, done a very large business. Our readers will recollect that this company recently paid to their shareholders a dividend of 8 per cent., which we consider very good as times go. Though chiefly representing the spruce interest, the New Brunswick Trading Company are also largely engaged in the pitch-pine trade. The shipments of New Brunswick spruce during the past season have shown a marked falling off. From St. John, the shipments in 1884 amounted to 165,000,000 ft., but in 1885 they dropped to 152,000,000, and last year they only amounted to 136,000 000. From Miramichi, the decrease as shown in Mr. Snowball's circular has been even greater; for while in 1883 the total shipments amounted to 149,000.000 ft., in 1886 they were only 72,000.000 ft., less than one half. This shows that the recent advance of spruce prices on the west coast was not without justification. Were the North of Europe whitewood does not enter into prejudicial competition with spruce, as in London, Hull, Leith, &c., the advance recently established is likely to be maintained.—*English Ex.*

Mr. Hiram Robinson, general manager for Messrs. Hamilton Bros., lumber merchants, has just returned from an extensive visit to the Gatineau district where he was looking after the working of the shanties of the firm, Mr. Robinson said that the output of lumber this season on the Gatineau, was not as large as it would have been had there been good weather. The fore part of the season was splendid weather for lumbering and consequently a great many logs were made before the heavy snow storms set in. These storms rendered the roads in every direction almost impassible as there was a depth of five or six feet of snow, and in many places the roads were drifted to a much greater depth. Later on, consequent upon a heavy rain storm, a thick crust was formed which was another impediment, as it was very hard for horses to work in this crust while hauling logs and timber. None of the shanties of any of the lumber firms had to shut up, but many of the small jobbers were unable to continue their work, and consequently had to send their men down the river. "What is the quality and size of the lumber being turned out this season?" "Well, the quality is fair, and the size large. I think that on the whole, the quality is nearly as good as last year's cut."—*Journal.*

BRITISH COLUMBIA IN 1886.

IN the New Year's issue of the Victoria *Daily Times*, which consists of ten pages, we find a voluminous account of the progress and position of British Columbia and its principal towns. Never before in the history of British Columbia, says that journal, were the prospects so favorable for the development of the quartz mines; the coal trade is improving and the umber export finding new markets. The Esquimalt and Nanaimo railway was finished and begun to be operated and the dry dock was practically completed.

The estimate of revenues and expenditures of that province for the current financial year of 1886-7, puts the revenue at $576,161 05, and the proposed expenditure at $710,524 50. Of the receipts, the Dominion pays $100,000 for lands conveyed in trust; $48,000 in a *per capita* grant; $35,000 by way of subsidy and $29,000 as annual interest at 5 per cent. The provincial land sales are estimated at $100,000; free miners' certificates $24,000; licenses $30,000; provincial revenue tax $75,000; real property $24,000, and personal property tax $20,000. Among the proposed expenditures of the province we find $225,000 in public works; $94,000 for education; $50,000 for administration of justice (salaries, $75,000, not included); civil government $62,000; hospitals and charities $21,000; legislation $19 800.

The exports of British Columbia form an interesting list. From twenty to thirty million feet of lumber in various shapes were dispatched to foreign shores last year. From Victoria, the declared exports for 1886 to the United States amounted in value to two and a quarter millions, an increase of 11 per cent on the average of three preceding years, and consisted mainly of coal, coin, furs, skins, salmon, fish oil. The list is as under:

Coal	$ 896,312 84
Treasure	693,815 36
Furs, hides and skins	299 721 95
Seal skins (undressed)	218,452 61
Canned salmon and fish oil	53,676 60
Tobacco and liquors	21,055 01
Opium, rice and Chinese goods	18,973 03
Miscellaneous	46,934 14
Total	$2,248,941 54

The fiscal year 1883 showed the largest export trade from all ports of the last fifteen; it amounted to $3,345,000, and of this total $1,333,000 was from the fisheries. For the year ending June, 1886, the exports were:

The Mine	$1,720,336
" Fisheries	633,110
" Forest	200,178
" Field	1,917
Animals	329,248
Manufactures	1,035
Total	$2,885,824

The salmon pack for 1886 of the 17 canneries in the province amounted to 163,004 cases. The prices realized were regarded as satisfactory. The English market was reduced in the supply on hand carried over from previous seasons, thereby enabling shippers to place their pack of the coast to advantage. "The run in this province," says the *Times*, especially on the Frazer River, was slight, disappointing in fact. Nevertheless the prices realized will in a measure make up for the shortness in quantity. Many of the canneries are carrying over supplies for another season, when it is expected they will recoup themselves by an increase in the pack. Of the quantity mentioned above, there were sent: to the United Kingdom, 102,091 cases; Eastern Canada, 47,223 cases; Australia, 12,700; local dealers, 900 cases; total 163,004 cases. These were caught principally (103 000 cases) in Fraser River, the remainder in rivers Inlet, the Skeena, the Duncan and the Alert.

The city of Victoria is growing rapidly. In the year 1884, some $750,000 was expended in new buildings, in 1885 about $500,000, and last year a hundred and fifty structures were erected at a cost of $550,000. A list of something over a hundred of the largest tax payers shows their assessment to reach $2,892,000. The revenue of the city, which in 1876 was but $57,000 was in 1886 $134,000, a sum of $14,000 in excess of the previous year's revenue.

From the port of Nanaimo in the fiscal year ending June 1886 there was exported $975,000 worth of coal, iron ore, lumber and dogfish oil to the United States, Sandwich Islands, Mexico and Asiatic Russia. The imports of the same period amounted to $300,000.

Some figures relating to the city of Vancouver will prove of interest. This city, situated on a peninsula formed by the waters of Burrard Inlet and False Creek, possesses great advantages in extensive water frontage. Coal Harbor extends along its northern front three miles, and the noble roadstead of English Bay is beyond. The city limits embrace an area of six miles in length by two and a half in breadth. Since the disastrous fire of June last, buildings valued at $521,000 have been erected, which added to the assessment of the real estate, makes a total value of over $3 000,000. The city has put down fire protection pipes at a cost of $12,000. There are three saw-mills in the city having an annual capacity of 40,000,000 feet. The C. P. R. Co. has expended $200,000 in clearing and street-making, and will expend some hundreds of thousands more in round-houses and other buildings. The assessed value of the company's property in the city is about $1,000,000 while some twenty-five other owners are taxed on an assessment of another million.

On Burrard Inlet is the Hastings saw-mill, which cuts fifteen million feet per year, and during 1886 shipped seven million feet to Valparaiso, Shanghai, Melbourne, Sidney, Adelaide, Callao and Iquique, or other ports in Australia, South America and Mexico. The Chemainus mill is on the east coast of the Island, and cuts say twelve million feet per year, three-fourths of which was last year used for the Esquimalt and Nanaimo Railway. At New Westminster and at Vancouver are the Royal City mills, consisting of two concerns which have a capacity of some twenty millions yearly and also make sashes and doors, shingles, laths and boxes. They have three steamers, fifteen barges, and employ over 400 men. At the mouth of the Brunette River, on the west bank of the Fraser are the Brunette mills, which cut six million feet last year. The Moodyville Saw-mill Co. shipped during 1886 twenty cargoes of rough and dressed lumber, spars, pickets and laths, to Australia China, Japan, the Sandwich Islands and South America. Their total carriage was 11,605 000 feet rough boards; 824 000 dressed boards.

The Vancouver Coal Mining and Land Co., limited, incorporated in 1862, took over mines and lands from the Hudson's Bay Co., and has since produced nearly two million tons of coal, the yearly production ranging from 21,000 tons in 1883 to 238,000 tons in 1885. It employs some 300 men at from $2 to $3 50 per day. The Wellington mines near Departure Bay, to which their railway, five miles in length, runs, employ some 600 hands, and their output last year reached 180,000 tons.

TERRA COTTA LUMBER.

THIS new discovery, which promises to revolutionize house construction, is but little known so far in Canada, although steps are now being taken to introduce it manufacture in Montreal. In an interview with Mr. W. C. Evans, of the latter city, who is the Canadian representative of the International Terra Cotta Lumber Co., of Chicago, THE LUMBERMAN gleaned some valuable information regarding this new and important industry.

Porous Earthenwares is the generic name given to these compostions, which afford four distinct bricken products, specifically termed by the inventor in the order of their discovery "TERRA COTTA LUMBER," "BRICKWOOD," "CELLULAR POTTERY," and "HOLSTEIN," or WOODSTONE.

As a manufacture the industry may be fairly started as yet in its infancy, ten plants only having been established, but it is calculated by the managers of the company, that the erection of twenty-four more in different parts of the world will follow during the coming season. "Terra Cotta Lumber" is composed of gritless kaolinic clays and sawdust in such proportions as to afford a degree of porosity to the burned product as enables its easy working with tools commonly used in carpentry.

Its experimental manufacture, and its application as "fireproofing" was introduced in 1882, and has ever since found increasing favor at the hands of architects and builders. The other inventions are of later origin. "Brickwood" is a composition of clays, or clayey loams, and sawdust so intimately mixed and worked into form by heavy steam or hydraulic power as to render its burned product one-third the weight of common building bricks. "Cellular pottery" is a mixture of surface clays, with fibrous vegetable matter, as straw, or its equivalent, in such proportions as to enable the safe drying and burning of hollow blocks pressed into the shape of joist and timber in lengths as great as ten or twelve feet. "Holstein," or wood-stone, is so called because compositions of clay and sawdust, with sufficient straw added to furnish the required amount of fiber in their green pressed state, to overcome the tendency of the wares to crack, while drying, will safely yield large hollow blocks, for the outside walls of houses, in the place and imitation of stone weighing as much as two or three hundred pounds.

All of these wares are of course incombustible and as resistance to the action of fire as bricks, for the final process of their firing is identical. Unlike bricks, however, their great porosity confers remarkable non-conduction properties of heat, cold, and sound. It is claimed that their production can be had of any sort of clays or clayey loams; that their first cost is cheaper than "slopped" bricks; that wooden framed buildings, at no enhanced cost, may be so sheathed and protected by their application as to be as secure against incipient fires, as the usual fire-proofed structures of iron; and that such construction affords the comfort of houses of brick in northern countries and of wooden in hot climates.

The compounding with clays, of vegetable and carbonacious matter, to a moderate degree, which by the firing process assists in fueling or to lighten the weight of the burned product, is not an unusual practice, but the invention of processes of manipulation which allows the introduction of vegetable matters in such proportions, as to themselves after ignition serve as fuel without other to properly bake the clay; or to create a product of brick, that may be wrought with wood working tools; or to tie together green clay wares with fibres so effectually as to overcome cracking tendencies in drying, the most trying stage of their manufacture; or to work clays from their original place of deposit to delivery to the wares in the drying-room by machine processes without the intervention of hand labor undoubtedly is new to the clay-workers of all countries, and combined will unquestionably form he basis for an industry, which in future importance may outrank even brick-making.

In the illustrated little works, given free distribution by this company, and descriptive of the novel manufacture and application of the wares for architectural and fire proofing purposes, the author says in reference to their production in Western towns, where, as building materials they are needed for the adjoining country and where in a measure their manufacture could reinstate a local business destroyed by the too liberal establishment of market towns of competing railroad systems, a business which would afford employment to its citizens and keep the money usually spent abroad for building material at home.

"Thus from the nature of things the industry can not be cheapened by new inventions, or by improvements on old ones. Wherever new buildings are erected, and burned ones are replaced, there exists the market. The material is made at home, sold at home, and the demand for it never satiated.

"In forest countries a saw-mill may be found in every settlement, sometimes two or three. Its presence assures the nucleus of a future town; its pine lumber productions are utilized in the building of it; its employes are citizens. The forest which supplies terra cotta lumber lies out of sight, beneath the feet.

"The dirt which the builder throws out in the excavation of his cellar will build the house which is to surmount it. If the making of pine lumber be a profitable manufacture, why not of porous earthenwares under like circumstances? A twenty-five tone plant, the smallest which can be economically operated, may be erected with the facility and cost of a portable saw-mill. Twenty-five men are required to run it; twenty-five townsmen, neighbors, men with families—men who make homes for themselves, and spend their earnings at home.

If a reasonable porportion only of what is at present claimed in favor of this new manufacture prove true, the introduction of the art as a new industry will confer benefits incalculable upon communities in vastly more ways than one.

The pine forests of our country are rapidly disappearing. With their eradiction follows the race of lumbermen, and the wide spread traffic subsidary to their labors. Will the hybrid production of brick and wood here spoken of, measurably take the place of lumber? Will its manufacture compensate idle hands, the losses sustained by the abolishment of their former occupations?

The invention of new material or composition of matter, is of rare occurrence. Still rarer where its supply to the world even requires an output greater than the capacity of one or two manufactories. But if for the interior of buildings are required, as seems to be the case, more bricks for partitions, walls, and floors, if used for that purpose, than is demanded for the erection of outer or weather walls, the substitution of porous enathenware for lathed and plastered constructions alone, being lighter in weight, cheaper, and every way preferable would cause the building of a factory in every town which now supports a brick yard.

WOOD-WORKING PATENTS.

The following list of patents relating to the Wood-Working interest granted by the U.S. Patent Office, February 25th, 1887, is specially reported by Franklin H. Hough, Solicitor of American and Foreign Patents, 925 F street, N.W., Washington, D.C., who will furnish copies of patents for 25 cents each.

356 460,—Saw-set,—H. Flater & A. L. Davis. Findlay, Ohio.
356 462.—Saws, Adjustable Guide for band,—C. Gail, Chicago, Ill.
356,482,—Planing-Machine,—H. A. Lee, Worcester, Mass.
356 509,—Lathe,—L. W. Spencer, Hoosjack Falls, N.Y.
356,583,—Sawing-machine,—T. E. Goodwin, Nashville, Tenn.
356,678,—Lathe,—J. J. Brewlis, Minneapolis, Minn.
356,693,—Stump-extractor,—R. B. Montgomery, Montour, Iowa.
356,820,—Saw handle,—C. W. Boynton, Brooklyn, N.Y.
356,920,—Saw-mill, Band,—J E. Emerson, Beaver Falls, Pa.
356,931,—Saws. Machine for setting and truing band,—J. E. Emerson, Beaver Falls, Pa.
356 973,—Log-dog,—E. H. Aldmen, Mobile, Ala.
357,032.—Saw-mill net works,—W. L. Raynes, Montezuma, Ind.
357,087,—Saw mill feed-mechanism —A. B. Landis, Waynesborough, Pa
357,091,—Saw filing machine,—R. Nolon, R. W. Bishop & J. Waltemeyer, Colorado, Texas.
356,182,—Sawing-machine, Circular,—H. M. Darling, Seneca Falls, N.Y.
356,336,—Saw-gummer,—E. Rogers, Fulton County, Ind.
357,437 —Chuck, Lathe,—J. H Westcott, Oneida, N.Y.
357,454,—Plane, Bench,—J. Brice, Sandy Hill, N.Y.

It will pay you to advertise in The Canada Lumberman.

THE WHITE AND CHESTNUT OAKS OF THE ATLANTIC FORESTS.

NORTH AMERICA is the headquarters of the oak genus. No less than thirty-seven species occur within the limits of the United States, and about fourteen of these can be found in Pennsylvania and New Jersey. The lumber yielded by these varieties is by no means of equal quality. This fact is well known to all lumbermen and lumber dealers and workers, but not all of these classes are acquainted with the growing trees of various ages, so as to be able to tell them apart. By the characters of their leaves the oaks of the United States may be divided into (1) white oaks, which have leaves cut up into rounded lobes; (2) chestnut oaks with toothed but not lobed leaves; (3) live oaks, the leaves of which are evergreen; (4) willow oaks, with entire, narrow deciduous leaves; and (5) black and red oaks, in which the veins of the lobed leaves project beyond the end of the green lobes as so many bristles.

Six distinct species of white and chestnut oaks, destitute of bristle points to their leaves, are found in Pennsylvania and New Jersey, but the live or evergreen oaks have their habitat further south.

Among the oak of the eastern states none exceed the white oak (*Quercus alba*) in an average of all the qualities which make a tree desirable. Pieces of the wood of this tree, four centime tres (1½ in.) square, and eight times that length, were found to have an ultimate resistance to longitudinal compression of 8 183 kilograms, and to transverse strain of 386 kilograms

In strength, hardness and durability, few oaks surpass this, and the economic value of the tree is enhanced by its wide distribution and large size. From Maine and Ontario to the St. John's river and Tampa bay, Florida; and from the ocean to Missouri, western Arkansas and the Brazos river, Texas, the white oak is abundant on all soils, and attains large dimensions. It is most abundant, and reaches its greatest development along the western slopes of the Alleghanies and in the valley of the Ohio, where it often forms more than half the forest growth, and reaches a height of from 80 to 140 feet, with a diameter of from 4 to 8 feet.

The acorn cup is hemispherical much shorter than the ovide acorn, which is edible, and about an inch long, and the leaves are cut into either from three to five board lobes, or into five to nine narrow ones.

It must not be forgotten that there are in the United States four other quite distinct kinds of oak which bear the name of white oak. Two of these are, however, confined to the coast region of the Pacific; a third, *Q. oblongifolia* extends in Arizona, New Mexico, and Mexico; while the fourth is peculiar to the latter regions.

The post oak or iron oak (*Q. obtuesiloba*) belongs to the same section with the white oak, and its lumber exceeds that of that species in specific gravity and resistance to indentation, but is inferior in elasticity, and slightly so in resistance to transverse strain and longitudinal compression. But the tree is comparatively small, at its best rarely exceeding eighty feet in height and three to four in diameter, and usually much smaller. The wood checks badly in drying, but is very durable in contact with the soil, whence, probably, its name of post-oak. It is the most common and widely-distributed oak of the Gulf states west of the Mississippi, ranges north to Massachusetts, south to Florida, and west through southern Ontario and Michigan to eastern Nebraska, Kansas and to the hundredth meridan in Texas. The acorns are very much smaller than those of white oak, not exceeding two-thirds of an inch in length, and the acorn cups cover only about one third of the fruit. The upper and larger lobes of the leaves are broad, and are often slightly notched.

The burr, mossy cup or over-cup oak is a tree equal in size to the white oak, to which its lumber, from the experiments made upon it in 1881, is superior in resistance to indentation and to transverse strain, but inferior in elasticity and resistance to compression Its specific gravity is about equal to that of white oak, and it is said to be of all oaks the most durable in contact with the soil The lobes of the leaves are often toothed, but the characters by which the tree may most readily be distinguished are the depth of the acorn cups and their covering of printed scales, the uppermost of which are prolonged into awns, forming a mossy fringed border.

Northward this oak ranges to Nova Scotia and New Brunswick, but it does not appear to extend further south than Lancaster county, Pennsylvania. Northwest it ranges along among the Atlantic oaks to the foothills of the Rocky mountains of Montana, and southwest to the valley of the Nueces river, Texas. It loves rich bottoms and prairies, and in the prairie region is the principal growth of the "oak openings."

Another oak which attains dimensions equal to those of the white oak is the swamp white oak (*Q birolor*) a tree which loves deep alluvial soil upon the borders of streams and swamps. By the older botanists, it was confounded with the chestnut oak. From southern Maine and the most southern part of Ontario this tree ranges south to Delaware and west to southwestern Iowa and western Missouri, while along the Alleghanies it extends even into Georgia. The wood is slightly heavier than that of the white oak, which it very nearly equals in elasticity, hardness, and transverse and longitudinal strength. The leaves of this tree are broader, and are unqually and more deeply toothed than those of the chestnut oak, and the scales upon the acorn cups are more pointed.

Quercus Prinus, the chestnut or rock chestnut oak, is one of the most valuable timber trees in Pennsylvania. Its range is from the Blue Hills of eastern Massachusetts to Delaware, and along the Alleghanies to Northern Alabama. In size it is inferior on the whole to the white oak, yet occasionally reaches nearly 100 feet in height, with a diameter of three to four feet. In the southern Alleghany region it forms a large portion of the forest growth. Slightly inferior to that of the white oak in transverse strength and hardness the lumber is superior to the latter in transverse strength and hardness. The wood is durable in contact with the soil; and the brick is rich in tannin. The leaves of this oak are uniformly dontate, with rounded teeth, a character by which they may be known from those of the chestnut which have pointed teeth. The acorns are large and thick, with thick hemispherical cups.

Very nearly allied to the chestnut oak is the yellow chestnut oak or chinquapin. This tree has been described under two names, as two distinct pieces, owing to the fact that, east of the Alleghanies, it is seldom found except in the form of a low shrub, the slender branches of which are often stretched flat upon the ground by the weight of the clustering acorns. West of the Alleghanies this oak attains a height of 80 to 100 feet, or occasionally even more, and a diameter of from two to three feet. It is found upon low, rich bottoms, and also upon dry hillsides. The presence of the dwarf form, which often grows in company with the Bear oak, a dwarf oak with bristle-pointed leaves, is proof of the barrenness of the soil. The leaves of the yellow oak are narrower than those of the rock chestnut oak, and the teeth are pointed instead of rounded, thus rendering the resemblance to those of the chestnut still closer.

This species ranges from the shores of Lake Champlain to the Delaware, and along the Alleghanies to Alabama and Mississippi, while westward it extends to eastern Kansas and Nebraska, and southwest to the Gua dalupe mountains, Texas. It reaches its greatest development in southen Arkansas, and is very common in the Mississippi basin.

Although this tree is comparatively little known, its wood, according to the experiments made for the purposes of the census, is, in fuel value, hardness and both transverse and longitudinal strength, greatly superior to that of any of the oaks mentioned, while in elasticity it is inferior only to the rock chestnut oak. It is very heavy and exceedingly durable in contact with the soil, but checks badly in drying.—*W. N. Lockington, in Journal of Progress.*

ESTIMATED LOG CROP.

Careful estimates of the log crop of the streams tributary to the booms, which furnish logs to Bay City and the Saginaws, the present winter place the amount at nearly 600 000,000 feet. Of course it is not presumed that the figures are absolutely correct; but it is thought they will approximate very nearly to the actual amount when the figures are all reported officially:

	Feet.
Tittabawassee and tributaries	400,000,000
Cass, Bad and Flint	8,000,000
Kawkawlin	20 000,000
Saginin and shore pine	10,000,000
Riffe river	90,000,000
Au Gres	55,000,000
Total	583,000,000

THE LUMBER TRADE.

A. G. VAN SCHAICK, the well known Chicago lumber merchant, has been unburdening himself to a reporter of the Chicago *News*, and we make some very interesting extracts from his remarks which follow. They embrace almost every phase of the lumber trade:

"Why, the local consumption of pine and hardwood lumber alone in Chicago is 700,000,000 feet annually, and so long as this is a railroad center there will be an outside trade.

"Some of the largest lumber manufacturers are removing their business from Chicago to their mills. That is, the manufacturers live and sell their product here, but have it forwarded direct from the mills by rail to the purchaser. Thus they save the expense of maintaining yards and handling the stuff in the city.

"The lumber question does not cut any figure in the change that is going on. I have not met a dealer who is grumbling about strikes. Those that occurred last summer of course delayed business at the yards, but they lasted only a few days, and after they were over every merchant went to work and soon caught up with his orders. In a large city, where there are always men out of employment, a strike cannot last many days. And, as matters are shaping themselves now, pressing orders can be filled direct from the mills when labor troubles interfere with the work here.

"The capital invested by Chicago lumbermen exceeds $60,000 000. This includes the money put into pine lands, mills and machinery, vessels, and the hundred and one ramifications of the trade. The Chicago yard trade alone represents about $30,000,000 capital, and employs 14,000 workmen on an average for the year round and 17,000 in the busy season, including the crews of the vessels that bring the lumber here. The local sales, however, only reach about $32,000,000 a year a little more than the largest dry-goods merchant in the city sells in the same time.

"Notice the changes in the lumber industry at other points. In 1886 the shipments from Green Bay ports directly to the east were 80,000,000 feet. This season they will reach 100,000,000 feet or more. All this pine product is diverted from the Chicago market, where it would ordinarily be sold. A few years ago nearly all the stuff manufactured in the Green Bay district came here, and it was a rare thing to hear of a cargo going east This movement from that quarter is increasing every year. The same is true of all lake ports from Manistee to Duluth. Why? Because the Saginaw river and Canada are no longer able to supply the eastern demand. Timber is getting scarce in the Saginaw river section. The great primeval forests of standing pine in eastern Michigan have been cut off, and there is to-day an excess of saw mill machinery at Lake Huron ports. Sales of standing pine in the Saginaw river region are quoted at $5 to $8 per thousand feet. This is a very high price. A resident of Detroit told me he paid $12 for stumpage near the Saginaw river, but that is an exceptional case. In two instances last year log-run lumber sold for $23.50 and over per thousand feet in Saginaw. That is very dear. Last season logs were towed from Marquette, Lake Superior, to the Saginaw river, to be manufactured into lumber.

"The Saginaw river is still the largest manufacturing market in the northwest. It produces and ships nearly 800,000 feet annually. The merchants there see, though, that this cannot last. They are already reaching out into other sections. More than $1,000,000 of Bay City and Saginaw capital was invested in standing timber in the Menominee district, Green Bay, last year. One lumberman paid $712.000 for a single tract and has built a saw mill at Green Bay City.

"On the east shore of Lake Michigan standing timber or stumpage is now selling at $4 at Traverse City to $8 per thousand feet at Manistee or Muskegon, the range being governed by the location and quality of the pine. On the west shore of the lake and along Lake Superior prices range from $3 to $6, the first in northern Wisconson and the last in the Green Bay region. These are just about double the prices of three years ago."

"What is the prospect for the lumber trade this coming season?

"The outlook altogether is very satisfactory. The winter has been a fine one for work in the pineries. There is plenty of snow all through the timber country and the men in the camps are actively at work. The reports indicate that the log supply will be a little excessive. Against this large stock of logs is the fact that the supply of old lumber on hand is less than a year ago. It is 10 per cent. less in two of the largest distributing markets—Minneapolis and Chicago—and a little less on the Saginaw river. There were also few logs left over last autumn. The probable liberal demand for lumber and the smallest stocks led the trade to think that prices will not fall below the present range. The average sales of lumber the last year show an average of 10 per cent. above the prices of the previous year, and in this same time standing timber advanced 20 per cent., or $1 per thousand feet, which about equals the rise in the manufactured product.

"The manufacturers of the western district which includes Michigan, Wisconsin and Minnesota, will probably reach 8,000,000.000 feet this season. This would wholly remove their timber from 1,000 square miles of territory."

THE WASTE OF WOOD.

It has been estimated by competent persons that, comparing the dead weight of a tree as it stands in the forest with the dead weight of the lumber that is obtained therefrom, not more than 25 per cent. is actually delivered in the timber market. The remainder consists of limbs and slabs, roots and edgings, and buttings and waste in general, in the forest and at the sawmill. However extravagant and wasteful the timber trade may have been in time past, it may now be noted with satisfaction that, owing to the increased demand in various directions for these so-called waste products, it is likely that the proportion utilized will be reversed, and the loss not exceed 25 per cent., even if it reaches that amount. This is especially due to the growing uses for wood pulp, which now enters not only into the manufacture of paper,—in itself a vast industry, but also finds employment in many other directions of almost equal magnitude.

The lumber dealers of New York have formed a corporation under the name and style of "The New York Lumber Trade Association," the objects of which are: "To foster trade and commerce, to reform abuses in trade, to protect trade and commerce from unjust and unlawful exactions, to diffuse accurate and reliable information among its members as to the standing of merchants, to acquire, preserve and disseminate valuable information relating to the lumber interests of this and the surrounding cities, to produce uniformity and certainty in the customs and usages of trade, to settle differences between its members, to establish rules for inspection, and to promote a more large and friendly intercourse between merchants.'

WANTED.

The publisher of the CANADA LUMBERMAN desires thoroughly reliable and competent correspondents at the following named places:—

Kingston, Ontario.
Quebec City, Quebec.
St. John, New Brunswick.
Halifax, Nova Scotia.
Winnipeg, Manitoba.
Victoria, British Columbia.

The duty of each correspondent will be to give a review of his local market for the month preceding the date of issue, and the ruling quotations for different kinds of lumber, &c. For terms and any other information, address

A. G. MORTIMER,
Peterborough, Ont.

TRADE REVIEW.

TORONTO.

TORONTO, FEB. 26.—The state of the lumber trade in this city is much the same as at the time of last report. There will be nothing new to report until the breaking up of winter, and building operations commence. Prospects are good for the coming season's operations, and should the large number of public and private buildings, for which contracts are being let, be pushed ahead early in the spring, our lumber merchants may safely look forward to a good trade. Prices rule the same, but it is thought by some that an advance may be expected in certain classes of building materials.

The following are the ruling quotations in this city at present:—

Mill cull boards and scantling	$10 00
Shipping cull boards, promiscuous widths	12 00
" stocks	13 00
Scantling and joist, up to 16 ft	13 00
" " " 18 ft	14 00
" " " 20 ft	15 00
" " " 22 ft	16 00
" " 24 ft	17 00
" " " 26 ft	18 00
" " " 28 ft	19 00
" " " 30 ft	20 00
" " " 32 ft	21 00
" " " 34 ft	22 50@22 50
" " " 36 ft	24 00
" " " 38 ft	27 00
" " 40 to 44 ft	30 00
Cutting up planks 1¼ and thicker dry	20 00@25 00
" boards "	20 00
Dressing stocks	16 00@18 00
Picks Am. inspection	30 00
Three uppers, Am. inspection	40 00

B. M.	
1¼-inch flooring, dressed	25 00@30 00
1¼ " " rough	14 00@15 00
1¼ " " dressed	23 00@25 00
1¼ " " undressed	14 00
" " dressed	16 00@20 00
" " undressed	12 00@14 00
⅞ Beaded Sheeting, dressed	18 00@20 00
Clapboarding, dressed	12 50
XXX sawn shingles, ₱ M	2 75@ 2 90
Sawn Lath	2 25
Red oak	20 00@25 00
White "	25 00@30 00
Basswood, No. 1 & 2	18 00@20 00
Cherry, No. 1 & 2	50 00@60 00
White ash 1 & 2	25 00@30 00
Black ash 1 & 2	20 00@25 00

MONTREAL LUMBER MARKET.

MONTREAL, Feburary 24th

Business in the lumber trade in Montreal has been slack during the month of February, but quotations have remained steady. There has been nothing of a special interest to give it animation, while there has been sufficient to account for the dullness. Unfavorable country roads, caused by snow blockades, the general holiday time of our carnival, and the absorbing interest centered in election affairs have all had their quieting effect upon business. The general outlook for the spring, however, is bright, and there are rumours that several factories are to be put up, which had been held in abeyance, pending the result of the elections.

The following are the imports of lumber into Montreal during 1886:—

Per River St. Lawrence	15,703 907 feet.
" Lachine Canal	61,732 000 "
" Grand Trunk Railway	16,512 000 "
" Canadian Pacific Ry	13 266,000 "
Total	107 213,908

The following are the quotations of the yards here:—

Pine, 1st quality, ₱ M	$00 00@40 00
Pine 2nd " "	00 00@30 00
Pine, shipping culls, ₱ M	14 00@16 00
Pine 4th quality deals ₱ M	10 00@12 00
Pine, mill culls, ₱ M	8 00@10 00
Spruce, ₱M	10 00@13 00
Hemlock, ₱ M	9 00@10 00
Ash, run of log culls out, ₱ M	20 00@25 00
Bass, " " ₱ M	18 00@20 00
Oak, ₱ M	40 00@50 00
Walnut ₱ M	60 00 100 00
Cherry, ₱ M	80 00 100 00
Butternut, ₱ M	35 00@40 00
Birch, ₱ M	20 00@25 00
Hard Maple, ₱ M	25 00@30 00
Lath, ₱ M	1 50@ 0 00
Shingles, 1st, ₱ M	2 00@ 3 00
Shingles, 2nd, ₱ M	2 50@ 0 00

OSWEGO, N.Y.

From Our Own Correspondent.

Three uppers	$46 00@47 00
Picking	36 00@37 00
Cutting up	26 00@27 00
Fine Common	22 00@25 00
Common	14 00@18 00
Culls	12 00@15 00
Mill run lots	19 00@21 00
Sidings, selected, 1 in	28 00@36 00
" 1¼ in	30 00@38 00
Mill run, 1x10, 13 to 16 ft	19 00@21 00
Selected	24 00@26 00
Shippers	14 00@16 00
Mill run, 1¼x10	15 00@17 00
Selected	21 00@30 00
Shippers	14 00@16 00
Mill run, 1 & 1¼ in, strips	19 00@21 00
Selected	32 00@34 00
Culls	12 00@15 00
1x6 selected for clapboards	32 00@34 00
Shingles, XXX, 18 in. pine	3 65@ 3 80
XXX Cedar	3 30@ 3 50
Lath 1¼, No 1	1 80@ 2 00
No 2	1 60@ 1 80
Ash, 1st & 2nd 1 t. 4 in	16 00@20 00
Basswood, 1st & 2nd, 1 & 1¼ inch	20 00@22 00
" culls, " "	11 00@12 00
Hard Maple, ₱ M	23 00@25 00
Lath, ₱ M	1 50@ 0 00
Shingles, 1st, ₱ M	2 00@ 3 00
Shingles, 2nd, ₱ M	2 50@ 0 00

CORDWOOD.

Long Maple, per cord	$ 6 00@6 50
Long Birch "	6 00@0 00
Long Beech "	5 00@5 50
Tamarack "	5 00@0 00

ALBANY.

Pine, clear, ₱ M	$55 00@60 00
Pine, fourths	50 00@57 00
Pine, selects	42 00@44 00
Pine, good box	22 00@33 00
Pine, common box	13 00@15 00
Pine, 10-in. plank, each	00 45@00 47
Pine, 10-in. plank, culls, each	00 25@00 27
Pine boards, 10-in	00 30@00 32
Pine, 10-in. boards, culls	00 16@00 20
Pine, 10-in. boards, 16 ft., ₱ M	28 00@32 00
Pine, 12-in. boards, 16 ft	28 00@32 00
Pine, 12-in. boards, 13 ft	28 00
Pine, 1¼ in. siding, select	40 00@43 00
Pine, 1¼-in. siding, common	15 00@18 00
Pine, 1-in. siding, select	40 00@42 00
Pine, inch siding, common	13 00@16 00
Spruce, boards, each	00 00@00 16
Spruce, plank, 1½-in., each	00 00@00 20
Spruce, plank, 2-in., each	00 00@00 30
Spruce, wall strips, each	00 00@00 12
Hemlock, boards, each	00 00@00 14
Hemlock, joist, 4x6, each	00 00@00 32
Hemlock, joist, 2¼x4, each	00 00@00 14
Hemlock, wall strips, 2x4, each	00 00@00 11
Black walnut, good, ₱ M	100 @120 00
Black waluut, ⅞ inch	80 00@90 00
Black walnut, ¾ inch	00 00@85 00
Scaymore, 1-inch	28 00@30 00
Scaymore, ⅞-inch	21 00@23 00
White wood, 1-inch and thicker	38 00@40 00
White wood, ⅞-inch	28 00@30 00
Ash, good, ₱ M	40 00@43 00
Ash, second quality, ₱ M	25 00@30 00
Cherry, good, ₱ M	60 00@85 00
Cherry, common, ₱ M	25 00@30 00
Oak, good, ₱ M	40 00@43 00
Oak, second quality, ₱ M	20 00@25 00
Basswood, ₱ M	25 00@30 00
Hickory, ₱ M	00 00@40 00
Maple, Canada, ₱ M	28 00@30 00
Maple, American, per M	26 00@28 00
Chestnut, ₱ M	38 00@40 00
Shingles, shaved, pine, ₱ M	0 00@ 6 50
" 2nd quality	0 00@ 5 50
" extra, sawed, pine	4 30@ 4 00
" clear, "	0 00@ 3 00
" cedar, mixed	0 00@ 3 13
" hemlock	2 25@ 2 37
Lath, hemlock	0 00@ 2 35
Lath, spruce	0 00@ 2 20

NEW YORK CITY.

SPECIAL CONTRACTS.

Pine, ver choice and ex. dry	$65 00@70 00
Pine, good	55 00@60 00
Pine, shipping box	21 00@22 50
Pine, common box	18 00@21 00
Pine common box ⅞	16 00@18 00
Pine, tally plank 1¼ 10 in	00 44@00 50
Pine, tally plank 1¼ 2nd qual	00 35@00 38
Pine, tally plank 1¼ cu ls	00 30@00 32
Pine, tally boards dres'd good	00 32@00 35
Pine, tally boards dressed common	00 28@00 30
Pine, strip boards culls	0 18@00 20
Pine, strip boards merc'table	0 20@00 22
Pine, strip boards clear	00 25@00 26
Pine, strip plank, dr clear	0 33@00 35
Spruce boards dressed	00 25@00 28
Spruce, plank, 1¼ inch each	00 28@ 0 30
Spruce, plank 2 in each	00 38@00 40
Spruce plank 1¼ in dressed	00 28@00 30
Spruce plank 2in dressed	0 43@0 45
Spruce wall strips	00 15@00 18
Spruce timber	20 00@22 00
Hemlock boards each	00 18@00 20
Hemlock joist, 2¼x4	00 16@00 18
Hemlock joist 3x4	00 18@00 20
Hemlock joist 4x6	00 40@00 44
Ash, good	45 00@58 00
Oak	50 00@60 00
Maple cull	20 00@25 00

Cargo rates 10 per cent. off.

EXTRA SELECTIONS.

Maple good	40 00@48 00
Chestnut	40 00@50 00
Cyprus, 1, 1½, 2 and 2½ in	35 00@40 00
Black Walnut good to choice	140 00@160 00
Black Walnut ⅞	85 00@100 00
Black Walnut selected and seasoned	150 00@175 00
Black Walnut counters	00 22@28 00
Black Walnut 5x5	150 00@160 00
Black Walnut 6x6	160 00@170 00
Black Walnut 7x7	175 00@180 00
Black Walnut 8x8	175 00@180 00
Cherry wide	100 00@120 00
Cherry, ordinary	70 00@80 00
Whitewood inch	45 00@50 00
Whitewood ⅞ in	35 00@40 00
Whitewood ⅞ panel	45 00@50 00
Shingles ex. shaved pine 18 in	8 00@ 9 50
Shingles ex. sawed pine 18 in	5 75@ 6 00
Shingles clear sawed pine 16 in	4 50@ 5 00
Shingles cypress 24x7	22 00@24 00
Shingles cypress 20x6	00 00@14 00
Yellow pine dressed flooring	30 00@40 00
Yellow pine girder	26 00@35 00
Locust posts, 8 ft	00 18@00 20
do 10ft	00 24@00 25
do 12ft	00 29@00 34
Chestnut posts	00 03@00 3½

TONAWANDA.

CARGO LOTS—MICHIGAN INSPECTION.

Three uppers	$42 00@44 00
Common	18 00@24 00
Culls	10 00@13 00

YARD PRICES—CAR LOTS.

3 uppers, inch	$44 00@46 00
3 uppers, plank	45 00@50 00
Pickings, inch	36 00@38 00
Pickings, 1¼ in. to 2 in	38 00@42 00
Fine Common	32 00@34 00
Fine Common, thicker	35 00
Cutting up	25 00@30 00
Shelving, 12 in. and up	27 00@30 00
Coffin boards, 12 in. and up	16 00@18 00
Dressing stocks	17 00@20 00
Dressing sidings	19 00@22 00
Common stocks	14 00@15 00
Common sidings	15 00@17 00
Common box	12 00@13 00
Shingles, XXX, 18 in. sawed	3 40@ 3 50
Do. clear butts, sawed	2 20@ 2 30
Shingles, XXX 16 in. cut ₱ sq	@ 3 00
Do. XX do	@ 2 75
Lath	1 90

CHICAGO.

From Our Own Correspondent.

We have had a hard winter up to the present time, the weather being either extremly cold or very stormy, for the lumber trade, but still the output will equal if not exceed that of last winter, and prices are quite firm, especially on coarse lumber. The outlook for the coming spring is promising, and unless we have a general strike of the labor classes I am of the opinion we will have a good spring trade. Chicago as a lumber market is gradually losing ground year after year, and a great many of the dealers are of the opinion that it will never regain its lost trade. The principal causes seem to be the gradual growing trade of Southern Yellow Pine and the extension of railroads into the manufacturing districts, so that lumber can be piled and seasoned at the mill and shipped direct, which, of course, is a saving, as expenses of handling, piling yard, rents, &c., are much higher in Chicago than they would be at the manufacturing point. Last season was about the worst one Chicago has seen for some years, and I predict that two more such years as last following right along would drive from 25 to 50 per cent. of the wholesale dealers out of the yard business here. As it is we have had something like half a dozen firms go out last spring, and there will be as many more go out the coming spring in all probability.

The lumber trade is done somewhat different here from what it is in the east. We have here what is called the "lumber market" which is simply a district near the mouth of the Chicago River where the cargoes arrive and are consigned to commission men to be sold. All you can see of it is a portion of the deck load and the "tally sheet" which is simply straight measurement, consequently you can't tell whether you have made a judicious purchase of any cargo you may buy until you have it sorted up in your yard, as no lumber is sold here by the manufactures by inspection.

The lumber for this market, mostly course, comes from Muskegon, Mich., Ludington, Mich. and Manistee, Mich. A very small quantity also comes from the Saginaw District as the freight comes too high from that point. The lumber designed for this market is manufactured different from what is demanded by the eastern market and as the Canada cut is all marketed in the east I am not capable of giving you any "pointers" that would be of any use to Canadian manufacturers. There are a great amount of strips sold here and the grading is entirely different from Canada and the east. The South Branch Lumber Co. of this city now have a yard at Tonawanda, where they have undertaken to run Chicago grades, but how it works I do not know, but I imagine they will have to change things somewhat to conform with the eastern ways.

Piece Stuff, short green	$ 9 25@ 9 50
Piece stuff, short dry	10 50 11 00
Piece stuff, long	11 00 14 00
Boards and strips, No. 2	11 00@13 00
Boards and strips, medium	12 00 15 00
Boards and strips, No. 1	15 00 20 00
Shingles, standard	2 00 2 10
Shingles, extra	2 25 2 45
Shingles, cedar, standard	1 65 1 70
Shingles, cedar, extra	1 90 1 95
Lath, white pine	1 50 1 60
Lath, Norway	1 40 1 50

RECEIPTS FOR WEEK ENDING FEB. 17.

	Lumber.	Shingles.
1887	6,843,000	431,000
1886	5,275,000	1,300,000

RECEIPTS FROM JAN. 1, TO FEB. 17, INCLUSIVE.

	Lumber.	Shingles.
1887	43,106,000	4,726,000
1886	25,840,000	6,327,000

STOCK ON HAND FEB. 1, INCLUDING SOUTH CHICAGO.

	1887.	1886.	1885.
Lumber	540,591,073	630,587,630	610,949,089
Shingles	459,282,578	450,947,455	356,238,775
Lath	52,610,908	56,592,178	60,376,992
Pickets	2,992,825	5,511,763	3,064,883
Cedar posts	275,728	500,454	490,705

EASTERN FREIGHT RATES.

FROM CHICAGO AND COMMON POINTS ON CAR LOAD LOTS OF HARD AND SOFT LUMBER.

To New York	25c.
Boston	30c.
Philadelphia	28c.
Baltimore	22c.
Washington	22c.
Albany	24c.
Troy	24c.
Buffalo and Pittsburgh	15c.
Shenectady	24c.
Wheeling	15c.
Suspension Bridge	15c.
Salamanca	15c.
Black Rock	15c.
Dunkirk	15c.
Erie	15c.
Toronto	15c.

LAKE FREIGHTS.

From Muskegon, green	1 62½
From Whitehall	1 62½
From Ludington	1 75
From Manistee	1 37½@1 87½
From Menominee, dry	2 00
From Menominee, green	2 00
From Cheboyan	2 00
From Bay City	3 00
From Oscoda, dry	2 75
From Alpena, dry	2 50

SAGINAW VALLEY.

LUMBERMAN'S GAZETTE OFFICE,
BAY CITY, Mich., Feb. 21, 1887.

There is very little to be said in regard to the lumber market of the Saginaw Valley; and "dullness," is about as expressive a word as can be written in regard to it just at present. Some attribute this to the passage of the inter-state commerce bill; but whatever may be the cause, the result is quite apparent. Some few comparatively insignificant sales have been made, but trade is not up to expectations. Mosher & Fisher sold 700,000 feet of lumber on Wednesday last at $12 $24 and $40, $10, $20 and $40 and $15 and $20. Murphy & Dorr sold 650,000 feet of lumber to Buffalo parties at $9 50, $19 and $38. C. L Grant & Co., sold a bill of lumber last week amounting to $3,000. Mill culls have advanced, and are selling at $7 and $8 in Bay City and East Saginaw. Shingles are firm; but there are few on the market.

CARGO QUOTATIONS.

Shipping culls	$ 8 50@11 00
Common	15 00@22 00
3-uppers	37 00@40 00
Bill stuff	8 50@10 00
Norway bill stuff	8 50@10 00
Under straight Measure	15 00@24 00
Shingles, XXX	2 85@ 3 00
Shingles clear butts	1 80@ 2 00
White pine ath	1 75

YARD TRADE.

3 uppers wide and thick	43 00@45 00
Do. 1 in	40 00@42 00
Selects	35 00@38 00
Fine common	27 00@30 00
1, 1½, 2 in. cut ups	20 00@22 00
No. 1 base, 7, 8 and 9 in selects	35 00
No. 2 do. (fine common)	27 00
No. 1 floor strips	40 00
No. 2 "	27 00
No. 3 "	17 00
Fencing	12 00@18 00
Fencing, coarse common	8 00
Fencing, mill culls	4 00@ 6 00
No. 1 stock 12 in	14 00@15 00
No. 2 stocks	11 00@12 00
Wide common	12 00@15 00
Piece stuff and timber	9 00@10 00
12, 14, 16, 18 ft	9 00@12 00
Do. do. 20 ft	12 00
Lath	1 50@ 1 75
Lath No. 2 (cul's)	1 00
Shingles XXX	3 15@ 3 25
Clear butts	1 90@ 2 15

DRESSING.

Surfacing	1 00
Dressing and matching	2 00
Making drop siding	2 25
Making bevel siding and ceiling	3 00

ADVERTISEMENTS

Those wishing to BUY or SELL TIMBER LANDS, LUMBER or SECOND HAND MACHINERY will find THE CANADA LUMBERMAN an excellent medium in which to make known their wants. Advertisements of this character will be inserted at the low rate of 1 CENT A WORD, cash to accompany the order in every case. Address.

A. G. MORTIMER, Publisher,
Peterborough, Ont.

DETROIT, MICH.

Uppers, 4x4	$48 00
5" 6x4 & 8x4	50 00
3 & 4 in.	50 00
Selects, 4x4	42 00
5x4, 6x4 & 8x4	45 00
Fine common, 4x4	35 00
5x4, 6x4 & 8x4	38 00
Shop, 4x4	22 00
5x4, 6x4 & 8x4	25 00
Flooring, select common	20 00
No. 1 common	18 00
No. 1 fencing	16 50
Roofing, D. & M	16 00
Siding, clear	22 00
A	21 00
B	19 00
C	14 00
Ceiling, select common	25 00
Ceiling, No. 1 common	22 00
No. 1 fencing	20 00
Stocks, 1x12 & 1x10, No 1	18 00
1x12 & 1x10, No. 2	14 00
1x12 & 1x10, No. 3	11 00
Ship culls	10 00
Mill Culls	8 00
Bill stuff ordinary sizes :	
12 to 16 ft	11 00
18 to 20 ft	12 00
22 to 24 ft	13 00
26 to 28 ft	14 00
30 to 34 ft	16 00
Shingles, clear, 18 in. Ex	3 30
10 in. clear, 18 in.	2 30
6 in. clear, 18 in.	2 00
6 in stocks clear, Ex.	4 00
5 in. " "	4 80
Lath, per M pcs	2 50

Add for S. 1 or 2 S. $1 ₱ M

TIMBER TRADE OF CANADA.

The special issue of the *Timber Trades Journal*, of London, Eng., contains a lengthy review of the timber trade, 1886, from correspondents at every port of importance in the United Kingdom as well as from the leading timber producing countries, the Continent and the Colonies We herewith reproduce the statements and figures furnished from Canada.

QUEBEC.

The season of 1886 has been another in the series of bad years which our Quebec timber trade has been for some time undergoing—one year worse than another, the past one worst of all.

The supplies got out last winter were full in pine in the Ottawa region, and in the spruce districts of the St Lawrence and Saguenay a fair supply was got out. These with the wintering stocks, enabled the representatives of our shipping houses last spring to present themselves before your buyers with ample lines of all classes of wood goods. It is to be regretted, however, that sales could only be effected to a limited extent, and at close out prices in most cases. It was evident that the selling season of 1886 was not going to be any improvement on that of 1885.

The Afghan dispute with Russia, which for a time assumed a very critical appearance, gave the wood trade a momentary spirt. Buyers, fearing the cutting off the supplies from the Baltic, took heart of grace, and made considerable purchases at fairly full prices. As, however, the war-cloud broke and gradually disappeared, the re-action set in, and it became almost impossible to effect sales.

The "drives" in the Ottawa regions were, on the whole, good, and the logs reached the different mills in regular and full supply during the season.

In the spruce districts the drives were not so good; in fact, on the tributaries of the south shore of the St. Lawrence the drives were almost a complete failure. On many of the streams the logs only got down with the heavy freshets of September.

Owing to the sluggish state of your markets, this does not seem, however, to have had much, if any, effect on the demand or prices of spruce deals.

The spring and summer brought us no cheer from your side; it was struggling, up hill work all through the season to effect sales with your buyers, although almost all classes of goods could be offered at low prices, and freights were unprecedentedly low.

It is a blessing the stocks here were held by strong houses, who could carry them over to another season, without being forced to sacrifice them, so prices have not been allowed to fall to any great extent, as otherwise would doubtless have occurred, owing to the deplorable state of your markets, diminished consumption, and the large competing supplies from the north of Europe.

Large lines of Michigan first—pine—were purchased the past summer at high prices by some of our Canadian houses; this was unfortunate, as your markets did not need them; it has caused a glut of firsts, which, for the first time in many years, cannot be moved at your side. They must now, of course, be held until your market can absorb them, or be sold at loss.

This will, however, prevent a repetition next year, and by next spring or summer, if any vitality is shown in your markets, things should right themselves, as the supply of first quality pine deals is year by year decreasing.

For the sake of the good old port of Quebec, we regret to have to record again a still further decrease this year in our already reduced trade in export of wood goods.

We append a comparative statement of the clearances for the past 10 years, which tells the lamentable tale.

1877	796	Vessels	670 627 Tons
1878	476	"	399 833 "
1879	433	"	364,628 "
1880	634	"	555.451 "
1881	459	"	380 186 "
1882	426	"	359 925 "
1883	487	"	416,169 "
1884	366	"	291,398 "
1885	369	"	294,789 "
1886	325	"	250,635 "

It must, however, be confessed that this does not mean that the total exports of wood goods from the St. Lawrence has fallen off in above proportion.

Many mills above Quebec, whose deals used to be brought down and shipped from here, are now delivered to ships and steamers direct at the mills, there being plenty of water and good anchorage all along the St. Lawrence, from Quebec to Montreal.

The cause especially of a considerable falling off in our Quebec shipments on this head is the fact that the great bulk of the pine deals which came from the Ottawa districts are now shipped from Montreal.

Whether exporters have made money on their deal shipments for 1886 is questionable; there can be no doubt whatever but that for our pine deal manufacturers it must have been one of the most profitable years they have ever had. They sold large lines of their cuttings to the United States, and also considerable lines of deals to European exporting houses, who were compelled to pay the mill-owners' prices or go without stocks, as the favourable state of the United States' markets rendered manufacturers completely independent of the deal buyers.

Whilst on this subject we cannot refrain from expressing the hope, in the interest of trade, that our exporting houses would in future regulate the business of the future with Great Britain to meet the reduced demand and consumption of Canadian woods in that country. This would place it on a healthy basis, and permit a legitimate profit to all concerned.

Any attempt to force on the markets of Great Britain the quantities of wood goods which were possible to be shipped in the halcyon days of the past, at living profit—because the demand and consumption were there where these latter no longer exist—cannot end otherwise than disastrously.

The log cutting this year in the Ottawa district will, from all accounts, be even more extensive than last year's, as the mill-owners look forward for a large and more prosperous year's business with the United States than even 1886.

There seems to be no halt in the onward progress of our big neighbour. Each year the volume of the trade exceeds that of the preceding year. There were probably the largest supplies of lumber from her own manufacturers, and including supplies from Canada, the past year than in any previous year in the United States; but notwithstanding many drawbacks from labour strikes and other causes, there seems to be consumption for all; and with some vibrations in prices during the season, it closes with reports of moderate stocks from all sides, good prices, and brilliant outlook.

In view of our declining trade with Great Britain, which we cannot but deeply regret, the advantages of a new market such as that of the United States at our doors, are such as we cannot help congratulating ourselves on.

In spruce deals it is probable that the new cut will about equal that of last winter. We cannot, however, see how spruce deals can be made to sell at the miserable prices now ruling in your markets. No doubt the low prices ruling with you are due, first, to diminished consumption; and next, to the abundant supplies at low prices of North of Europe whitewood We fear our spruce manufacturers will eventually have to give up trying to compete with the Baltic, and seek other markets for the disposal of their deals

The winter all over Canada has been very severe, extremely cold, and snow in abundance, rather too abundent for working to advantage in the woods; but, on the whole, it may be called a very favourable winter for log making and hauling, and we have no doubt the most will be made of it by our lumbermen.

OTTAWA.

The shipments of lumber which take place yearly from Ottawa value far up into the millions. The outlook for the coming season is most flattering. All the lumbermen are unanimous in stating that the cut this season will not be below the average, while two expect to double their cut. The amount of lumber manufactured during the past season was in advance of that manufactured during any previous year, and it is clear that the amount manufactured next year will show another large increase. The amount of lumber manufactured by the Ottawa mills during the past season is as nearly as possible 288 000 000 cubic feet. The greater quantity shipped has been sent to the United States, but almost all the coarsest grades were consigned to Montreal for home consumption. The principal destinations of the consignments to the United States were Burlington, Vt, Albany, New York and Boston. Excepting in a few cases where consignments were shipped via Montreal direct to England, but little export trade was done from Ottawa, save to the United States. A large proportion of the lumber sent to the United States has been exported thence to South America, the West Indies, Africa, and other foreign markets The prices of lumber in the various markets fluctuate according to the freight charged from Ottawa, the lumber being sold there on a basis of about 16 dollars per thousand superficial feet, to be delivered on the cars or barges, all freight charges to be borne by the purchaser. During the past season nothing has been done in square timber. Hardwood is not touched by Ottawa lumbermen except occasionally for private use.

ST. JOHN, N. B.

I have nothing to add to my last communication to your *Journal*. There has so far been very little snow along the bay shore, and operators are unable to do much in the way of getting out logs; in the upper part of the province there is I understand, an abundance of snow, and work in that section is progressing very favourably.

I hand you below a statement of the entire shipment from the New Brunswick ports for the year. I am indebted to the *St. John's Globe* for the figures, and you will notice they are so arranged as to show the shipment for 1885 as well as 1886.

WOOD EXPORTS.

The total export of deals &c., from St John trans Atlantic ports in 1886 shows a large falling off compared with last year. The figures are as follows, showing the ports to which the lumber was sent and the names of the shippers :-

Years	Port.	No of Ves.	Tons.	Sup feet deals, &c.
1886	Liverpool	55	62,638	51 768,613
1885	do	56	65 221	51,421 742
1886	London	4	4,163	1 739 595
1885	do	8	9,507	5,295 221
1886	Bristol Channel	33	28 568	25,872,450
1885	do	39	30,328	29 329,394
1886	Continent	11	5,958	5 501 517
1885	do	4	2,628	2,160 446
1886	Africa	4	2,758	2 586 176
1885	do	8	4,605	4,476 705
1886	Australia			
1885	do	1	916	596.155
1886	Avonmouth	1	1,183	1 042,445
1885	do	1	616	566 909
1886	Aberystwith			
1885	do	1	267	274,140
1886	B rrow	6	5,773	5 490 802
1885	do	9	11,069	11,313,751
1886	Belfast	5	4,810	4,338,176
1885	do	6	4 944	4 694,123
1886	Ballyshannon			
1885	do	1	117	101 762
1886	Bantry	1	428	482,129
1885	do	1	441	489,070
1886	Carnarvon	1	595	116,944
1885	do	4	2,170	707,224
1886	Clonakilty	1	270	287,792
1885	do	1	283	348,358
1886	Clare Castle	1	495	365 402
1885	do	1	298	325,534
1886	Cork	8	4,576	4 471,189
1885	do	5	2,517	2 393.109
1886	Crookhaven	1	638	586,149
1885	do	8	2,820	2,832,813
1886	Colerraine	2	565	603 713
1885	do	1	263	298,665
1886	Drogheda	1	314	341,793
1885	do	1	314	358,986
1886	Dundalk	4	1 365	1,592,756
1885	do	4	1,393	1,654,666
1886	Dungarvan	1	196	210 431
1885	do	1	94	89,379
1886	Dub in	7	4,876	4 540,702
1885	do	7	4,761	4,514 874
1886	Fleetwood	8	5,399	4 297 988
1885	do.	5	4,676	3 802,769
1886	Foynes	1	450	348,204
1885	do	1	256	244,820
1886	Garston Dock			
1885	do	1	1,031	883,636
1886	Galway	3	1.460	1.439 136
1885	do	1	499	475 028
1886	Glasgow	2	1,262	772,318
1895	do	2	2.047	1,787,660
1886	Hare Island	1	395	372,812
1885	do	1	395	366,941
1886	Irvine			
1885	do	1	276	280,361
1886	Llanelly	2	765	708 208
1885	do	1	290	297.232
1886	Limerick	4	2 518	2,288,125
1885	do	3	1.678	1,618 239
1886	Londonderry	6	3 841	3 549,054
1885	do	4	2,477	2,272,526
1886	Mersey River			
1885	do	3	2 802	1,924 488
1886	Milford Haven	1	314	246.705
1885	do			
1886	Newry	2	885	915 366
1885	do	2	791	794 391
1886	Plymouth			
1885	do	1	361	397 659
1886	Port Madock			
1885	do	1	298	314 746
1886	Queenstown	5	4,128	3.762,880
1885	do	10	7,511	6 330,561
1886	Rhyl			
1885	do	1	343	392,912
1886	Rotterdam			
1885	do	2	892	813 855
1886	Sligo	3	996	1,098,212
1885	do	1	313	396,315
1886	Tralee	3	1 211	1,220 243
1885	do			
1886	Valentia			
1885	do	1	545	443,832
1886	Warrenpoint			
1885	do	1	573	533,077
1886	Waterford	1	406	406.041
1885	do	4	2,102	2,003.885
1886	Westport	1	192	210.666
1885	do	1	299	327,021
1886	Wexford	1	348	397 484
1885	do	3	1,150	1,005 803
1886	Wicklow			
1885	do	1	332	338 245
1886	Total	191	154.659	134 123 207
1885	do.	221	177,514	152,543.026

Years	Shippers.	No. of Ves.	Tons.	Deals in Sup. feet.
1886	A. Gibson	54	54,160	48 674 319
1885	do.	81	81,319	77,245,320
1886	R. A. & J Stewart	41	32,240	29,619,139
1885	do.	32	25,325	20.018,626
1886	W. M. Mackay	46	33.439	26,458 213
1885	do.	39	32 997	22 314 060
1886	Guy, Beven & Co.	15	14 851	13.312,735
1885	do.	30	17,616	16 735,235
1886	Geo McKean	22	12 979	11,231 570
1885	do.	19	8 813	8.741,900
1886	S. Schofield	9	5,114	3,027,016
1885	do.	14	7 516	3.838.766
1886	Knight & Co	3	1,501	1.375,538
1885	do.	5	3,173	2,988,050
1886	Hamilton & Co	1	385	394,618

(CONTINUED ON PAGE 15.)

MINING REGULATIONS

To Govern the Disposal of

MINERAL LANDS OTHER THAN COAL LANDS,

1886.

THESE REGULATIONS shall be applicable to all Dominion Lands containing gold, silver, cinnabar, lead, tin, copper, petroleum, iron, or other mineral deposits of economic value, with the exception of coal.

Any person may explore vacant Dominion Lands not appropriated or reserved by Government for other purposes, and may search therein, either by surface or subterranean prospecting, for mineral deposits, with a view to obtaining under the Regulations a mining location for the same, but no mining location or mining claim shall be granted until the discovery of the vein, lode, or deposit of mineral or metal within the limits of the location or claim.

QUARTZ MINING.

A location for mining, except for iron, on veins, lodes, or ledges of quartz or other rock in place, shall not exceed forty acres in area. Its length shall not be more than three times its breadth, and its surface boundary shall be four straight lines, the opposite sides of which shall be parallel, except where prior locations would prevent, in which case it may be of such a shape as may be approved of by the Superintendent of Mines.

Any person having discovered a mineral deposit may obtain a mining location therefor, in the manner set forth in the Regulations which provide for the character of the survey and the marks necessary to de ignate the location on the ground.

When the location has been marked conformably to the requirements of the Regulations the claimant shall, within sixty days thereafter, file with the local agent in the Dominion, Lands Office for the district, in which the location is situated, a declaration or oath setting forth the circumstances of his discovery, and describing, as nearly as may be, the locality and dimensions of the claim marked out by him as aforesaid; and shall, along with such declaration, pay to the said agent an entry fee of FIVE DOLLARS. The agent's receipt for such fee will be the claimant's authority to enter possession of the location applied for.

At any time before the expiration of FIVE years from the date of his obtaining the agent's receipt, it shall be open to the claimant to purchase the location on filing with the local agent proof that he has expended not less than FIVE HUNDRED DOLLARS in actual mining operation on the same; but the claimant is required before the expiration of each of the five years, to prove that he has performed not less than ONE HUNDRED DOLLARS' worth of labor during the the year in the actual development of his claim, and at the same time obtain a renewal of his location receipt, for which he is required to pay a fee of FIVE DOLLARS.

The price to be paid for a mining location shall be at the rate of FIVE DOLLARS PER ACRE cash, and the sum of FIFTY DOLLARS extra for the survey of same.

Not more than one mining location shall be granted to any individual claimant upon the same lode or vein.

IRON.—The Minister of the Interior may grant a location for the mining of iron, not exceeding 160 acres in area, which shall be bounded by north and south, and east and west lines astronomically, and its breadth shall equal its length, Provided, that should any person making an application purporting to be for the purpose of mining iron thus obtain, whether in good faith or fraudulently, possession of a valuable mineral deposit other than iron, his right in such deposit shall be restricted to the area prescribed by the Regulations for other minerals, and the rest of the location shall revert to the Crown for such disposition as the Minister may direct.

The Regulations also provide for the manner in which land may be acquired for milling purposes, reduction works, or other works incidental to mining operations.

Locations taken up prior to this date may, until the 1st of August, 1885, be re-marked and re-entered in conformity with the Regulations without payment of new fees, in cases where no existing interests would thereby be prejudicially affected.

PLACER MINING.

The Regulations laid down in respect of quartz mining shall be applicable to placer mining as far as they relate to entries, entry fees, assignments, marking of localities, agents' receipts, and generally where they can be applied.

The nature and size of placer mining claims are provided for in the Regulations, including bar, dry, bench, creek or hill diggings, and the RIGHTS AND DUTIES OF MINERS are fully set forth.

The regulations apply also to

RED-ROCK FLUMES, DRAINAGE OF MINES AND DITCHES.

The GENERAL PROVISIONS of the Regulations include the interpretation of expressions used therein; how disputes shall be heard and adjudicated upon; under what circumstances miners shall be entitled to absent themselves from their locations or diggings, etc., etc.

THE SCHEDULE OF MINING REGULATIONS.

Contain the *forms* to be observed in the drawing up of all documents, such as:—"Application and affidavit of discoverer of quartz mine." "Receipt for fee paid by applicant for mining location" "Receipt for fee on extension of time for purchase of a mining location." "Patent of a mining location." "Certificate of the assignment of a mining location." "Application for grant for placer mining and affidavit of applicant." "Grant for placer mining." "Certificate of the assignment of a placer mining claim." "Grant to a bed-rock Flume Company." "Grant for Drainage." "Grant of right to divert water and construct ditches."

Since the publication, in 1884, of the Mining Regulation to govern the disposal of Dominion Mineral Lands, the same have been carefully and thoroughly revised with a view to ensure ample protection to the public interests and at the same time to encourage the prospector and miner in order that the mineral resources may be made valuable by development.

COPIES OF THE REGULATIONS MAY BE OBTAINED UPON APPLICATION TO THE DEPARTMENT OF THE INTERIOR.

A. M. BURGESS,

Deputy Minister of the Interior.

WORKING CLASSES ATTENTION! We are now prepared to furnish all classes with employment at home, the whole of the time, or for their spare moments. Business new, light and profitable. Persons of either sex easily earn from 50 cents to $5.00 per evening, and a proportional sum by devoting all their time to the business Boys and girls earn nearly as much as men. That all who see this may send their address, and test the business, we make this offer. To such as are not well satisfied we will send one dollar to pay for the trouble of writing. Full particulars and outfit free. Address GEORGE STINSON & Co., Portland, Maine.

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ALSO
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lessening the quantity of fuel used, and prolonging the life of the Boiler.
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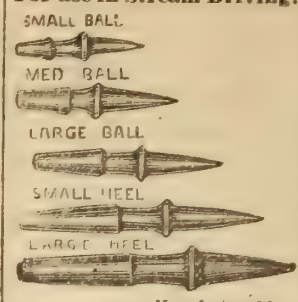
For use in Stream Driving.


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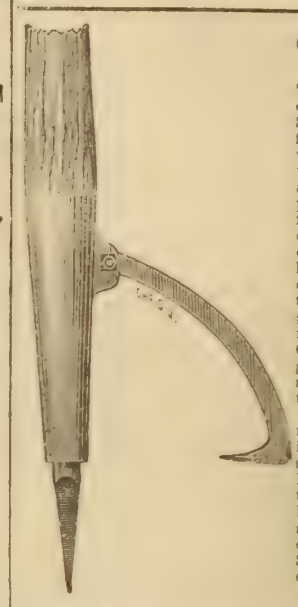
Manufactured by
T. McAVITY & SONS, ST. JOHN, N. B.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(All Steel)
The Dogs are made of the Best Cast Steel, by the drop forging process, which makes them very smooth, true and even. The point or hook is fashioned to a nice oval shape so as to catch all sizes of logs instantly, and enabling the operator easily to disengage. The picks are made also of Best Cast Steel and are of good length both inside and outside of the wood
Our handles are made of best quality straight grained split and turned ROCK MAPLE, 5 to 6 feet in length, bored specially to suit the pick. Prices on application. See advertisement of Drivers Calks. manufactured by
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MERCHANT
Car Lots sold on Commission, railway switch into yard and plenty of room for storage. Yard corner of Stachan and Wellington Ave. Office, 9 Victoria St. Telephone Connection.

GRATEFUL—COMFORTING.
EPPS'S COCOA
BREAKFAST.
'By a thorough knowledge of the natural laws which govern the operations of digestion and nutrition, and by a careful application of the fine properties of well-selected Cocoa, Mr. Epps has provided our breakfast table with a delicately flavored beverage which may save us many heavy doctors' bills. It is by the judicious use of such articles of diet that a constitution may be gradually built up until strong enough to resist every tendency to disease. Hundreds of subtle maladies are floating around us ready to attack wherever there is a weak point. We may escape many a fatal shaft by keeping ourselves well fortified with pure blood and a properly nourished frame."—*Civil Service Gazette.*"
Made simply with boiling water or milk. Sold only in packets by Grocers, labelled thus:
JAS. EPPS & Co., Homœopathic Chemists.
London, England

SCRIBNER'S LUMBER AND LOG BOOK.
Over One Million Sold. Most complete book of its kind ever published. Gives measurement of all kinds of Lumber, Logs, Planks, Scantling; cubical contents of square and round Timber; hints to lumber dealers; wood measure; speed of circular saws; care of saws cord-wood tables; felling trees; growth of trees; land measure; wages, rent, board, interest, stave and heading bolts, etc. Standard book throughout the United States and Canada. Get the new illustrated edition of 1882. Ask your book-seller for it. Sent post-paid for 35 cents.
G. W. FISHER, Box 238, Rochester, N.Y., or
A. G. MORTIMER, Peterborough, Ont.

(CONTINUED FROM PAGE 13.)

1885	Hamilton & Co.	—	—	—
1886	G. Carvill & Son	—	—	—
1885	do.	1	755	661,069
1886	Total	191	154 659	134,123 207
1885	Total	221	174,514	152 543,026

The export of timber as compared with past year was as follows:—

Port.	1886. Tons Birch.	Tons Pine.	1885 Tons Birch.	Tons Pine.
Liverpool	5,950	2,322	10,834	3,028
London	—	—	498	—
Continent	11	—	—	—
Avonmouth	—	76	—	—
Carnarvon	501	—	1,500	—
Crookhaven	—	—	363	—
Dublin	125	—	—	—
Fleetwood	400	706	—	658
Glasgow	512	9	—	—
Hare Island	—	—	7	—
Wexford	8	—	4	—
Queenstown	—	—	563	—
	7,512	3,113	13,769	3,686

Shippers.	1886. Tons Birch.	Tons Pine.	1885. Tons Birch.	Tons Pine
W. M. Mackay	4,172	2 827	9,170	3 138
S. Schofield	2,265	202	4,094	548
A. Gibson	1,056	8	7	—
R. A & J. Stewart	11	76	498	—
Geo. McKean	8	—	—	—
	7,512	3,113	13,769	3,686

The total export of deals, &c., from all New Brunswick ports to Transatlantic ports during the year was about 272,159,637 ft., compared with 291,081,759 ft. in 1885, 331.000,000 ft. in 1884, and 404,287,676 ft. in 1883. St. John is given above. The other ports are as follows:—

DALHOUSIE.

Year.	No. of Vessels.	Tons.	Deals s. ft.
1886..	42	21,947	18,615,319
1885..	36	19,282	13,796,950

BATHURST.

Year.	No. of Vessels.	Tons.	Deals s ft.
1886..	31	18,469	16,392,183
1885..	19	12,028	9,403,405

MIRAMICHI.

Year.	No. of Vessels.	Tons.	Deals s. ft.
1886..	148	85 998	72 276.391
1885..	169	104 691	87,259 028

CARAQUET.

Year.	No. of Vessels.	Tons	Deals s. ft.
1886..	1	1,197	1,004,377
1885..	6	2,275	2,232,000

RICHIBUCTO.

Year.	No. of Vessels.	Tons.	Deals s. ft.
1886..	33	13,910	13,117,800
1885..	31	12,981	11,909,050

SHEDIAC.

Year.	No. of Vessels.	Tons.	Deals s. ft.
1886..	19	7 613	7.209,360
1885..	15	6,336	5,797,035

SACKVILLE

Year.	No. of Vessels.	Tons.	Deals s. ft
1886..	22	9,884	9,425.000
1885..	18	7,423	7,117,000

It will be remembered that the shipments from outports are included in the shipments from ports—as, for instance, Campbellton is in Dalhousie.

SITUATION WANTED.

BY a young man of thorough experience in the Saw Mill Business, in all its details. Understands Telegraphy. First Class References. Address

"LUMBER,"
P.O. Box 136, Quebec.

NOTICE to CONTRACTORS

CHANGE OF TIME.

THE time for seeing the Plans and Specifications for the

NEW EXAMINING WAREHOUSE AT OTTAWA,

is hereby extended to Monday, the 21st February, and the time for receiving tenders to Tuesday, the 8th March. By order,

A. GOBEIL,
Secretary.

Dept. of Public Works,
Ottawa, 12th Feb., 1887.

MONEY to be made. Cut this out and return to us, and we will send you free something of great value and importance to you, that will start you in business which will bring you in more money right away than anything else in this world. Any one can do the work and live at home. Either sex: all ages. Something new, that just coins money for all workers. We will start you; capital not needed. This is one of the genuine, important chances of a lifetime, Those who are ambitious and enterprising will not delay. Grand outfit free. Address TRUE & Co., Augusta, Maine.

TORONTO MILLING EXCHANGE

IF you want to *Buy, Sell, Trade or Rent a Saw or Grist Mill*, send full particulars to me. I am a practical mill man. I advertise extensively, and my facilities for handling mills an unsurpassed by any in the Dominion. I also furnish contractors, sawmilliers, and others with men. All orders by mail promptly attended to. Write for particulars.

JOSEPH TUER,
101 York Street, Toronto.

WANTED.

A SITUATION AS SALESMAN, Inspector or in Office in connection with the Wholesale or Retail Lumber Trade. Have had several years experience in the Retail Trade, also in the Export Trade to Britain. Acquainted with the detail of R. R. and Ocean Freight and Shipping. Address Lock Box 33,

INGERSOLL, ONT.

YOU can live at home, and make more money at work for us, than at anything else in this world. Capital not needed; you are started free, Both sexes; all ages. Any one can do the work. Large earnings sure from first start. Costly outfit and terms free. Better not delay. Costs you nothing to send us your address and find out; if you are wise you will do so at once. H. HALLETT & Co., Portland, Maine.

CHRISTIE, KERR & CO

LUMBER DEALERS,
TORONTO, ONTARIO,
Office No. 9 Victoria Street.

The HENDERSON LUMBER Co.

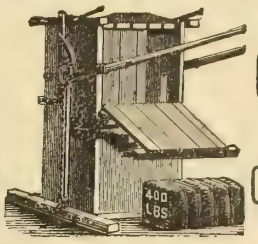
LIMITED.

DAVID H. HENDERSON, *President*; NORMAN HENDERSON, *Vice-President*; CHAS. H. WALTERS, *Sec.-Treas.*

Dealers in, and manufacturers of, Dimension and Bridge Timber, Sawn Lumber, Clapboards, Shingles and Lath. Packing Cases and Boxes a Specialty.

OFFICE, MILLS AND YARDS: 342 to 396 William Street, MONTREAL, and at ROXTON FALLS, P. Q.

S. S. KIMBALL



MANUFACTURER OF

CHAMPION STUMP & STONE EXTRACTORS

Cultivators, Hay Presses, Safes, &c.,

577 CRAIG STREET

P.O. BOX 945, MONTREAL.

Send for Circular.

WE ARE THE ONLY MANUFACTURERS in AMERICA OF

TAPER PIKE POLES

Made of the best White Maple, and turned in a Machine constructed especially for this work. These Poles are 13 feet long, and measure $1\frac{3}{8}$ in. at the pike end. being parallel for about 5 ft., after which they taper down to $\frac{7}{8}$ in. to the small end.

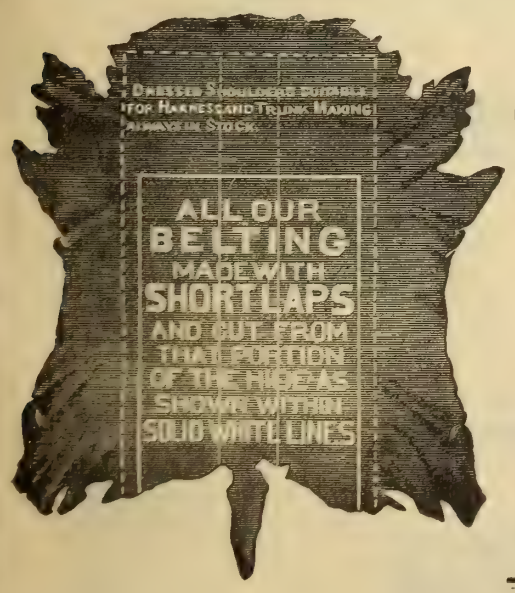
☞ Price, F.O.B. CARS at Peterborough, $25 per hundred. ☜

Sample Pole sent on application. W. FORSYTH, Peterborough, Ont.

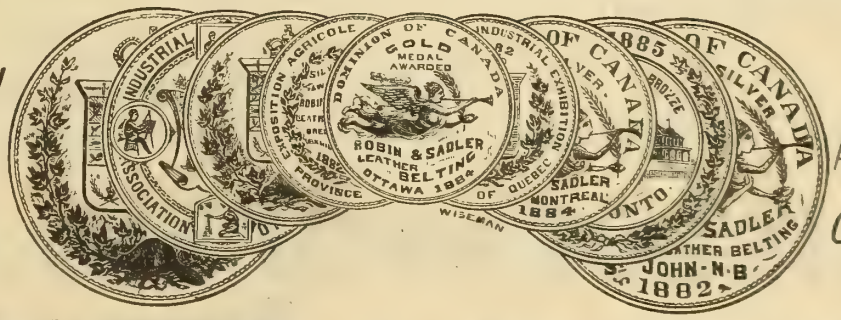
PATENTS Procured in Canada, the United States, and all Foreign Countries, Caveats, Trade-Marks, Copyrights, Assignments, and all Documents relating to PATENTS prepared on the shortest notice. All information pertaining to Patents cheerfully given on application. ENGINEERS, PATENT ATTORNEYS, and Experts in all Patent Causes. Established 1867.

Donald C. Ridout & Co. 22 King St. East, Toronto

Be sure and Advertise in our Special Issue.



Cotton and Rubber Belting.



All sizes of BELTING kept in stock

Orders filled promptly.

ROBIN & SADLER

MANUFACTURERS OF

LEATHER BELTING AND LACE LEATHER

Send for Price Lists and Discounts.

2518, 2520 and 2522 Notre Dame St., MONTREAL

129 BAY STREET, TORONTO.

CYLINDER
CURTAIN
PEDESTAL
STANDING
PARLOR

DESKS

Designs Unequalled! Materials the Best!

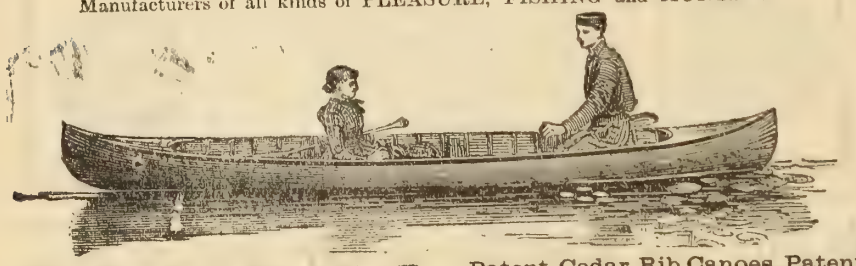
Arrangement Unsurpassed!

Workmanship A No. One! Prices the Lowest!

TEES & CO., 300 St. JAMES ST. WEST **MONTREAL.**

The Ontario Canoe Co, Limited.

PETERBOROUGH, ONTARIO,
Manufacturers of all kinds of PLEASURE, FISHING and HUNTING



CANOES

Gold Medal, London Fisheries Exhibition, 1883.

Patent Cedar Rib Canoes, Patent Longitudinal Rib Canoes, Bass wood Canoes, Folding Canoes Paddles, Oars, Tents, etc., etc

J. Z. ROGERS,
President and Managing Director

Send 3 Cent Stamp for Illustrated Catalogue.
Canoes for Lumbermen, designed to carry any amount of goods and chattels and strongly built, made to order on short notice.

THE
Gutta Percha & Rubber Mfg. Co'y

T. McILROY, Jr., Manager,

MAIN OFFICES and WAREHOUSE at the Factories, 135 to 155 West Lodge Avenue, P. O. Box 494. **TORONTO**

The largest Manufacturers in the world of Vulcanized India Rubber Goods for mechanical purposes.

Rubber Belting from ONE to SEVENTY-TWO inches wide.

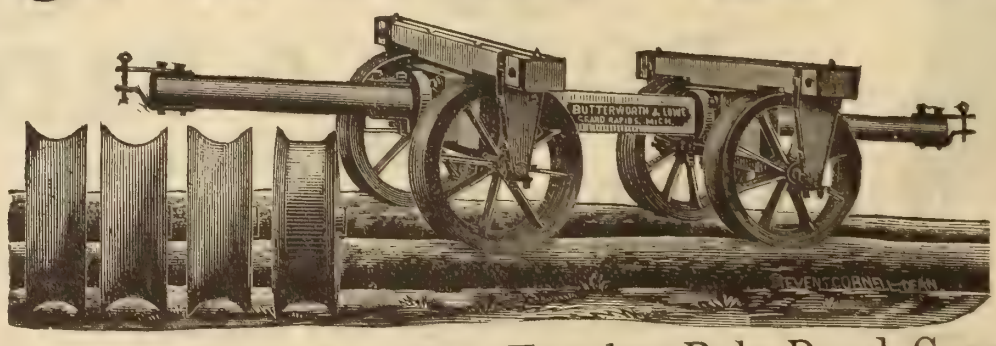
Hose, for conducting, suction and steam. ***Packing,*** Cloth Insertion and pure ***Tubing*** of all kinds. ***Rubber, Linen and Cotton Fire Hose. Leather Belting.*** Extra heavy American Oak Tanned.

A Full Stock always on hand. Write for Price Lists and Discounts.

Works also at NEW YORK and SAN FRANCISCO.

Butterworth & Lowe

GRAND RAPIDS



MICH., U. S.

Manufacturers of Logging Cars, Logging Trucks, Pole Road Cars; Wheels, Chilled and Unchilled, Flat-Faced and Concave, for every description of Logging Road.

Send for Circulars and mention this Paper.

SMITH'S

Mercantile & Land Reporting Agency

BANKERS—DOMINION BANK.

General Solicitor, JNO. LEYS, ESQ., Barrister, Toronto. Secretary, JOHN SMILEY, M.A.
MANAGER—WILLIAM SMITH.

General Offices—Court St., Toronto, Ont.

Telegraph Address—Agency, Toronto.

Having for its special objects the furnishing to subscribers of reliable information on the financial standing or otherwise of tradesmen and others, the collection of outstanding accounts and the procuring of the most reliable information from independent sources of the value and condition of landed and other properties in any part of Canada and the United States, with correspondents in Great Britain and other parts of Europe.

Our method of procuring for our subscribers the most reliable information is through solicitors of the highest standing, and from other equally reliable sources in the several localities indicated, who are under contract with us to supply the necessary information promptly.

The Landed Enquiry Department of this Agency, the only institution of this kind known, is invaluable to Solicitors, Loan, Investment, and Insurance Companies, Estate Agents, and others, preventing fraudulent land transactions resulting from misrepresentations.

The Department for the collection of outstanding accounts is conducted on an entire change of the system usually followed by Collecting Agencies, viz.:—Subscribers may have their collections paid either direct to themselves, or to the offices of the Agency, in which latter case remittances will be deposited to an account provided for that purpose, and immediately remitted to the parties to whom it is due, and will not be applied to any other purpose.

Another important feature in connection with this department is, that subscribers depositing accounts for collection will, if requested, be furnished with a Form of Script, on which will be entered the name of each debtor, the amount owing, and a full report of the prospects of collection, and providing that the receipts thereof be paid to bearer only, thus enabling subscribers to realize on their outstanding accounts.

The Agency will forward at least once in three months, or oftener if desired, a report and statement of all accounts in hand.

NOTE.—The offices of the Agency are open to the Solicitors and subscribers for reference to our numerous maps, atlasses, directories and correspondence, and for the transaction of business with their clients and customers when in Toronto.

W. SMITH, Manager.

J·L·JONES
WOOD ENGRAVER
10 KING ST EAST
TORONTO
SEND FOR PRICES

Notice to Contractors.

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for New Examining Warehouse, &c., Ottawa," will be received at this office until TUESDAY, 1st March, for the several works required in the erection and completion of the

New Examining Warehouse, &c.,

—AT—

—OTTAWA.—

Plans and specifications can be seen at the Department of Public Works, Ottawa, on and after MONDAY 14th February.

Intending contractors should personally visit the site and make themselves fully cognizant of the work to be done, according to the said plans and specifications, before putting in their tenders.

Persons tendering are further notified that tenders will not be considered unless made on the printed forms supplied, and signed with their actual signatures.

Each tender must be accompanied by an *accepted* bank cheque, made payable to the order of the Honorable the Minister of Public Works, *equal to five per cent.* of the amount of the tender, which will be forfeited if the party decline to enter into a contract when called upon to do so, or if he fail to complete the work contracted for. If the tender be not accepted the cheque will be returned.

The Department does not bind itself to accept the lowest of any tender.

By order,

A. GOBEIL,
Secretary.

Department of Public Works, Ottawa, January 27th, 1887.

ESTABLISHED 1856.

THE OLDEST BELTING HOUSE IN CANADA.

IF YOU WANT

Imported Oak Belting

MONTREAL	TORONTO	St. JOHNS, N.B.	DUBLIN	PARIS
1882	1883	Centennial 1883	International	International
Silver Medal.	Bronze Medal.	Silver Medal.	Exhibition 1865.	Exhibition 1867.

At Canadian Prices

SEND TO

JOHN C. McLAREN,

292 AND 294 ST. JAMES STREET MONTREAL.

American Rubber and Chesapeake Gandy Belting at inside Prices.

EVERY *MAN who is in any way interested in the Lumber and Wood-working industries of the country should send ONE DOLLAR for a year's subscription to the Canada Lumberman. The investment is a small one and will pay you ten-fold. Sample copy sent to any address on application.*

ESTABLISHED 1820.

EAGLE FOUNDRY

GEORGE BRUSH,

14 to 34 King and Queen Streets, MONTREAL.

MAKER OF

STEAM ENGINES — STEAM BOILERS — HOISTING ENGINES
STEAM PUMPS — BARK MILLS — CIRCULAR SAW MILLS
SHINGLE MILLS — ORE CRUSHERS — MILL GEARING
SHAFTING — HANGERS AND PULLEYS,
HAND AND POWER HOISTS FOR WAREHOUSES, &c., &c.,

And Agent for "Water's" Perfect Steam Engine Governor, and "Heald & Sisco's" Centrifugal Pumps.

7th Year of Publication. $1 per Year in Advance.

The Canada Lumberman

SPECIAL EDITION

We have now in course of preparation the FIRST ANNUAL SPECIAL EDITION of the CANADA LUMBERMAN,

Six Thousand Copies

Of which will be issued ***Friday, 1st April, next,*** and circulated among the trade throughout Canada, United States and Great Britain.

This issue of THE LUMBERMAN is intended to surpass, both in size and variety of contents, anything heretofore produced by the trade press of Canada. Arrangements are being made whereby every Province in the Dominion will furnish a complete budget of news of interest to every man engaged in the lumbering and wood-working branches of trade. The state of trade and the prospects for the coming season's business will be discussed in all its bearings, while the list of technical contents will be unusually large and complete.

No such opportunity has ever before been offered MANUFACTURERS OF SAW-MILL AND WOOD-WORKING MACHINERY, WHOLESALE LUMBER DEALERS, Etc., to introduce their business to the Canadian Trade. The tariff of advertising rates for this edition is so low that anyone desirous of doing business in this country should have their announcement prepared and duly forwarded.

From the rates specified below, advertisers will note that, if a series of insertions are ordered, they will gain all the benefit of the special issue of ***6,000 COPIES*** at the ordinary charge :

Tariff of Rates for Special Issue :

Two Pages	$44 00	*Quarter Page*	$8 00	*Three Inches*	$2 75
One Page	25 00	*Eighth Page*	5 00	*Two Inches*	2 00
Half Page	14 00	*Five Inches*	4 25	*One Inch*	1 25
Third Page	10 00	*Four Inches*	3 50		

(Size of Page 9″ x 12¼″)

Advertisers contracting for half or whole page advertisements can have descriptions of machinery and illustrations of same inserted among reading matter at the rate of $5 per column. Those not having displayed advertisements will be charged $8 per column among reading matter.

We beg to remind you that during the months of April and May Canadian lumbermen are fitting up their mills for the season's trade ; discarding old machinery and putting in new ; and for this reason, at no other time during the year will an investment in advertising pay as well.

As the time is short, and as all matter and advertisements must be in the hands of the printer by the 20th March, in order to insure proper classification, all who feel disposed to favor us with an order, should see that the same be handed in not later than the date mentioned.

Remittances may be sent with order, payable to A. G. MORTIMER, Peterborough, Ontario, or within thirty days of completion of contract.

LOWEST RATES FOR CONTRACT ADVERTISING FURNISHED ON APPLICATION

It is to the interest of every man in any way interested in the great lumber industry of Canada to assist in making this special issue of THE LUMBERMAN a success.

PUBLISHED MONTHLY By A. G. MORTIMER. | *The only Newspaper devoted to the Lumber and Woodworking Industries of the Dominion.* | SUBSCRIPTION $1.00 PER ANNUM.

VOL. 7. PETERBOROUGH, ONT., APRIL, 1887. NO. 4.

AN ACT RESPECTING THE DRIVING OF SAW LOGS.

QUITE a stir has been occasioned in lumber circles regarding the bill recently passed its first reading in the Ontario Legislature respecting the driving of saw logs and other timber on lakes, rivers, creeks and streams. Deputations of lumbermen have already gone to Toronto to interview the Government on the matter, making objection to some of the provisions of the bill. The result of these interviews will not likely be known until after the present issue of the LUMBERMAN. We publish the Bill in full, however, and will have more to say regarding the matter in a future issue. The Act reads as follows :—

1. Any person putting or causing to be put into any lake, river, creek or stream, in this Province, any saw log or other timber for the purpose of floating the same to the place of manufacture or market shall make adequate provisions, and put on a sufficient force of men to break jams of such saw logs or other timber in or upon such lake, river, creek or stream, and to run or clear the same from the banks or shores thereof, and to run or drive the same so as not to hinder the removal of any saw logs or other timber from the banks or shores thereof nor obstruct the floating or navigation of such lake, river, creek or stream.

2. In case of the neglect of such person to make such adequate provision, and put on such sufficient force of men, as aforesaid, it shall be lawful for any other person engaged in floating or running saw logs or other timber in such lake, river creek or stream, obstructed by reason of such neglect, to cause such jams to be broken, and such saw logs or other timber to be run, driven or cleared from the banks of such lake, river, creek or stream, and along and down such lake, river, creek or stream, at the cost and expense of the person owning such logs or other timber, and such owner shall be liable to such persons for such costs and expenses.

3. The person so causing such jams to be broken, or such saw logs or other timber to be run, driven or cleared, shall have a lien on such saw logs and other timber, for his reasonable charges and expenses for breaking jams, and running, driving and clearing the same, and shall be entitled to take and retain possession of such saw logs or other timber, wherever the same may be found, or so much thereof as may be necessary to satisfy the amount of such charges and expenses, and all costs, and may after thirty day's notice to the owner, if the owner be known, and advertisement thereof for three successive weeks at least once in each week, in a newspaper published nearest to where such saw logs or other timber may then be, sell by public auction, subject to the lien of the Crown (if any) for dues, the said saw logs or other timber, or so much thereof as may be necessary to satisfy the amount of such charges and expenses, and all costs, rendering the surplus on demand to the owner.

4. If the owner of the saw logs or other timber is not known to the person claiming the lien, then such person may after advertisement thereof for four successive weeks, at least once in each week, in the *Ontario Gazette*, and in a newspaper published nearest to where such saw logs or other timber may then be, sell by public auction the said saw logs or other timber or so much thereof as may be necessary to satisfy the the amount of such charges and expenses and all costs.

5. Any person whose saw logs or other timber in any lake, river, creek or stream, in this Province, are so intermixed with the saw logs or timber of another person, that the same cannot be conveniently separated for the purpose of being driven or floated to market, or place of manufacture, may drive all saw logs and other timber with which his own are so intermixed at the cost and expense of the person owning the same, unless such owner furnish a fair proportion of plant and men, and do or cause to be done a fair proportion of the work necessary to be done in driving all the said saw logs and other timber, so intermixed, and such owner shall, unless he so furnishes a fair proportion of plant and men, do or cause to be done a fair proportion of the work in driving said saw logs and other timber as aforesaid, be liable to such person for such costs and expenses, and such person shall have a lien on such saw logs and other timber for his reasonable costs and expenses for driving the same, and shall be entitled to take and retain possession of such saw logs or other timber, wherever the same may be found, or so much thereof as may be necessary to satisfy the amount of such charges and expenses and all costs, and may sell the said saw logs and other timber in the manner mentioned in the sections hereinbefore contained, but subject to the provisions as to notice and advertisement thereof as in said sections mentioned.

6. If the owner of the said saw logs or other timber shall dispute the amount claimed by a lien holder he shall, within five days from the receipt of the notice of sale, to be given by such lien holder to such owner, give notice in writing to such lien holder, that he disputes the amount claimed and thereupon the following proceedings shall be had unless the parties otherwise agree upon the amount to be paid :

1. Such notice shall state the name of an arbitrator and call upon the lien holder to appoint an arbitrator on his behalf within five days after service of such notice, and in default of such lien holder making such appointment it shall be lawful for the Judge of the County Court of the county, or the Stipendiary Magistrate of the District, as the case may be, in which such saw logs or other timber are situate upon request of the owner to appoint such arbitrator, and the two arbitrators so appointed shall forthwith appoint a third arbitrator in the matter ;

2. If after the arbitrators have been appointed, as aforesaid, they fail or neglect for the space of five days to appoint a third arbitrator, the said Judge of the County Court or Stipendiary Magistrate shall, within four days after a request in writing made upon him by either of the two arbitrators appointed as above, appoint a third arbitrator ;

3. The arbitrators may require the personal attendance and examination on oath of the parties and their witnesses and the production of all documents relative to the dispute, and may determine by whom the expenses of the arbitration shall be defrayed, together with the amount thereof, and shall make and deliver their award and determination within twenty days from the date of their appointment, and the said lien holder, may retain his lien and possession of the said saw logs and other timber until such award is made and delivered, and the amount found thereby and costs is paid by such owner to such lien holder.

7. If the owner does not forthwith pay the amount and costs which the arbitrators determine that he shall pay, such lien holder may proceed to sell by public auction the said saw logs or other timber, or a sufficient portion thereof, to satisfy the award and cost, and the subsequent costs of and incidental to such sale, first giving notice of such sale by advertisement for two successive weeks, at least once in each week, in a newspaper published nearest to where such saw logs or other timber may then be.

8. Any person whose saw logs or other timber are intermixed in any lake, river, creek or stream with the saw logs or timber of any other person, and who for any reason desires to separate the same, or does not wish to continue the drive, shall at his own cost and expense separate his said saw logs and timber from the saw logs and timber of such other person, and securely boom the same to one side, in such manner as to allow a free passage for the saw logs and timber of any other person who may wish to continue the drive.

NEWS NOTES.

Prof. John Macoun, Botanist to the Dominion Government, intends leaving for British Columbia about the first week in April, where he expects to remain until September next. Readers of THE LUMBERMAN may expect some interesting correspondence during the next few months.

A sale was completed a short time since by Mr. Donald Campbell, of Colborne, Ont., to Mr. Thos. P. Pierce, of Belleville, and Mr. Joseph Pierce, of Norwood, of the pine only upon 100 acres of land in the township of Otonabee, Peterborough county, the price paid therefore being $10,000. Messrs. Pierce are now busily at work taking out this pine as square timber for the Montreal market.

Two or three wealthy Michigan lumber companies which own large quantities of pine in Ontario will import a considerable quantity during this year, notwithstanding the Canadian export duty. A single raft of 3,000,000 feet was put together in Georgian Bay last autumn, and will be started for Saginaw on the opening of navigation. The Dominion tax will, it is said, be removed whenever lumber is put on the free list of the American tariff.

Permits to take out ties and wood in Ontario along the Canadian Pacific railroad have been granted by Crown Timber Agent Margach, of Port Arthur, to the following Winnipeg parties : Dennison Bros., whose permit covers the district from the Manitoba line east to Eagle river ; Egan Bros., to cut 125,000 ties in the district extending from English river to Savanne. The Hudson Bay company are also applying for a permit.

The Pontiac & Pacific Junction Railway promises to be one of the most important lines of railroad in the province. They have now employed a large gang of men on the work of construction. Application will be made by the company at the next session of parliament, for amendments to their charter. The amendments will include an extension of time for the completion of the road. The acquiring of timber limits in the Ottawa district, the working of saw mills, extending the railroad through the Province of Quebec to Sault Ste. Marie, crossing the Ottawa river in the county of Pontiac, a short distance west of Pembroke, and extending the line to Mattawa if necessary. To validate and confirm the agreement between the Canadian Pacific railroad for the purchase of the Aylmer branch of that road and to relieve that branch from all mortgages and charges.

THE MANUFACTURERS SPEAK.

Some Interesting Correspondence Concerning Prospects for the Coming Season's Trade.

From A. & P. WHITE, Pembroke.

We have cut about 3,000,000 ft. saw logs, and 1,000,000 ft. dimension timber at Duex Riviere. Part of this will be sawn at Duex Riviere and part at Pembroke.

From T. A. KIDD, Burritt's Rapids.

There will be about 500 to 1000 saw logs taken out here, all used for local improvements; 5000 to 7000 railway ties; 15,000 to 20,000 cedar fence posts; 200 cords cord wood.

From ONTARIO LUMBER CO., Toronto.

We have cut during the past winter about 28,000,000 feet of logs. This will be manufactured into lumber at Midland, French River and Gravenhurst. The prospects for the next season's operations are satisfactory.

From W. E. TENCH & SON, Chippawa, Ont.

The timber in this locality is fast being cleared out. Pine has already been cleared. About 200 M Oak, together with probably 100 M of Elm, Ash, &c., will be a fair estimate of the season's cut. The outlook points to a high price for oak.

From MANHARD & COMPANY, Brockville, Ont.

Business opens well. More orders booked now than at any time during the past three or four years. Some American customers feel a little shy over the Retaliation Bill. A fair crop of logs taken out this season, but I fancy not as many as people generally suppose.

From JOHN VANNOSTRAND, Aurora, Ont.

We have just about finished logging for this season. Have got in 7000 pcs., consisting of Pine, Hemlock, Basswood, Maple, Oak and Elm. These logs when cut will make about one million ft. We do only a retail trade now, as our standing timber is very limited and there is no more to be had in this locality.

From T. S. DOBSON, Harriston, Ont.

All the mills in this neighborhood are only small country mills and do not amount to much, as the timber in this part is pretty well cleaned out. They usually run along most of the winter and stock up from 500M to one million. Buyers are on the road enquiring, but seem charry of closing at marginal prices.

From W. B. & S. ANGLIN, Kingston, Ont.

Saw and Planing Mills: We manufacture about 2,000 Hemlock logs (Standard); 1,000 Baswood logs (Standard); 1,000 Pine logs (Standard); 500 Ash logs (Standard); 500 Elm logs (Standard); 200 Maple logs (Standard); 10 thousand cubic feet of pine, ash, and other lumber. We handle about 1000 cords of cord wood.

From the MUSKOKA MILL AND LUMBER CO., Bracebridge.

The cut this winter will be about 10,000,000 feet, with 2,000,000 of last year's stock on hand. This year's stock was principally cut in the townships of Franklin, Wood and Gibson, the season has been very favorable for taking out logs. Preparations are now being made for driving and the mills will start as soon as Navigation opens.

From CASSELMAN, Ont.

Logging operations have not been as extensive as was anticipated last fall, owing to the unfavorable nature of the season. It is probable that the cut for the present summer will be from 2 to 3 millions less than last year which was about 11 millions. Prospects are an improvement on last spring as orders are coming in very freely. Mills will probably commence work some time in April.

From J. HADDEN & SONS, Foxmead, Ont.

Our manufacture is almost entirely confined to Bill Timber, which we are now manufacturing up to fifty feet in length. We have the only steam logging railroad in this part of Canada, and bring our logs direct from the woods in this way. We also operate a shingle mill in an adjoining building. The output of lumber averages 1,000,000 feet each season. Prospects for this season are good.

From M. BRENNAN & SONS., Hamilton.

In reference to logs and lumber prospects we think through out the Muskoka and Parry Sound Districts, the prospects for a fair stock is very good. The season has been favourable and most of the lumbermen will have full stocks. For ourselves, we have got out about 12 millions, which we hope to get all safely down the rivers and manufacture at our two mills, together with a large quantity of shingles both XXX and XX.

From B. CALDWELL & SON, Lanark, Ont.

The fall of 1886 was unusually good for log cutting on the upper Mississippi, and also on the Madawaska River. The winter months have been very good for hauling and the drawing was up early. However, the snow was too deep for cutting and upon the whole, consider the quantity of logs cut this season, 1886-7, will be somewhat less than the year previous, especially in that part of the country named. Consider the prospects for business during the coming spring favorable.

From CALABOGIE, Ont.

There has been a change made in the firm of Francis Carswell & Co., whose mills are situated on Calabogie Lake, with limits in the vicinity, Mr. Francis having sold his interests in limits and mills to Mr. E. MacKay, of Renfrew. The business will be carried on under the firm name of Carswell, Thistle & MacKay. A busy season is anticipated. There are sufficient logs at the mills to last until the new logs arrive, and everything is in order to begin operations as soon as the ice breaks up. Estimated cut for season 8,000,000 feet.

From THOS. OUELLETTE, Gordon Ont.

The output of logs for Essex and Kent, of oak, ash, balsam, sycamore, maple and a small quantity of chestnut will be about 18 million feet. There is a very large quantity of elm, put out for hoops and staves. Although we had about six weeks of sleighing it came so early that the mill men were not prepared for it, which accounts for small output. Demand for lumber is very good and business looks good for the coming season. Think there will be a large quantity of logs put out this season on trucks, &c.

From GREEN & ELLIS, Fenelon Falls.

We have only the two firms operating here now in lumber and shingles, ourselves and Messrs. Thompson & McArthur, which are taking out about their usual stock. Thompson & McArthur will start cutting custom stuff about the first of April, Green & Ellis will start their mill about the first of May. They have about one and one-half million feet of lumber on hand, composed of shipping lumber and bill stuff of all kinds, which they are shipping to all points in Canada and United States. Prices from $6 to $16 per thousand feet.

From J. K. WARD, Montreal.

I think that there will not be over two-thirds the usual quantity of logs got out this winter, in the part of the country I am operating in, *a.e.*, the River Rouge, P. Q., the snow being at least five feet deep in the woods, making it very expensive lumbering, where the timber is scattered. I am told that there will be at least 25 per cent. shortage of logs on the Ottawa, and not more than one and a half million feet (cubic) of timber got out, with a prospect of any amount of water for driving. Demand for lumber bids fair to be good the coming season.

From DICK, BANNING & Co., Keewatin.

Our winter operations will be about six million feet, this we intend sawing, as also three-quarters of a million on hand, and one and a half million of logs, part of drive hung up. Providing the proposed dam is built at the falls near Rat Portage, a heavy sawing season is expected. The season promises to be an unusually busy one. Demand is firm at present with every indication of a good season's trade. Stocks are decreasing at all points here and west. From reliable reports the proposed large Grist Mill will soon be commenced, and points to a large influx of settlers for this place.

From MESSRS. BERTRAND & Co., Quebec.

The three planing mills which prepare wood for the retail trade here in Quebec are well enough employed. The local retail trade is only middling and appearances for the future are not bright. The pine that is in demand here is deals of 2 inch, 1½ inch, 1¼ inch and 8 inches and up, 1st and 2nd quality, and the consumption is limited in our old city of Quebec. We would be glad to have an address where we could purchase Hardwood, Walnut, black and soft; Cherry, Birch, Ash, Basswood, &c. As for news we await your interesting journal to find that, and the opening of navigation to give a little life to our trade.

From PERLEY & PATTEE, Ottawa.

The present winter has been the worst for logging operations known in this part of Canada for many years; the snow has been exceedingly deep with a heavy crust and the slush on the lakes has been troublesome throughout the winter. In consequence of these drawbacks the cut of logs will be fully 10% less than anticipated, which must make the cut of lumber for 1887 less than 1886. The prospects of the lumber trade for 1887 are exceedingly good (the strikes in the United States being the only uncertain element in the situation,) and we look for an advance in prices, particularly in the lower grades.

From THE MUSKOKA MILL AND LUMBER CO., Toronto.

The Company's operations this winter have been confined to the Muskoka river and lakes. Their stock, with the logs wintered over, will be about fourteen million, including long timber. It would have been larger but for the great depth of snow in the woods and the crust which is severe on the horses. The Company are getting the Hamilton Manufacturing Co., of Peterborough, to put up a Band Saw Mill for them, which they hope will prove a success, and save much good lumber going into saw dust. The mill will probably start about the middle of April, or as soon as the ice breaks up. The prospect for the season is considered fair although the price of common lumber is still low.

From TRAIN & SON, Burk's Falls.

The Victoria Harbor Co. will have a 5,000,000 feet drive to go over the Magnettewan to the Georgian Bay this season. Train & Son will manufacture here about 2,500,000 feet, part of which will be put into shingles. E. H. Smith will also have sawn here about 500,000 feet of basswood. Business throughout will be lively. The only thing this place lacks to make it a splendid point, is proper switch accommodation.

From DAVID ROSS, Whitemouth, Man.

In compliance to your request for a report of this season's cut of timber, the following is as near the mark as can be given:—G. H. Strevel, ties, 300,000; Wm. S. Reade, ties, 75,000; McKinty & McKinnon, ties, 30,000; J. Ferguson & Co., ties, 40,000; David Ross, logs, 2,000,000 feet, besides a large quantity of cordwood. This has been a remarkably fine winter for work. The camps will be closed up here next week.

From P. O. BYRAM, Madawaska, N. B.

Our log hauling from the stump was done some time ago, but considerable yet to haul off of yards. The repeated snow storms has prevented a good bottom being made to roads, and it is doubtful if all will be got off of yards. A falling off of fully one third of lumber may be expected, owing principally to the large quantities of snow. American lumbermen hang on still, slaughtering our cedar, to manufacture on the American side, leaving the best half of the lumber in the stump only to the depth of the snow, but they pay no export duty for slaughtering our forests, and can afford to lose heavily in the getting, but that don't save the destruction of our lumber. It's a piece of outrageous blindness to allow our forests to be slaughtered yearly to build up American enterprise at the sacrifice of our own.

From GODERICH, Ont.

Firms doing business here the past season are: Williams & Murray, H. Secord, Diment & Company, Jno. D. LeBel. W. & M. and D. & Co., manufactured their own stock, the former at Blind River, the latter at Thessalon. The other purchase from mills North of this and on the Georgian Bay. The amount of business done has been rather small, probably did not exceed ten million feet by all the dealers (4). Their market extends from Goderich to London, St. Thomas, Port Colborne, Guelph, Norwich, and intermediate points, with occasional shipments of better qualities to the United States. Lumber consists principally of white pine, with some few small cargoes of Norway or Red pine. Prices for the past season have remained very steady, about as follows, f. o. b. cars here:

W. P. Mill Culls	$ 8 00
" Common Stocks	11 00
" Last and Scantling	11 00
N. P. Joist and Scantling	10 to 10 50
" 1¼, and 1½ in. Flooring	13 50
W. P. Dressing	16 00
" 1 in Clear and Picks	24 to 26 00
" 1¼, 1½, 2 in Picks	33 to 35 00
" Lath, 1½ in., 4 ft	1 85 to 1 90

Very few shingles come here by water. Dealers supply their customers direct from mills on the Midland and N. & N. W. R'ys. Williams & Murray, who have been in the business since 1867, have just dissolved partnership, the senior partner continuing the business. They sold the Blind River Mill and limits to Lawton Bros., of Toledo and Geo. A. Butterfield of Alpena, who compose the new company of "Blind River Lumber Co." They expect to get out about five million feet this season on the Blind River, which will go to Toledo. Diment & Co. may get out from six to eight million at Thessalon, which will likely be brought to Goderich for distribution.

MANITOBA AND THE NORTH WEST.

—The Canadian government is establishing agricultural stations in the northwest provinces, and a special feature of these stations will be the attention paid to the forestry. As large a variety as possible of fruit and forest trees will be tested with a view to future forest planting in the prairie sections. For the more rapid distribution of desirable varieties of trees, a nursery will be started for their propagation, and the distribution of such as may be found adapted to the climate.

—In the district of Alberta, in the Northwest, all the timber limits under license, except one, are situated west of the meridian of Calgary, and chiefly on the Red Deer, Rosebud, Bow and Clearwater Rivers, and upon the Old Man's River north of Fort Macleod. The average amount collected for dues in the Calgary agency amounts to about $5,000 annually, and for bonuses for timber berths along the Bow and Kanaskis Rivers, the large amount of $62,426.61 was received at this agency in one year.

Advertise in the Canada Lumberman, it will pay you.

NEW BRUNSWICK MATTERS.

INTENSE excitement prevalled in St. John when the announcement was made that the Maritime Bank had suspended payment. No definite cause for the failure has yet been made public, the managers in St. John being yet reticent on the subject. The suspension has been severely felt in Fredericton, where stock is held to the extent of $50,000 or $60,000. It is said that the suspension was caused by the carrying of heavy lumber operators through a period of financial embaraassment.

The St. John *Globe* says: "The Maritime Bank has been an unlucky institution almost from the start. A large portion of its original capital disappeared long ago in the interest of one or two individuals. It had in its experience of one or two large lumber operators a warning that should have satisfi d it of the shoal water in which it was navigating, but this seems to have had no effect upon it, for now it appears to be irretrievably wrecked on a dangerous reef which its past experience should have taught it to avoid. The reserve and almost mystery which surrounds the break-up, and which the reporters seem to be unable to penetrate, seem to justify the fear that the suspension means a very bad failure. Some large lumber firms are heavily involved.

Advices to the St. John press stated that Guy, Bevan & Co., timber merchants, of-Mobile, Ala., were protested in London on the 9th inst., on a £1,000 draft. Attachments have been issued at Mobile on the property of the firm to the amount of £17,000.

Friday evening's *Globe* stated: "To-day it became known that Messrs. Stewart had placed on record on the 9th inst. a transfer of valuable property in Gloucester county to the New Brunswick Trading Company. On the 10th inst. there was placed on record a bill of sale of the same property to the People's Bank, Fredericton. The latter document was dated in 1884, but was never recorded."

A despatch from Montreal to the same paper says:

A large seizure has been taken out by the firm of J. R. Greenshields & Guerin, acting for the Maritime Bank, St. John, against the timber and other property of J. Stewart in Ottawa district. The seizure is for $500,000.

It is said by Messrs. Stewart that instead of their being a source of weakness to the bank they have on more than one occasion been the means of saving it from suspension. Some years ago on the suspension of Messrs. Carvill, McKean, & Co., the bank would have suspended payment had not Messrs. Stewart provided $70,000 or $80,000 to enable it to tide over the run made on it at the time. The Stewart firm claim that very considerable assistance has been rendered by them on more than occasion to the bank.

Mr. Thos. Maclellan, president of the Maritime Bank, arrived home on Sunday morning's train from Montreal. He stated that his visit to Montreal was for the purpose of arranging for the seizure of the Stewart property.

It has transpired that on the 11th inst., a bill of sale was fyled, transferring all R. A. & J. Stewart's deal, property and schooners at St. John to the New Brunswick Trading Company. This includes a quantity of deals in the barks "G. H. Gordon" and "Young Eagle." These deals were furnished from Messrs. F. Tufts & Co.

The following is the order in which the recent bills of sale and deeds have been recorded in the registry office at Bathurst

(1) Bill of Sale: R. A. & J. Stewart to New Brunswick Trading Company, dated March 7th, 1887, recorded March 9th, 1 887; consideration, $38,500, viz.: 3 wood-boats, 10 shares Restigouche Boom Company's stock and 10 debentures Restigouche Boom Company: mill requisites and supplies; trade requisities; 1 fire engine; booms; lumber licenses: 4 shares Miramichi Steam Navigation Company's stock; household furniture; logs in Tetagouche river (estimate), 736,000 sup.ft.; logs in Millstream river (estimate), 1,550,000 sup. ft.; logs in Grant's Brook (estimate), 375,000 sup. ft.; spruce and pine deals and other sawn lumber, 1,982,000 sup. ft.; logs at Jacquet River Boom, 87,000 sup. ft.; spruce logs and birch timber on the Big and Little Tracadie rivers and Pokemouche river (estimate) 5,000000 sup. ft.

(2) Deed dated 31st December, 1886, recorded 9th March, 1887; John Stewart to N. B. Trading Company; consideration $43,400, viz.: The "farm" formerly owned by Hon. John Ferguson, the "homestead" formerly owned and occupied by Hon. J. Ferguson, the store, wharf and mill property, engines, boilers, furnaces, mill machinery, booms and water and all other privileges connected with the mill.

3. Bill of sale dated 7th August, 1884, recorded 10th March, 1887, R. A. & J. Stewart to People's Bank, Fredericton—consideration $1, and also in consideration of advances made or to be made, viz.: All cows, horses, grain, etc., on the "Farm." All stock in store, books and book debts, notes, [illegible] in action, etc. Also, all logs and lumber to be manufactured from the logs.

4. Deed dated 4th April, 1883, recorded 10th March, 1887, John Stewart to A. F. Randolph, president of the People's Bank, Fredericton consideration$ 1, and also in consideration of advances made or to be made the "Farm" the "Homestead," the store, wharf and mill property, dwelling houses, etc., etc.

The Tracadi mill property was transferred to the New Brunswick Trading Co. in 1886, and duly recorded.

LEGISLATURE NOTES.

Mr. Park, in a recent address in the Legislative Assembly, referred in the following terms to the question of stumpage: "Some years ago the speech at the opening of the house used to refer to the depression in the lumber trade. Why is no reference made to the matter now? The question of stumpage is one that concerned the bread and butter of many persons in this county, of many in all the northern counties. Kent and Restigouche, Gloucester and Northumberland were opposed to the government's high rate of stumpage, and candidates in these counties during the last election expressed themselves in favor of a reduction of that stumpage. He hoped that members from the southern and western parts of the province would not think lightly of this stumpage question. It was one of vital importance to the people of the north. During the past four or five years since the government's high stumpage was imposed the value of mills that cost $70,000 had been reduced to $40,000 and less. To show how the stumpage affected the lumber trade of the north he would give some figures in reference to the shipments of lumber from North Shore ports during the past few years. In 1883 there were shipped 149 millions, in 1884 the amount was 108 millions, in 1885 the shipment fell to 87 millions and last year to 72 millions, or a difference of over one-half during the four years. That falling off meant that $160,000 less was spent for getting out logs, sawing of lumber and the hauling of the same than four years previously. Everybody was interested in that—the man who goes to the woods, the man who works in the mill, the man who loads vessels and the merchant. Some one will tell us, no doubt, that this falling off in the shipment of lumber is due to a general depression in the lumber industry. But what do the shipments from Nova Scotia show? In '83 there were shipped from that province 77 millions; in '84 69 millions; in 1885 79 millions, and last year 87 millions, or in other words an increase in Nova Scotia during four years of 13 per cent., while the north shore trade has fallen off over 50 per cent. during the same time. During the provincial elections the canvass was used that the government intended to give a rebate on the stumpage, and he read from a circular issued from Mr. Snowball to show that members of the government have led lumbermen to believe that such a rebate would be allowed. He hoped that the member or members of the government who had made such a promise to the lumbermen would have the manliness to say so now. The government say that they charge the high rate of stumpage in order tr raise a revenue, but he would remind the house that when the stumpage was 80 cents the revenue obtained was greater than it is at present,"

* * *

In debate on supply Mr. Hutchison contended that lumber at the North Shore and particularly in Northumberland county was greatly handicapped and that in the matter ot laths alone there was a difference in the favor of the southern part of the province ot 60 per M, the average rate at the North Shore being 80 cents and at St. John $1.40. Replying to the query of the solicitor general why don't the lumbermen in Northumberland ship their small lumber, the speaker said that they do ship a great deal. This was the only way they had to get rid of it. But it was here again that the North Shore was unfortunate as the freight from the North Shore was about three times as great as it was from St. John. Last year the shippers of his county had to pay $6 on lumber and $1 on laths, while it was a well known fact that in St. John last season laths were shipped to New York at 40 cents per M.

The Provincial Secretary—What are your rafting charges?

Mr. Hutchison said that depended to a great extent on the river. On an average the rafting, delivery and other charges cast us about $1 per M. The North Shore is also handicapped on account of the severe labor that is necessary to get logs to market. While rafting on the St. John may be more expensive, the removal of logs cost less than at the North Shore. With regard to the assertion that there were more small operators now than ten years ago he said such was not the case. The great evil the small operators complain of in Northumberland county is that the small operators do not hold the land and they can't get it. He was a small operator himself. All he could get was twelve miles. He did not blame the increased stumpage for this, but he blamed the system of crown lands management for it. This is exactly the charge he had to bring. In 1886, in Northumberland, Gloucester and Kent counties there were 2,386½ square miles of lumber lands held, from which stumpage to the amount of $65,139.29 was paid, all of which came out of these counties. The whole of this area was held by nineteen gentlemen. Noticing this fact and that these people have the monopoly of the land for ten years, he failed to see the point of the solicitor general's argument that there were more small operators now than ten years ago. He disputed the fact that in the county of Northumberland there were more small operators [illegible] years ago; indeed th re were less. Under the old system if a man wanted certain land [illegible] the auction the next year and he would get them. Now he has got to wait seven years. In [illegible] in Northumberland county he found one man who held 68 [illegible] and paid a yearly rent for stumpage per mile of $[illegible] including the $4 for renewal of lease, amounted to $22.10. Of the 2,386½ miles held in this county he figured that the average stumpage was $27.29 per mile, and $4 per mile for renewal, which gives the government only about two per [illegible] for their investment. This he did not consider fair management. He finds that one man holds 249 miles and that he pays thereof only $25.10 per mile. Another man who holds 19 miles pays $106.60. This on the face of it appeared uniust and unreasonable. Then, again, another individual has 197½ miles and he pays in stumpage $39.30 per mile. Another one holding 39 miles pays $21.54, another holding 406 miles contributes $35 per mile. Another with 72½ miles pays $4.02, while there is another holding 70 miles who pays nothing at all. If this was fair he failed to see it. The crown land should not be shut up to monopolists. The evil is the small operators have not got the land and cannot get it. It was monstrous that all the lands in his county should be held by nineteen individuals and that they should hold it for a period of ten years. The reduction of stumpage would not help matters in this respect. It was a fact, however, that in the campaign the president of the council had in effect stated that the government would just manipulate things so that the lumber would get 25 per cent. off. The country wasn't going to know anything about it. The reduction would be made and nobody would be the wiser.

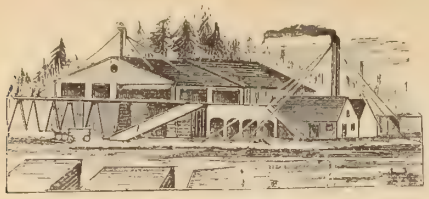
WOOD-WORKING PATENTS.

The following list of patents relating to the wood-working interests, granted by the U.S. Patent Office, up ot March 20th, 1887, is specially reported by Franklin H. Hough, Solicitor of American and Foreign Patents, 925 F Street, N. W. Washington, D.C., who will furnish copies of patents, for 25 cents each.

358,474,—Shingle-sawing machine,—P. O'Connor, Ludington,
358,495,—Veneering Wood,—J. H. Spedman, Cortland,
358,550,—Saws, Feed-rool for gang,—W. Harvey, Arnprier, Canada.
358,607,—Lathe tool holder,—C. E. Hall, Brick Church, N.J.
358,678,—Wood, Ornamenting,—A. Komp, New York, N.Y.
358,772,—Saw,—J. E. Emerson, Yonkers, N.Y.
357,582,—Saw-mills. Carriage feed-mechanism for,—A. Cunningham, Milwaukee, Wis.
357,595,—Saw-tooth swage,—D. G. Hadley, Fitchburg, Mass.
357,678,—Saw Guide,—J. W. Maxwell, Louisville. Ky.
357,679,—Saw-mill band,—J. W. Maxwell, Louisville, Ky.
357,680,—Sawing-machine. Scroll,—J. W. Maxwell, Louisville Ky.
357,681,—Saw-mill band,—J. W. Maxwell, Louisville, Ky.
357,810,—Lumber-binder,—W. Baynes, Buffalo, N.Y.
357,818,—Lumber-binder,—A. R. Clark, Buffalo. N. Y.
357,866,—Saw-tooth swaging device,—J. A. Shull, Poplar Bluff, Mo.
357,913,—Saw-gummer and sharpener,—C. Eidelbach, Faltonia, Tex.
358,003,—Saw-mill. Combined band and circular.—E. W. Turner and J. Reynolds, Blexwich, England.
358,026,—Saws. File for band,—J. E. Emerson, Beaver Falls, Pa.
358,045,—Shingles. Machine for dressing,—H. Lightner, Neff's Mills, Penn.
358,069,—Saw-tooth swaging machine,—S. A. Parke, Bay City, Mich.
358,159,—Saw-mill dog,—T. Manley, Nevada, Mo.
358,173,—Sawing-machine. Circular,—C. J. Sturgeon, Nilos Grove, Pa.
358,217,—Saw-filer and Gummer,—I. H. Palmer, Ledi, Wis.
358,328,—Saws. Apparatus for removing gum from.—J. C. Ballew, Evansville, Ind.

There are 89 logging railroads in Michi[illegible] of 475¼, and equipped with 127 locomoti[illegible]

The Glasgow correspondent of *Timber*, says:—"There are not many transactions taking place in timber, and although deals are moving pretty freely, prices are still keeping at the low level. The Quebec merchants are finding it rather uphill work in making business of it this year, so far as I can learn. To the Clyde little or nothing has yet been done, and it does not appear as if there will be much business, for Spring shipment at least. The usual contracts for cargoes to the coast ports have mostly been fixed, and they are pretty well spread amongst the shippers. As one or two contracts are still open, it is premature to say who has been most successful."



The Canada Lumberman

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ANNUAL SPECIAL EDITION.

PETERBOROUGH, ONT., APRIL, 1887.

A LARGE amount of editorial, correspondence and illustrated matter, has unavoidably been held over until the next issue.

STEWART & Co., of London, Eng., and St. John, N. B., have entered an action against the *Star* newspaper for $100,000 damages for an alleged libelous article in connection with the Maritime Bank, of St. John, N. B., and for half a million dollars damages against the Bank of British North America, for alleged damages sustained by the bank refusing to accept one of their checks.

THE New York *Lumber Trade Journal* is one of the latest additions to our exchange list. It is a semi-monthly publication of thirty pages, and is full of interesting matter pertinent to the lumber trade. Notwithstanding the fact that this journal is only in its second year, and has opposition to fight in every direction, it seems to be holding its own and enjoys a large advertising patronage.

No trade journal published in the South has made greater progress than the *Southern Lumberman*, of Nashville, Tenn. Being the only paper in the Southern States devoted to the saw mill, lumber and machinery interests, it has a wide field to cover, and it is making the most of its opportunities. Published semi-monthly at $2 per year. Free sample copies will be sent to any address on application.

THE Maguire failure has, it is claimed, turned out much more serious than was at first expected, and has now been thrown into court. The assets are pretty well included in the securities given to cover secured claims, therefore the balance of the creditors will not likely get a cent. It is generally stated that two or three Canadian banks are greatly to blame for the way this firm has been allowed to carry on business.

IN view of the success of the experiment made in the direction of preventing such immense losses of timber by fires as have occurred in past years and the strong pressure to continue the service and make it more effective, the Crown Lands Department of Ontario has determined to do so and extend it, which will necessitate an increased vote. It is confidently assumed, however, that any judicious expenditure in this direction will meet the approval of the Province at large.

THE WM. HAMILTON M'F'G CO., of Peterborough, Ont., have arranged with Wm. M. Wilkin, of Erie, Pa., to build his patent Compensating Balance Gang, for the Dominion of Canada, of which a full description will be given in our next issue. They have built and are now shipping one of their New Improved Oscillating Iron Gangs, with gate 54 inches wide and 8 inch crank, for the Charlemagne & LacOuareau L. Co., Charlemagne, Que. This is the same style of gang that they put in last season at Three Rivers, Que., Little Current and French River, Ont., and which gave such good satisfaction.

It is said that Mr. Peter McLaren, the well known lumberman, retires, after a business career of about twenty-five years, with a fortune of a million and a half of dollars. He will probably take up his residence in Toronto, where, it is said he purchased a handsome residence some time ago. It is stated by the Perth *Courier* that he is willing to invest some of his money in a blanket factory in that town. The sale of his property includes everything except the lumber in the yards at Carleton Place.

THE past month has been a disastrous one in certain lumber circles in New Brunswick, as in addition to the failures reported in another column of this paper, we are also called upon to add the name of Geo. McLeod, ex-M.P. for Restigouche, which took place on March 25th. Mr. McLeod was one of New Brunswick's largest lumber operators, but the failure was not unexpected. No statement of liabilities or assets are yet to hand, nor the names of the heaviest creditors. The official reason of the failure is said to be the suspension of T. C. Jones & Co., of Liverpool, which firm held all Mr. McLeod's freight moneys, and large sums of his also, to accruing liabilities. The suspension of this business will be a heavy blow to St. John, where he employed a large number of laborers on his vessels. His lumber operations were chiefly on the North Shore, which will suffer heavily.

A CURRENT newspaper telegram from Ottawa, Ont., chronicles the fact that assurances have been made that the federal government proposes to liberally subsidize the Ottawa ship canal scheme. The project is to shorten the distance between the west and the seaboard, by a direct and continuous water route, by the utilization of Lake Superior, Sault Ste. Marie, North Passage, Georgian Bay, French river, Lake Nippising, connecting and neighboring lakes, and the Ottawa river to the St. Lawrence and the ocean. The plan requires some improvements on the upper Ottawa, and the digging of about 21 miles of canal. Take a look at the map and see what a short cut from the west to the Atlantic the proposed route makes. Of course it is only a summer route, but it will stay open as many months as the "Soo." It is said that this project is original with C. H. Plummer, of East Saginaw, Mich., who at one time was admitted to the Canadian Parliament and there presented his plans.

DURING the past month an extensive sale has been effected between Mr. Peter McLaren, of Perth, one of the most extensive and best known lumbermen in Canada, and Mr. W. E. Edwards, M. P., Mr. James McLaren, president of the Bank of Ottawa, and a number of other gentlemen. The whole property belonging to Mr. McLaren was transferred to the new company, which will be known as McLaren & Edwards. The bill of sale included limits, mills, etc. The limits, which are situated in the counties of Lanark, Frontenac and Addington consist of about three hundred square miles. There is one mill on the K. & P. railway, besides the mills in Carleton Place. The price paid is said to be in the neighborhood of $900,000. Mr. Peter McLaren was one of the representative lumbermen of the country, and his resolve to go into private life has caused considerable surprise. His successors, however, are also well known among the trade, and the indications are that the business will not suffer under the new management.

WE herewith present our readers with the first annual special edition of THE LUMBERMAN, which although by no means as large as we had hoped to have made it, nevertheless contains a very large amount of carefully prepared matter of interest to the trade in general. It was not until after our announcement had appeared concerning this special edition that we fully realized that the same should have been issued earlier in the season. To a great extent this accounts for a much larger number of pages not having been added, and for this reason in particular, and also from the fact that the time allotted us was too short to allow of the preparation of many reports which were intended for this issue, that many omissions may be noticed. We take pleasure, however, in drawing attention to the extensive improvements we have made in the typographical and general appearance of the paper. The new dress of type used for the first time on this issue is from the well-known foundry of Miller & Richard, Edinburgh, Scotland, while the fine toned paper now used is furnished by Messrs. Buntin, Reid & Co., of Toronto. Improvements necessarily come slowly, but by persistent effort, and through the kind assistance of the trade, we hope to fully carry out the prospectus published last fall on our assuming control of THE LUMBERMAN. This issue is intended to find every lumberman and mill-owner in Canada whose name appears on the commercial reports, and we would respectfully ask that a careful reading be given it in every case. We believe that we are not asking too much when we solicit from every man in the trade his subscription to this the only lumber journal published in Canada. It may not be out of place here to mention that the annual special edition of this paper will hereafter be issued on the first of February of each year, and that before that time next year it is hoped that the young 'un of to-day may have grown to a healthy child.

FROM the official reports issued by the Commissioner of Crown Lands for Ontario, we learn that the accounts for timber dues, bonus, ground rents, etc., for the year 1886, amount to $742,029.64, and the total collections under same heads amount to $715,804.61. The total collections during the year from woods and forests is $715,304.61, which includes $147,471.00, payment of bonuses on sale of timber berths of 22nd October, 1885, which became due in 1886. This sum being deducted leaves $568,333.61 as revenue proper from timber dues, ground rents, etc. The amount collected is in excess of 1885, and of the estimated receipts for the year, and may fairly be taken as indicating that transactions in sawn lumber in 1886 have been of increased volume; that sales have been more readily effected, and on improved terms, as compared with the previous year. For the year 1887 the forecast is an increase in the cut of saw logs, and a diminuation in the manufacture of square and waney pine. The market in the latter has been dull for the past year or two, sales of any importance being confined solely to the largest and finest timber, small sized and inferior pine being almost unsaleable except at greatly reduced prices.

WESTERN papers in the States are publishing a special despatch from Ottawa stating that a story of "inhuman brutality and damnable wrong" done to women in the lumber camps of the Upper Ottawa has come to light from Desert. It is alleged that "a gentleman from Pembroke Ont., two or three weeks ago made a trip into the lumber region to investigate the report," and found it true. Every-one who knows anything of the lumber camps will know the story to be a wretched lie. The Pembroke *Standard* takes the trouble however to deny it categorically, and continues:—"Very likely the despatch is the work of a journalistic scamp at Ottawa, who for months past has been making a disreputable living by sending sensational despatches from that city to the American press, everyone of which, on investigation, turns out to be lies. This is no doubt the fellow who invented the story some months ago about a famine in Labrador, who later got up a report about an Indian rebellion in the North-West, and in November last put in circulation the story about the murder of a whole family at White River, on the C. P.R. Even many respectable Canadian papers were deceived by the White River story, so circumstantial was it, and complete in all its details; but the whole thing was nevertheless a fiction pure and simple. This Desert iniquity, we are convinced, is another of the same sort, viz., a pack of lies."

WE desire just here to have a few words with the old-time readers of THE LUMBERMAN, and also the three thousand new ones whom we expect to peruse this issue. We desire to become acquainted not only with the business workings of every lumber manufacturer and dealer, and planing mill man of the country, but also make ourselves acquainted personally with all with whom we do business in any way. In other words we want to make the CANADA LUMBERMAN the mouth-piece of every man engaged in the trade, and take pleasure in repeating our oft-repeated invitation to the trade in general to use these columns. No matter how diligently we may work to make this journal a success, we cannot expect to make it thoroughly representative without the individual and combined assistance of our friends throughout every province of the Dominion. Every Canadian manufacturer who has a spark of ambition, is working at the present moment with the object of making his manufacture second to none, and especially equal, if not superior, to that produced by our neighbors across the border. We have the same object in view, and desire in the near future to see this journal the *accepted* organ of the great lumber trade of Canada, and on a par with any of our big American exchanges. This can be done if even a limited support is given it by the great bulk of the lumbermen of the country. The question "What are we expected to do?" may present itself to some of our readers. That question is easily answered. In the first place we want your name on our subscription list. The commodity will only cost one dollar per year. In the second place we want to receive a few lines from you occasionally letting us know what you are doing and the general state of trade. Now how many of those who are not now regular subcribers will send in one dollar, with a few lines of news? We do not believe in repeatedly making appeals to the trade for support, and therefore hope that this may have the desired effect. We want your assistance, and in return we promise to do our share towards making THE LUMBERMAN a journal of which the Canadian trade will justly feel proud.

EXPORT OF SAWLOGS.

Manifestly it is not to the advantage of either the lumberman or the people of Canada that sawlogs should be cut in our forests and then be conveyed to the United States to be there manufactured into timber. It is not fair to our mill owners, workingmen and others who thus lose the profit of this business, and the competition is especially unequal as our neighbors impose an import duty upon our lumber. Our remarks apply more especially to the pine of the Muskoka and Algoma districts, as it is here that there are symptons of an intention to carry on these operations on a large scale; here they are especially obnoxious and here they ought to be capable of being checked. On our south east frontiers, where logs, especialiy spruce, are taken down small rivers to mills across the border, there may be more difficulty in checking the practice and in some cases it may be less objectionable, so that it might even be tacitly permitted.

The Dominion authorities moved in the right direction last session when they raised the export duty on sawlogs. Having provided the remedy every effort should be made to see that it is applied.

It is quite as much the affair of the Provincial Government to see that the local industries are not starved and ruined by unfair foreign competition, that the resources of the country are not used to enrich foreigners in preference to our own people. It is time that the Province, as such, has nothing to do with export duties but it has jurisdiction in another way, for it is the property of the Province that is in question. Our timber limits are held by lumbermen who are licensed to cut the timber on certain conditions. There should be no insuperable difficulty in the way of divising an agreement of which one condition should be that the sawlogs should be manufactured into lumber in this country and not abroad. Of course it would have to be drawn carefully so as not on the one hand to restrict the export of square timber, spars, &c., nor on the other hand to leave a loophole open for the evasion of the prohibition to export sawlogs. The penalty for non-compliance might be either the exaction of increased dues if the logs were manufactured, abroad, or even the forfeiture of the limit. The officials who now see to ascertaining and collecting the dues, might without additional cost see to the observance of this condition.

The only objection that could be raised to such action on the part of the Province, is that it might be prejudicial to the Provincial revenue by preventing the competition of foreign millowners for the limits, and so having a tendency to lowet their value when put up to auction. But this would not be a sufficient reason, since the increased bonus would be dearly purchased, for the benefit of the home manufacture would far outweigh any gain from this source. The Province when disposing of its property would clearly have both the power and the moral right to make such a stipulation, so no objection could be raised under that head.

It is obvious from the official returns that the export duties previously imposed have not been very rigorously collected. Now that the necessity for action is recognized, as is manifest from the step taken last year of increasing the duty, there is less likelihood of neglect in this respect. It has been said that the great extent of our lake shores and the sparse habitation of the timbered districts would render the collection of the export duty almost impossible and very costly. In this opinion we cannot agree; both governments have various officials who might be instructed to protect the common interests in this respect. Any limit holder breaking the law would run the risk, or rather would face the certainty of incuring the penalty, for his limit would be there as securety for the payment. Then to convey the logs across the lake a tug would be necessary. If it were rendered liable to forfeiture for towing logs from our territory without reporting to the proper authority, its first trip would have to be its last.

It is only right that our forests should not be depleted for the benefit of foreigners at the cost of our own people, and if a little energy is displayed such an injurious practice can be checked.

"PLEASE MENTION THIS PAPER."

A recent issue of our sprightly exchange, *The Builder and Woodworker*, contains some excellent advice to advertisers bearing the significant title given above. It is so good that we present it in full below:

"Please mention this paper." This line stares the reader in the face in many advertisements, in all classes of papers and periodicals, and the request is, in the majority of cases, not complied with. Why should it be? Many advertisers get the idea that no better scheme was ever devised to test the real value of any paper as an advertising medium than this apparently simple request, and yet as an index of value it is practically valueless. Why? Well, think back and see how often you have neglected compliance with similar requests, and tell us why you neglected them. That will be an excellent reason. There is no obligation resting upon the reader to comply with such requests and as time, which to the busy man is money, may be saved by neglecting them, why, they go unnoticed. Business is like a river with many tributaries, and in which it is impossible to trace every individual drop of water to the spring from whence it came. But if a journal is selected for advertising purposes that reaches time and again the persons most likely to be interested in the solicitation, that paper is certainly a sure fountain-head of profitable trade in the stream of patronage far below. Temporary advertising in a small way will not produce an immediate or permanent increase of business any more than a slight shower will affect the depth of water in a well, but by persistency in the use of printer's ink in the right direction the results sought will be gained in the end with interest.

FREE ENTRY OF FOREIGN-SAWED LUMBER.

(Bangor Whig.)

Memorials setting forth that great frauds upon the revenue have been committed under the guise of the laws granting free entry of lumber manufactured in the British provinces by American citizens from logs cut in the State of Maine, have been numerously signed by the principal lumbermen of the Penobscot and Kennebec Rivers and forwarded to the Secretary of the Treasury through our members of Congress, with request that the department set in motion effective agencies for the prevention of the violations of law complained of. Representative Boutelle recently received a number of these memorials signed by the most prominent lumber manufacturers of Bango, Old Town, Orono, Milford and the vicinity representing the business on the Penobscot River, forwarded to him by Messrs. W. T. Pearson & Co., and on Tuesday he called personally on Secretary Fairchild with the papers and had an interview with him in regard to this important matter.

The secretary expressed a very earnest desire to do anything in the power of the department to remedy the evils represented, but stated some of the difficulties encountered, and the importance of having the co-operation of American lumber manufacturers with the revenue authorities in the matter of discovering and punishing fraudulent importation. The interview resulted in the following correspondence:—

TREASURY DEPARTMENT
FEBRUARY 15th, 1887.

Hon. C. A. Boutelle, U.S. House of Representatives, Washington, D.C.

SIR,—Referring to the petition of Messrs. Wm. T. Pearson & Co., Adams & Co., and others of Bangor, Maine, submitted by you to the Department, concerning alleged frauds in the importation of sawed lumber from New Brunswick, claimed to be the productions of the forests of the State of Maine, I transmit herewith a letter this day addressed to the said parties, which I will thank you, after perusal, to cause to be forwarded to the proper address.

Respectfully yours,
C. S. FAIRCHILD,
Acting Secretary.

TREASURY DEPARTMENT,
OFFICE OF THE SECRETARY,
WASHINGTON, D.C., Feb. 15th, 1887.

Messrs. Wm. T. Pearson & Co., Adams & Co., and others, Bangor, Maine:

GENTLEMEN,—The department is in receipt through the Hon. C. A. Boutelle, of your petition without date, concerning alleged frauds in the importation of sawed lumber from New Brunswick, which is claimed to be the production of logs cut in the State of Maine, and sawn in the Province of New Brunswick by American citizens, and to be entitled to free entry under the provisions of section 2,505 and 2,506 of the Revised Statutes, as contained in the Act of March 3rd, 1883.

The petition represents that great frauds exist in such importation in that a comparatively small amount of Maine timber is mingled with the great drives of the St. John River in New Brunswick, which are floated to the mills in that Province and there manufactured, and that the product, consisting principally of foreign lumber, is then imported into the United States, and admitted to free entry as of the productions of the State of Maine, manufactured in New Brunswick by American citizens.

The deparment is unable to take any definite action upon the general statement made in said petition. If you will, however, forward particulars concerning any transactions of which you have knowledge, specifying the names of importers, and importing vessels, dates of importations, and other data, the department will cause careful investigation to be made with a view to detect such frauds, and to prevent their recurrence in the future.

Respectfully yours,
C. S. FAIRCHILD,
Acting Secretary.

FOREST FIRES.

The annual report of the Ontario Commissioner of Crown Lands will be found to contain much that is of interest to our readers. It is very satisfactory to find that the wise measures taken by the Mowat Administration with the view of preventing or checking forest fires have been so successful in attaining the desired end. It has been repeatedly said that fire has done more than the axe to deplete our forests, and any mitigation ot this evil is therefore a most important consideration alike for the lumbermen, the public treasury and the country at large. From the departmental report it will be seen that fires last year were less frequent, less destructive and that when they occurred their speed was checked. This was largely due to the precautionary regulations that have been enacted and still more to the employment of officials whose special duty it is to see them enforced. How valuable has been the service rendered by these fire preventive officials is proved beyond cavil by the fact that the lumbermen have shown their appreciation in the very practical way of cheerfully bearing half the expense. In answer to a departmental circular the leading lumbermen have urged the continuence of the service, have expressed their willingness to continue to bear half the expense, and even advocate an extension of the system. Thus encouraged the Government has arranged to increase the number of these officials and to extend the area under their protective care. Even better results may therefore be expected in the future than those which have already proved so gratifying. It appears from the Commissioner's report that he has some natural hesitation to incur the expense of doing all that is asked or all that he thinks advisable. While economy is of course desirable and even necessary, parsimony in such a matter would be as economical as insufficient insurance of property exposed to risk of a conflagration.

The prevention or even the keeping within narrow bounds of these forest fires will save from destruction an enormous amount of property belonging not only to the lumbermen interested but also to the public treasury which has no less at stake. And besides the question of revenue, the whole community has an interest in the preservation of such valuable resources which form a large part of the national wealth.

Apart from the actual destruction of the forests by fire the mere dread of such devastation has an injurious effect. It often happens that limit owners hasten the cut of certain portions of their territory though it may be neither convenient nor expedient thus to hasten their operations, because they would rather submit to some loss and inconvenience than run the risk of the total destruction of property which for some reason they believe to be particulary exposed to danger. When a fire has run through the forest this urgency becomes an imperious necessity, for their cutting within a very limited period is absolutely necessary to prevent extensive deterioration and soon total loss, from the ravages of boring insects.

So too with the public treasury, there is not only the risk of loss by fire, but the very dread of that risk acts prejudicially. Thus Provincial authorities have sometimes placed limits on the market in excess of requirements, and when circumstances were not altogether propituous, for the avowed reason that it was better to do so even at some sacrifice than to lose all by fire, of which there was danger through advancing settlement, explorations for minerals, hunting and trapping, &c. Such forced sales are clearly not to the advantage of the Province, and are not always convenient for lumbermen, who may not care thus to add to their limits in advance of their requirements. With a reduction of the fire risk, these evils would be diminished.

In view of the mischief wrought by forest fires, the regulations for guarding against them should be maintained and even made more strict if necessary, they should be rigidly enforced, and an efficient staff should be employed not only to see them carried out, but also to prevent the spread of such fires as may occur.

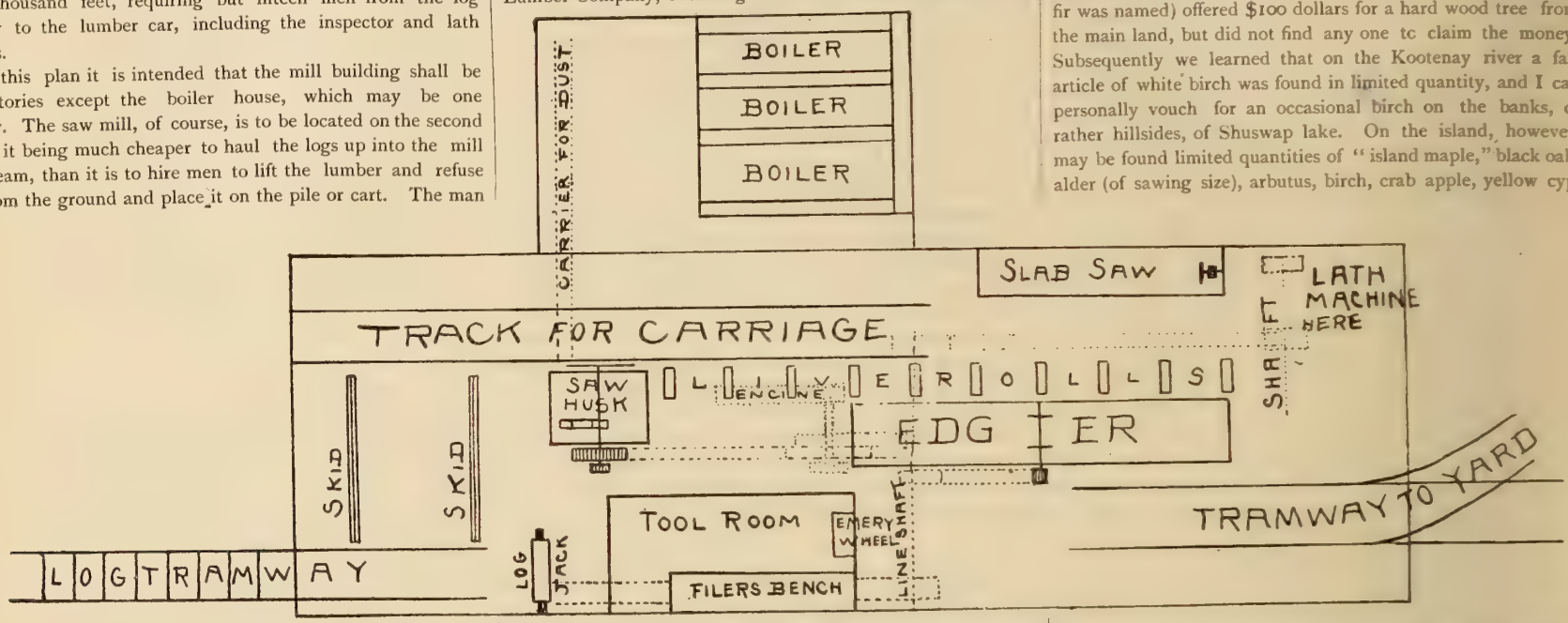
OUR New Brunswick correspondents have repeatedly complained of the injustice being done the trade of that province by the government allowing Americen lumbermen to make free use of their timber resources, and the question is certainly worthy of careful and immediate attention. The geographical position of the province of New Brunswick is such that unless the most stringent protective measures are adopted a continuation of forest destruction by Americans will not only be practiced as in the past but will be pushed with increased vigor. The principal support of the people of this province comes directly or indirectly from its extensive timber operations, and now that this revenue is being cut off, the people are led to enquire "What are we going to do?" Some positive move should be made, and that at once, to impress upon the Government the importance of restricting Americans from engaging in such a wholesale slaughter. If United States lumberman desire to operate in Canada, let them open out their mills on the Canadian side, and enter into fair competition with our own people. No one will object to this, as American enterprise and capital will always be found acceptable in this country, but when they cross the lines for the express purpose of cutting and carrying away our timber to be manufactured in their mills aeross the border, it is quite time we should call a halt. The export duty seems to be a dead letter in this province, aud no time should be lost in drawing the attention of the local members of parliament to the robbery now going on. The question is of too serious a nature to allow of delay.

SAW MILLS FOR PROFIT.

IN order to make a saw mill a success, or in other words a source of profit, it must not only be well managed, but must also be planned and arranged with a view to the handling of the stock from the pond or bank to the piling ground in the most expeditious manner and with the smallest practicable number of hands. The day is passed in which it was necessary to keep as many men in the mill as it cut thousand feet a day, and the man who tries to run a mill of that sort will soon get left.

We present herewith a plan for a saw mill of moderate cost to build and operate in proportion to the amount of its daily output. We have only shown in detail the usual and necessary machines, in order to bring the cost down to the minimum, but those who may desire something of greater capacity can readily add the usual appliances. The writer has seen a mill built after this plan with the addition of steam nigger, steam feed, and lumber trimmer,—the trimmer was placed between the edger and the tramway,—with a daily capacity of fifty thousand feet, requiring but fifteen men from the log jacker to the lumber car, including the inspector and lath hands.

In this plan it is intended that the mill building shall be two-stories except the boiler house, which may be one storey. The saw mill, of course, is to be located on the second floor, it being much cheaper to haul the logs up into the mill by steam, than it is to hire men to lift the lumber and refuse up from the ground and place it on the pile or cart. The man



who runs a ground floor mill of ten thousand feet daily capacity or over is doing an uphill business in more than one sense. The dotted lines are intended to show the location of the engine on the ground floor, also the shafting and belts suspended from the middle joist. The saw mill is intended to be driven by a belt direct from the pulley on engine shaft; another pulley is placed on the crank shaft which drives the line shaft, to which the edger and other machinery is belted. The slab saw should be a swing saw, and may be either suspended from above or supported from below. We prefer the latter, on account of the tendency which a suspended saw has to feed in too fast and choke up. The slab saw is driven by a quarter turn belt from the short shaft shown near the corner of the drawing. The two main belts should be provided with gravity tightener pulleys, so arranged that either one may be thrown off quickly from the sawing floor, in case of accident to the machinery, or for the purpos of examining or changing saws. In cases where it is desired to dress the lumber before shipment, the planer can be placed on the ground floor under the tramway, and driven by a belt from line shaft; but it will not be satisfactory to run the planing machine and saw mill at the same time, as unless the power is ample, the motion is too unsteady for the planer.

The dust carrier is an open box or trough, with a chain belt running through it. The bottom of the trough should be provided with slides for the purpose of discharging at any desired point in the boiler room. The carrier may be extended outside the boiler house, and the surplus dust carried out and deposited in the dump cart. A tramway should also be provided from the slab saw to some convenient dumping place at a safe distance from the mill. While the small mill man may not fell able to have a steam nigger, he should provide some better means for log turning than by the use of cant hooks. A geared windlass driven by a belt from some convenient point and provided with a strong rope and hook, will be found to answer for a small mill, and will save much time and hard lifting.—*Chicago Timberman.*

—Another saw mill is in course of erection in Calgary, N. W. T., with a cutting capacity of from 40,000 to 50,000 feet per day. This establishment is owned by Wisconsin men, who recently had extensive timber berths surveyed along the eastern slope of the foot hills. They are known as the Au Clair Lumber Co., under the management of Mr. Prince.

THE TIMBER OF THE PACIFIC.

A CORRESPONDENT, signing himself "G. W. H.," has been writing a series of articles to the *Northwestern Lumberman*, and as his last production has special reference to the timber of Western Canada, we reproduce the same. Our readers will readily perceive how cautious this writer is in his remarks, and how he inclines to write purely from an American point of view. Even though much that he says may be open to criticism, his version, right or wrong, will not be read without interest:—

From Winnipeg to the Rockies there is not a stick of timber to be seen which a lumberman would esteem worth cutting. From Winnipeg to the foot hills it would puzzle the wayfaring man to find a staff. South of Cassils are the Cypress hills, 25 miles distant, where is a timber tract estimated at 15,000,000 to 20,000,000 feet of jack pine, running 40 logs to the thousand. I did not visit it, nor yet the splendid mill erected for cutting it, but have my information from reliable sources. A few miles west of Calgary is the new mill of the Alberti Lumber Company, obtaining stock from a timber limit in the foot hills, by way of the Elbow river. This stock is not much different from that of the Cypress hills. From the summit of the Rockies to the coast, the Canadian Pacific runs through a densely wooded, mountainous country, and the novice would exclaim, "What worlds of timber!" but the lumberman would, with a more practical eye, discover nothing but "fence rails." An occasional exception must be noted as we pass the limited valleys of the Illecillewaet and Beaver, where, mixed with the predominant small "jack pine," may be seen a patch of larger size, even to trees of two and three feet; and at Donald we heard of a limit of a couple of thousand acres a few miles up the river, said to be "good timber." And in this neighborhood the company obtained 25,000,000 feet of mainly 12x12, with which to build the snow sheds. The flats along some portions of Eagle river looked as though there might be some fair-sized timber mixed through the saplings. Passing these we did not see a good-sized tree on the line of road until we neared Yale, 90 miles from the coast. The sides of the mountains are dense with tall forest growth, from 6 to 10 inchies in diameter; but if there was a world of good timber among it, the character of the steep mountain sides, and of the streams at their base, would forbid its utilization by the lumberman. At Yale (head of Navigation on Fraser river), however, we begin to see some timber and to observe stumps alongside the track, which would measure from 4 to 10 feet across. From all we could learn the whole of the interior, or mountainous portions of the province, is correctly judged by that portion traversed by the railroad.

There is an occasional lake, in fact many of them, in the mountains, hemmed in by cliffs whose precipitous sides extend from thousands of feet above to hundreds if not thousands of feet below the surface of the water, but it is difficult to find any shores, and the timber growth on the hillsides is of the small stuff before mentioned. Some of these lakes are fed by rivers, and where the river empties into the lake an area of a few thousand acres of good timber can be found. We visited one such river, and found a valley of from two to five miles in width, densely wooded with the red cedar of the Pacific, trees from two feet to 10 and 12 in diameter, with trunks 150 to 200 feet to the first limbs. We counted the trees on one acre, and figuring out the contents of an average tree, we estimated 597,000 feet to the acre. We could hear of but one other such tract in the province. There is, however, a tract of excellent white pine *(Pinus monticola)*, about 55,000 acres in extent, said to average 100,000 feet to the acre, in the region of Mable lake, which with a drive of 138 miles down the Spullmcheen river could reach the railroad. It is needless to say that these tracts have been taken up. Aside from those mentioned we could learn of no timber in the interior which could be made available by lumbermen. When we reached the coast, however, we must tell a different tale. As near as we could learn, the available timber resources of British Columbia are confined to a belt on the main land not more than 50 miles in width at the outside (in many cases but two or three miles), and this so broken by mountain ranges as to greatly reduce the timber area. The island of Vancouver, however, is a vast forest of timber of most excellent quality. The island is about 300 miles long, averaging 100 miles in width; its shores are broken by bays and inlets, often running many miles inland, and it would be difficult to find one of them which did not offer a fine quality of fir to the seeker. Smaller islands abound, all of which are well timbered. On the main land I inquired in vain for any variety of hardwood, and was told that the first governor of the province (the honored Douglas, after whom the fir was named) offered $100 dollars for a hard wood tree from the main land, but did not find any one tc claim the money Subsequently we learned that on the Kootenay river a fair article of white birch was found in limited quantity, and I can personally vouch for an occasional birch on the banks, or rather hillsides, of Shuswap lake. On the island, however, may be found limited quantities of "island maple," black oak, alder (of sawing size), arbutus, birch, crab apple, yellow cypress, fir, hemlock, white pine (very little), spruce, white thorn and yew. Of these the Douglas fir predominates, with a mixture of 10 to 15 per cent. of red cedar, an occasional white pine *(pinus monticola)*, and spruce. The fir grows to immense size, and, so far as I can could judge, was esteemed fit for the saw mill only when from four feet diameter upward.

We endeavored to obtain estimates from those we esteemed most competent to judge as to the aggregate timber resources of the province, but out of half a dozen timber rangers, mill men and government officials, the highest estimate given was "7,000,000,000 to 10,000,000,000." From a knowledge of earlier customs in the east, and a conviction that when the four foot timber became scarce smaller growths would be in request, we placed an estimate of from 40,000,000,000 to 50,000,000,000 feet as nearer the correct figure.

The fir has a height of from 150 to 250 feet, its leaf more nearly resembles the hemlock than the pine, and its wood is akin to the fat pine of the south. It is said to be no infrequent occurrence for the saw to strike into a "pocket" of liquid pitch from which one or two gallons may be strewn promiscuously over the mill. The butt logs are very similar to long leaf or Georgia pine, while we saw top logs which appeared more like white pine than like the "loblolly" of the interior of the southern states. An end section of fir laying upon your desk would be pronounced "southern pine" by a majority of your visitors, if they did not examine the face before giving their opinion. It is a pecularity of this timber that it may be used green from the saw (in that climate) without danger of either shrinking or swelling. It would probably need acclimating by means of kiln drying in other climates. I was told by a carpenter whom I saw working in it that when bone dry it was frequently necessary to bore for the nail, and that when once driven, the nail could not be withdrawn without breaking. These pecularities no doubt account for the fact that in every mill we visited we found a pony planer at the rear of the mill through which the lumber was passed as it left the saw. A piece a foot long, one inch square, supported at the ends, will show a breaking load of from 650 pounds at the highest, to 600 pounds at the lowest, or a mean of 638 pounds as shown by government tables. Its mean crushing load is 7,000 pounds to the square inch endwise, and 1,750 pounds sidewise. Its weight dry is 3¾ pounds to the foot. It is a timber which will fill any place where strength is required, being stronger in every respect than oak or maple. It is largely used also for

finishing purposes, although its pitch prevents it from becoming a favorite.

The red cedar is the finishing wood of the coast, taking the place which in the east is monopolized by white pine. It is not the pencil cedar of Tennessee or Florida, nor the red cedar with which we are familar. It is of more open grain ; in fact its grain is no more dense than the white cedar of Michigan. It is however a beautiful wood, and finished *au natural* is no whit inferior in appearance to cherry, and in many instances equal to mahogany. It is almost exclusively employed in the manufacture of doors, sash, blinds and mouldings, while for ceiling and wainscotting it is unequalled. It takes paint like pine, but is so much more beautiful in natural finish, that it is seldom defaced with paint. It is often used in connection with the redwood of California, and like it sells at about $35 to $40 a thousand. It is somewhat gritty in working and in this respect resembles redwood, but of the two was most commended by carpenters. Like the fir it may be used direct from the saw without danger from warping or twisting. Several of the finest buildings at Victoria, notably the Victoria theater and Driard hotel, are finished in cedar, and no one could ask a richer *tout ensemble*. It is not plentiful even at Victoria, and the coast cedar does not equal in quality that of the mountains.

While upon the subject of cedar, we must not forget to mention the beautiful yellow cedar, or cypress, of the northern part of Vancouver island, and I have never heard of it elsewhere. It is of a beautiful creamy color, very dense in texture, taking a high polish and with a specific gravity of 31.21 as compared with fir at 34, red cedar, 24.95, maple, 37.41, white pine 27.79. For strength it will carry a mean breaking load of 693 as compared with fir at 638, maple, 580; oak 550. It crushes endwise at 5,900 as compared with red cedar at 5,500, fir at 7,000, oak, 6,500, white pine, 5,500, and sidewise at 1,400, as compared with red cedar at 1,500, fir, 1,750, hemlock, 1,000, maple, 1,500, and white pine, 1,000. As an ornamental panel with red cedar, mahogany or cherry, it shows a rich contrast, and is altogether a most desirable wood. I could hear of but limited quantities, in patches of 160 acres or so, but its value may be assumed from the readiness with which it finds market at $60 per thousand on the coast.

OTTAWA LETTER.

From Our Own Correspondent.

OTTAWA, March 24th, 1887.

The leading industry of the Ottawa Valley and the one with the most capital embarked, is undoubtedly the taking out and manufacture of lumber. Perhaps it may be a fact unknown, but it is a fact nevertheless, that sixty millions of dollars are invested in the lumber business of the Ottawa Valley, and this is almost, if not equal, to the whole of the capital invested in manufacturing in the Dominion. The principal assets of the firms engaged in lumbering are timber limits, saw mills, improvements on rivers and creeks, to facilitate driving stocks of lumber on hand, piling grounds and machinery. The area of timber limits under license on the Ottawa and its tributaries in the Province of Quebec is 9,732 square miles, and in Ontario 7,153 square miles. In 1886 there were logs cut to the enormous quantity of 496,000,000 feet board measure, the getting out of which furnished employment to thousands of men and teams in the woods, at the mills and on the river. In addition to the saw logs about twenty millions of dimension timber were taken out last year.

WHO ARE OPERATING.

The greater portion of the vast era of limits in the two Provinces mentioned above is worked by firms whose headquarters are at Ottawa. The following operate in the Province of Quebec : Gilmour & Co., Hamilton Bros. J. R. Booth, James McLaren, Ross & Co., Bronson & Grier, Alex. Fraser, Bronson & Weston, J. &. G. Bryson, Gillies Bros., Perley & Pattee, E. B. Eddy, Hurdman & Co., W. C. Edwards, Bronson, Weston & Edwards, David Moore, McLaughlin Bros., Latour Estate, John Ross, Bryson & Charlton, Thomas Glover, Thompson & McKay, R. White, Peter McLaren, Martineau Estate, Rochester & Doherty, McLaren & Edwards, James Cotton, D. Murphy, J. B. Dickson, John Roche, H. U. Noel, John Smith, Estate Sir F. Hincks, Estate A. Grant, R. White.

The names of the principal limit holders in the Province of Ontario are :—

J. R. Booth, Perley & Pattee, Bronson & Weston, McLaughlin Bros., Bronson, Weston and Grier & Co., Gillies and McLaren, Barnet & Mackay, E. B. Eddy, Wm. McKay, McClyment & Co., James McLaren, Alex. Fraser, Thistle, Carswell & Co., Boyd, Caldwell & Son, R. Klock, Hurdman & Co., R. Ryan, N. E. Cormier, Gillies Bros., O. Latour, A. & P. White, A. Barnet, H. M. McLean, Emery Bros., A. S. McLean, Ontario Lumber Co. and McCarthy & Co. There are about 18 firms engaged in the manufacture of square lumber in the Ottawa and Nipissing district. This branch of the trade however is decreasing in operations year by year and this year will not go more than 5,000,000.

SAWN LUMBER

cut at the mills in Ottawa is shipped principally to the United States and to other points in Canada. Last year, however, quite a quantity was shipped to England and found a ready market. Nothing, however, was shipped to the latter point but first class stuff. The manner of shipping to the United States is chiefly by barges which are towed down the Ottawa and St. Lawrence and through the canals to Sorel, thence up the Richelieu River and Lake Champlain to Whitehall and down the Hudson to Albany and New York. Considerable quantities of lumber are also shipped by the Rideau Canal and Canadian Pacific and Canada Atlantic Railways, and lately some heavy shipments have been made by the Canadian Pacific Railway of square lumber from the district of Nipissing. The entire output of sawn lumber from the Ottawa district in 1886 was between 700,000,000 and 800,000,000, but this year that quantity will be lessened owing to the difficulty with the log drawing, the unprecedented snowfall curtailing and in many cases preventing the drawing.

TOTAL VALUE.

The total value of sawn and manufactured lumber exported from this district to the United States was : In 1884, $2,843,575 ; 1885, $2,254,801 ; 1886, $2,170,814. It is estimated that there will be a considerable falling away in the latter figures in 1887.

OTTAWA MILLS.

The immense water power furnished by the Chaudieur and Rideau Falls runs a great number of lumber mills, many of which, at the present moment of writing, are being fitted up for the summer's operations. The Messrs. Grier have during the course of the winter erected a new mill which it is expected will be ready to begin operations about June 1st. The sawmills in this district are of large capacity and are equipped with all modern appliances for rapid, smooth and economical work. These are all "gangs" and contain from four to eight gangs of from thirty-six to forty-two saws each with all the necessary edging tables, all lumber being made parallel and passed over chain butting tables. The lumber manufacturers of Ottawa are fully alive to the necessity of keeping abreast of the times and the necessity of the industry. The mills are run night and day for between six and seven months of the year or from the time the river opens till the Canadian Sovereign, Jack Frost, stretches his scyptre over the waters. The mills in general are lighted by electricity which aids materially in night work. About two-thirds of the sawn lumber of this district is produced at the Chaudiere and Rideau Falls mills. Eleven hours a day constitute a days work for mill hands and others connected with the manufacture and handling of lumber, and wages are paid weekly to mill hands. The number of men who find employment in connection with the lumbering business in the Ottawa district is very large and variously estimated at from ten to 12 thousand. There is no fixed rates for workmen but the following gives an approximate idea : Foremen $50 per month, choppers $24, road cutters $17, teamsters $20, cooks $35, log measurers $35, head sawyer for gangs $40 to $50, for circulars $40 to $60, tail sawyers $30 to $35, edgers and trimmers $35 to $40, filers $40 to $50, ordinary laborers $1.25 per day.

TIMBER DUES.

The timber dues in the Province of Quebec are, generally speaking, higher than in Ontario. For oak and walnut the dues are four cents per cubic foot in Quebec and three cents in Ontario, red pine, white pine, cedar and other square timber two cents in Quebec and 1¼ cents in Ontario, fine logs 13½ feet long, 17 inches diameter, 22 cents each in Quebec, 15 cents each in Ontario. Less than 17 inches 11 cents in Quebec 15 cents in Ontario. Spruce logs 5½ cents in Quebec, 10 cts. in Ontario. White and Norway pine saw-logs per 1,000 board measure $2.00, hemlock logs same measurement $1.00.

SLIDES AND BOOMS.

In connection with the immense timber and lumber traffic of the Ottawa Valley an extensive system of slides and booms has been constructed on the Ottawa and its tributaries. The total length of the Ottawa River is about 700 miles. The upper portion of the river descends from the north-west to Lake Temiscaminque and then turns to the southeast, which general direction it follows to its confluence with the St. Lawrence at Montreal. The most important tributaries of the Ottawa are the Gatineau, Mississippi, North Nation, South Nation, Lievre, Rideau, Madawaska, Bonchere, Coulonge, Black River, Petewawa, Chalk, Mattawa, Dumoine and Magnasippi. On all these streams extensive timber limits are worked by Ottawa capitalists and improvements have been made by public and private enterprise to facilitate the passage of square timber and logs. The first public slides and booms constructed on the Ottawa were begun in 1841, but private enterprise had constructed slides at the Chaudiere, Portage du Fort, Calumet and at Arnprior prior to that date. Philomon Wright, an American pioneer who settled at the Chaudiere shortly after the war of 1812, built a slide on the Hull side which was purchased by the Canadian Government in 1849 for $40,000. In 1843 Mr. David Moore built a slide at Calumet. The first important slide on the Ottawa is that at Carillon, 68 miles below Ottawa. The total amount expended by the Government of Canada in erecting slides and booms on the Ottawa river was $339,204. For repairs, staff and operation $275,113 were expended between the years 1867 and 1882. The total receipts for slides and booms on the Ottawa and its tributaries for 1886 was $107,328. In 1886 269,504 pieces of square timber and 3,550,698 logs passed through the Ottawa slides.

THE TRADE FOR 1887.

The trade for 1887 promises to be brisk but the heavy snow fall will materially lessen the log cut. In conversation with the different lumbermen of the Chaudiere they expressed themselves like this :

MR. J. R. BOOTH

said that the difficulty experienced this winter by the lumbering firms in the Ottawa district in getting out the logs will have the effect of lessening the cut by from 20 to 25 per cent. This reduction will affect the amount of lumber sawn during the coming summer and unless the mills have a large reserve of logs from last season the mills can hardly run their usual full time. In cases where lumbermen sell their whole season's cut before they begin to saw this state of affairs may prevent those who do so from keeping their contracts, but most of the large firms only sell a portion of their season's cut before hand. To all appearances, he added, the floods of this season would equal the memorable ones of seven years ago if the snow and ice went with a rush. Floods, as far as the lumbermen were concerned, would make a splendid drive but might also do damage by preventing mills from running owing to raising the back water on the Ottawa.

MR. E. B. EDDY

said the depth of snow in the bush was unprecedented in the history of lumbering in Canada and would have the effect of lessening materially the season's cut. The amount of sawn lumber turned out from the mills this coming summer would, he thought, be much smaller than last year.

MESSRS. PERLEY AND PATTEE S, MANAGER

said the cut at the mills this year would be much less than last year. He thought injury would be done to the mill business by the hight water which seemed to be inevitable.

MR. BRONSON

of Bronson & Weston, said the state of affairs in the shanties was most unsatisfactory. The number of logs cut this season would be much lessened from last year's returns. His own firm, he said, would have sufficient logs to keep them running all summer. He anticipated bad flooding.

MESSRS. GILMOUR & CO.

who are carrying on an extensive operation on the Gatineau river, state that the depth of snow would lessen the log cut from 15 to 20 per cent. but much depended on how the season would wind up.

MR. HIRAM ROBINSON

of the firm of Hamilton Bros. considered that the cut would be materially reduced owing to the depth of the snow. The probable reduction will be 15 to 20 per cent.

MR. J. HENDERSON.

of the firm of James McLaren & Co., said there was a likelihood that the reduction would be 25 per cent. The markets are steady at present but he thought it likely judging from the dimunition in the cut that prices would go up considerably.

G. B. GRIER & CO'S. MANAGER

thought that the firms would be able to keep their contracts with buyers, but owing to the reduction in the log cut there would be no reserve logs for next fall. He feared bad floods.

Other lumbermen seen on the subject coincided in the view that fewer logs would be cut this season than last, but all agreed that prices would feel more or less of a boom. The date for opening the mills is fixed all the way from April 20th to May 1st, but all depends on the season, and whether or not operations will be carried on between the 20th of May and the 20th of June, depends on the rise in the waters of the Ottawa. From careful competition 600,000,000 feet will cover the output of the entire Ottawa district for the year 1887.

LUMBERING.

MCARTHUR BROS., of Toronto, are cutting a quantity of very nice pine timber, only eight miles from the city of Toronto. It is timber that has been saved apparently for this special occasion. This firm is also putting in a quantity of logs and board pine in upper Michigan and in the Georgian bay district. It owns large tracts of timber, and has made a large sum of money in knowing how to do business in a strictly orthodox style. The firm maintains an office in Saginaw as well as at Toronto, and in the palmy day of oak timber in the Saginaw country it was among the largest shippers.

NOTES FROM THE MILLS.

ONTARIO.

—A sash and door factory is likely to be built at Portage du Fort this spring.

—Loggers are hopeful that wages for the spring drive will be high this spring.

—Work is to be commenced on Tait & Wylie's saw mill at Midland at once.

—Mr. Mat. Sierra, of Norwood, while skidding logs a few days ago, had his leg broken.

—Messrs. Swackhammer and Butler, of Acton, have purchased the Ballinafad saw mill.

—Mr. Bechler is erecting a new mill on the 6th concession of Greenock township, Bruce county.

—William Mitchell, of Deseronto, is making some extensive improvements in what is known as the Big Mill.

—Mr. C. J. Rykert, of timber limit fame, is spoken of as the probable Speaker in the new Parliament at Ottawa.

—The Minneapolis & Ontario Lumber Company has purchased 1,500,000,000 feet of timber in British Columbia.

—Mr. J. B. Coates, of Picton, lately purchased Andrew Irwin' saw mill at Blenheim, and has taken up his residence there.

—A. Hirtle, the proprietor of a planing mill in Berlin, has effected a compromise at 50 per cent. secured, on liabilities of $3,000.

—A large crotched tree was recently felled in one of Boyd & Co's shanties in Monmouth which measured 5 ft. 4 in. at the butt.

—Loggers from all parts of the country are rapidly returning from the shanties and the work in the woods is practically at an end.

—Mr. J. Watson of Cæsarea, has put up a large addition to his shingle mill, and is putting in a lath machine and other machinery.

—Messrs. Bronson & Weston are making numerous improvements in their mills at the Chaudiere in preparation for the coming season.

—At Little Current, Manitoulin Island, Ont., railway ties and logs are coming out of the woods rapidly, and business of all kinds is good as a consequence.

—Mr. Bowerman of Brooklyn has purchased the saw mill on Sawyer's Lake. He will be prepared to cut on the 1st April, and talks of putting up a woollen mill.

—Jas. Keenan, of Huntley township, while drawing logs recently, the binding pole slipped and knocked him off the load. He fell under the sleigh and was crushed to death.

—Messrs. Grier & Co., have placed a complete plant of machinery in their new mill at Ottawa, and will soon commence cutting. The new mill is built after the style of E. B. Eddy's.

—The Midland *Free Press* says there will be a big boom in lumbering in that region this summer. The Ontario Lumber Company have closed with Messrs. Ross and Devonport's tender for the building of their new mill.

—Mr. J. R. Booth has a gang of 50 men engaged in making repairs to his saw mills at the Chaudiere, in anticipation of the coming season. Mr. Booth expects to be able to commence sawing as soon as the river is clear of ice.

—John Shaw, of Forest, and Simon Fraser, of Amherstburg, have closed with the Georgian Bay Consolidated Lumber Co. for the entire cut of their Eyng Inlet lumber mills, amounting to 12,000,000 feet of lumber and 4,000,000 pieces of lath.

—More than 400 American and 130 Canadian barges are employed in the Ottawa river and Lake Champlain lumber trade. This immense fleet would be thrown into ordinary if the President should enforce the retaliatory law lately passed by congress.

—The amount of snow in the Parry Sound district the past winter has been deeper than for years past, and as a result logging operations has been difficult. Notwithstanding this, however, it is said that the cut of logs will be one of the largest for years.

—The last season's cut of lumber in the White Lake district is being shipped now. Twenty-eight teams are engaged in drawing to Pakenham, eight of which are drawing for J. R. & J. Gillies. About 2,000 feet constitute a load, and one trip a day is made.

—A correspondent at Kingston writes that there is not much lumber on the Kingston & Pembroke railway unpurchased. Operators worked at railway ties as a rule. Limit holders get out their usual supply this winter. Most of the ties are purchased by the Rathbun Co. Hemlock is becoming very scarce in this vicinity.

—Messrs. Grier & Co., of Ottawa, intend making a roadway under Broad street for transferring the lumber cut in the mill to the sorting ground. This change will be a great improvement, as by the transfer of lumber in the ordinary way the streets would run a risk of being blocked up.

—An immense moose having been seen by several men belonging to the lumber shanties on the Schyan River, near Pembroke, Messrs. G. B. Moore, J. A. Angus and J. F. Inglee started in pursuit. Getting on the trail they soon sighted the object of the chase, a truly noble animal, and killed him after some trouble. The dressed carcass weighed 900 pounds and the skin 113. The animal is said to have been the largest ever seen in the district.

—From Ottawa reports it is surmised there will be a full cut at least, and if the winter had been a good one for lumbering, many more logs than the mills could have cut up, which is limited, would have been made. This is accounted for by many square timber men having taken contracts for sawn logs instead of cutting square timber. If anything will be short next season it will be square timber, which is being cut in very small quantities compared with former years.

—Mr. George A. Loud, of the Oscoda Salt and Lumber Company, Mich., has returned from the Georgian Bay district, where he is banking several million feet of long timber and short logs for the American market. When the south extension of the Algoma branch of the Canadian Pacific is completed next summer it will be quite easy for Michigan lumbermen to reach the pine forests of the Serpent, Spanish and French rivers, going *via* Mackinaw and the Sault in place of *via* Toronto.

—Mr. J. C. Robert, lumber merchant of Montreal, was in Ottawa a few day's ago, endeavoring to obtain a supply of lumber, but is reported to have announced his ill-success as follows:—"Nearly every plank in the Ottawa market has been purchased. I visited five firms here to-day, and at each place was told that the entire cut has been disposed of. In one or two instances I was offered a few thousand feet by way of accommodation. The manufacturers certainly can't complain as the last ten or twelve months has witnessed an advance in prices of about 15 per cent. Dealers won't figure upon next season's cut."

—Repairs have been going on nearly all winter at the various booms, slides and piers along the Ottawa River. At Des Joachims, about fifty miles above Pembroke, the slide and booms are being repaired, at Mountain Station, near Portage du Fort, a gang of men are re-constructing the side piers on the dock, which were damaged at the breaking up of the ice last spring. The ordinary winter repairs are going on at the Chaudiere and Hull stations, while on the tributaries such as the Dumoine, Pettewawa, Black River, Coulonge, Madawaska, and Gatineau repairs are going on in preparation for the opening of navigation, and also the anticipated ice shoves in the spring. The largest operation is on the Coulonge, the damage being effected last year by the heavy masses of ice coming in contact with the booms and completely demoralizing them. The Ottawa River works have taken precaution this year and will be in readiness for the break-up. It is said that if the ice breaks up in the solid masses, as last year, there will be no saving the wharfs, booms, boats and other works, notwithstanding their extra fastenings.

QUEBEC.

—The roads are blockaded by snow in every direction.

—Owing to the heavy snow lumbering operations in the district of Quebec are being abandoned in every direction.

—A fairy supply of pine logs has been cut in Quebec, and if they can all be driven to the mills there will be no stoppage.

—Business is very dull in the lumber business. No sales are being made in the American market, and Quebec merchants are holding off.

—Messrs. Dobell, Beckett & Co. are credited with the purchase of Stokes and Kelley's elm, about 60,000 feet at 28c. This lot is stated to be two years old, and 45 to 50 feet average.

—The British Admiralty has awarded contracts for pine and spruce deals to Messrs. Smith, Wade & Co., and for Canada pipe staves to Messrs. R. R. Dobell & Co., both Quebec firms.

—A correspondent from Montreal says that the arrivals from the lumbering district around Three Rivers report an immense quantity of snow in the woods. There is fifteen feet in some places. There is certain to be a great dearth of logs in the spring, and the lumber trade will sustain great loss.

—Preparations are being made in the Hull lumber yards for the opening of the season. As soon as ever the ice sufficiently breaks up great activity may be anticipated in this department as the supply of logs at the boom is sufficient to keep the mills going six weeks without any additional supplies from the shanties.

—Messrs. Fuller & Hill, of Bolton Center, Que., are turning out all the butter tubs it is possible for them to make. They have an order from Scotland for two car-loads of tubs per week. A car contains from 1,800 to 2,000 tubs.

—An American firm who possess a patent for manufacturing a fireproof composition out of sawdust and clay are considering the advisability of opening a branch establishment at Hull. The immense quantities of sawdust which can be obtained at an almost nominal price greatly favors such an enterprise, and its establishment will be a decided boon to Hull. If this scheme be carried out it will certainly develop a new industry in the Ottawa Valley and one which would employ a large number of hands, and furnish a considerable export trade to this district. If water power should be required Ottawa instead of Hull may be selected.

NEW BRUNSWICK.

—A man named Joseph Miller, employed in a factory at St. John, N.B., recently had his arm split by a circular saw from wrist to elbow.

—St. John, N. B., exported $22,048 worth of timber, lumber, lath, shingles, etc., during the month of February, against $36,596 during the same time last year.

—A large quantity of pulp wood concentrated at Moncton, New Brunswick, for shipment to the United States. Several vessel loads will be thus shipped, it is said.

—Messrs. Simson & Mason, Limited, have just been appointed sole agents in France, Spain, Portugal, and Algeria for the New Brunswick Trading Company of London, Limited. The New Brunswick Company handle the entire well-known stocks of Messrs. R. & J. Stewart and Messrs. Guy & Co., who ship spruce from St. John, Miramichi, Bathurst and Shediac, besides pitch pine from Mobile and Pensacola. These classes of wood goods are being sold more and more each succeeding year on the continent.

—Wm. H. Murray, Isaac H. Page, John Kilburn, Franklin Stetson, Walter S. Stevens, George B. Dunn, Whitfield Giberson, J. Fraser Richardson, Edward L. Jewett, David Keswick, Jarvis Hayward, Chas. F. Woodman, Darius Vixon, Wm. H. Cunliffe, Archibald F. Randolph, Geo. T. Baird, John S. Leighton, Adam J. Beveridge, Israel Merritt, James Yerxa, Cornelius Hagerman, Matthias Nadeau, Bedford Hume, Frederick Moore, Thomas H. Phair, and Wm. F. Fowler have petitioned the Main legislature to be incorporated into "The St. John Log Driving Company."

—Messrs. Weldon, McLean & Devlin, solicitors for the People's Bank of New Brunswick, have obtained an injunction from Judge Palmer, prohibiting the New Brunswick Trading Company of London from conveying to any person the real estate lands and premises described in certain deeds from one John Stewart to them executed upon the 8th inst., and recorded on the 9th in the county of Gloucester; also prohibiting the same company from disposing or removing any of the property described in a certain bill of sale dated Aug. 7, 1884, from Robert and John Steward to the People's Bank, and registered March 10, 1887.

—The St. John River Log-Driving Company held its annual meeting in Fredericton on the 13th ult., when directors were appointed in the persons of Frank Stetson, president; Robert Conners, F. W. Giberson, Wm. Tidlie, and Darius Nixon. The secretary-treasurer is J. Fraser Gregory. For driving purposes the river is divided into seven districts; 1st, from Grand Falls to boom limits; 2nd, Salmon Falls to boom limits; 3rd, Aroostook Falls to boom limits: 4th, Tobique to boom limits; 5th, Big Presque Isle to boom limits; 6th, Becaquimic to boom limits; 7th, Maduxinkeag to boom limits. The driving was sold at the following rates; district No. 1, 18c. per thousand; No. 2, 11c.; No. 3, 15c.; No. 4, 14c.; Nos. 5, 6, and 7, 9c. per thousand.

MANITOBA AND THE NORTH-WEST.

Alex. McIsaacs was brought in from Cameron & Kennedy's camp at Rat Portage a few days ago having his back broken by a tree falling upon him. The whole lower part of his body is completely paralyzed. Very little hope is entertained.

—On account of the recent increase of freight rates from the Mountains to Calgary, all the lumber merchants have cancelled the orders they had placed with the Mill-owners in the west, and have appealed to General Manager Whyte for a reduction in the tariff.

—Thirty-eight thousand shingles were cut, edged and packed recently in a day of ten hours at McFadden's mill, Minnedosa, by the Orr boys. It is stated that if it had been a favorable day the cut would have reached forty-five thousand. The men at the mill claim this to be the best day's cutting ever done in Manitoba, and want to know who can beat it.

BRITISH COLUMBIA.

—Victorio, B. C., has three saw mills which have an annual capacity of 40,000,000 feet. There are numerous small saw mills in operation near the city, and all doing well.

CHIPS FROM YANKEELAND.

The railroads are hustling the logs to the Saginaw river at a lively rate.

The Detroit and Bay City railroad will have hauled at the close of the present season 230,000,000 feet of logs.

The project for a winter bridge across Detroit river has taken definite form. The first stages of the work has been begun.

Hamilton, Mass., is to have a planing and saw mill run by power furnished by a wind mill. It is believed that this is a new application of such power.

A Buffalo, N.Y., paper says that the lumber trade of that city and Tonawanda leaves more money in local hands in the two places than the grain trade, large as that is.

Careful estimates of the log crop of the streams tributary to booms, will furnish logs to Bay City and the Saginaws, the present winter, place the amount at nearly 600,000,000 feet.

In Michigan the value of lumber, per 1,000 feet, has only increased from $12 in 1866, to $13 in 1886, while stumpage has jumped from $1.25 to $5.50 per 1,000 feet during the same period.

Baird & Robins, of Big Rapids, Mich., are about to erect a large steam saw mill at Rhinelander, Wis. The *Herald* says the mill will have a capacity of from 80,000 to 100,000 feet per day.

The question of inspection and straight measure still continue to agitate lumber circles, and their seems to be a rather decided front in opposition to the plan of selling by straight measure.

The proposed building of the Alpena & Petoskey railway, in northern Michigan, is likely to promote other enterprises with the object of opening out the timber resources of the northern counties.

The *Lumberman's Gazette* claims that "the dark, sand-burdened Saginaw river still continues to float out more lumber than any other stream in the world that we know of; Muskegon comes next."

The logging business is being pushed for all it is worth in Alpena county, as well as in other parts of the state; and the outlook at present is favorable for the full realization of the anticipated log crop.

New York hardwood men are agitating the subject of uniform inspection throughout the country, or at least the adoption by the various exchanges at principal points, of a system which shall be common to all the leading markets.

Down in Maine the law makers have become exercised over the waste of forest wealth going on in that state, and the result is a bill now pending before the legislature providing for the appointment of a commission to look the matter up.

Lumbermen in New York are taking considerable interest in the proposed national inspection system for hardwood lumber, and it is not unlikely that a call will shortly emanate from their new exchange for a convention at some central point to consider the matter.

The American Forestry Congress has addressed a memorial to the Congress of the United States on the necessity of preserving from depredation and fire the forests that now exist on the Government domain, and on the desirability of encouraging tree-planting on the great plains.

It is evident that the mill capacity of the northwest, especially that of Wisconsin and the upper peninsula of Michigan, will be greatly increased during the current year. In both the sections indicated there is to be a wonderful development of resources by reason of the building of railroads and the opening of mines. As these regions are largely timbered with pine, mills will be erected simultaneously with the building of railroads.

Flatt, Bradley & Co., of East Saginaw, Mich., have a contract to supply the British Navy with masts. They are at present getting out spars on the Pinconning branch of the Michigan Central railroad, and lately shipped a quantity to Nova Scotia, a new departure in the method of forwarding masts to the seaboard, as hitherto they have gone down the lakes by water. There must be some urgency in British naval affairs, since the builders cannot wait till the opening of navigation.

The exports of lumber from New York have been much larger so far in 1887 than in 1886. The shipments of pine in January amounted to 5,905,000 feet, as compared with 5,181,000 feet in January, 1886. About three-sevenths of this year's exports went to South America, and one-third to the West Indies. A successful effort to establish rail shipments is in progress in the Saginaw Valley. In 1880 that district sent out 27,000,000 feet of lumber by rail, and 770,000,000 feet by water. Last year the rail movement amounted to 176,000,000 feet, and that by water to only 591,000,000 feet. The principal gain in the former direction has occurred since 1884.

The Minor Lumber Co., Alpena, Mich., is said to have recovered $9,200 of the $11,000 appropriated by the defaulting salesman, W. J. Miller. The latter is now in Canada.

An Associated Press dispatch from Chicago says: The grand total of the white pine lumber product of the Northwest for 1886 was 7,426,368,000 feet. This is 870,000,000 feet in excess of the preceding year, and is only slightly short of the total cut for the year 1882, 1883 and 1884. The greatest gains were in the older milling districts. The grand total of the shingle product of the Northwest was 4,575,531,000 shingles, which is the largest showing in any preceding year. These figures are cited as showing that the maximum annual lumber product of the white pine districts has probably not yet been reached. The stock of lumber on hand at the mills at the close of the year is placed at 3,068,093,000 feet, or 170,000,000 less than at the close of 1885, and 450,000,000 feet less than in 1884. The stock of shingles were 350,000,000 more than in 1885, and 10,000,000 less than in 1884.

Every indication at present points unmistakeably to the belief heretofore expressed by this paper that unless some entirely unexpected event happens, the lumber business will open encouragingly, and continue prosperous during 1887. Our opinion is seconded in this wise by *Lumber*, one of our exchanges: "The trade outlook is very favorable at present although the actual business is not quite so heavy as at this time last year on account of bad weather. The arrangements for building this season are quite as extensive as at this time last year, possibly more. Quite a number of solid business men are contemplating extensive building operations the coming season. If the general business of the country is not interfered with by legislation or other outside causes, everything points to an extremely brisk season. Lumber seems to be holding firm in all markets with a slight prospect of an advance in some articles, particularly hemlock and yellow pine."—*Lumberman's Gazette.*

EUROPEAN LUMBER NOTES.

The English lumber market is gradually improving.

The stock of lumber in the Liverpool market is very much reduced.

It is generally apprehended that timber freights will be advanced in England shortly.

A correspondent writing to the *Timber Trades Journal*, wants to know why it is that the ends of Quebec Birch are Painted red.

Two cargoes of lumber shipped by Messrs. D. & J. Maguire & Co., insolvents of Quebec, to the English market, were seized at a London port recently.

Considerable discussion is at present going on among the members of the trade regarding the advisability of establishing a Lumber Exchange in England.

Liverpool trade is still in a stagnant condition, with very few orders in the market, and no disposition to enter in arrival business, in which, so far, there has been very little done, especially in Quebec goods. The failure of Messrs. R. A. & J. Stewart has naturally given rise to considerable comment.

Rumours having been circulated as to the New Brunswick Trading Company, Limited, being affected by the reported difficulties at St. John, N.B., we made direct enquiries, says *Timber*, and were assured by one of the directors "that even had the rumours been true there would have been no loss to the Company, who are quite prepared to meet their engagements."

The prevailing impression in England is that very little is doing in business for the new season for the Baltic, but it is said that considerable transactions are constantly taking place in a quiet way, and that more sales have been made than many are aware of. The Quebec shipping houses have also done a large amount of business for f.o.w. shipment to United Kingdom; but very little of it for London. The competition between sellers has been keener than usual this season, especially during the last few weeks.

The London Board of Trade returns for last month were issued on the 9th March. They are very favorable, particularly as regards the exports, which show an increase under all the leading heads. The declared value of the imports was £28,513,994, against £26,621,869 in February, 1886, the items which have augmented most being articles of food and drink, raw materials for textiles, and manufactured articles. For the two months to date the increase is £4,256,508. The value of the exports last month was £17,255,133, against £16,384,007 in February, 1886—an improvement of £871,126, which is mainly in yarns and textile fabrics, metals, machinery, and apparel. The gain for the two months is £1,567,080. The great expansion in yarns and textile fabrics continues to be chi fly due to the extended scale of shipments of cotton goods to the Eastern market, more especially India.

The shipbuilding industry at Tyne is looking up. Many of the yards are better employed, and two of the yards which have done nothing for some time, are commencing active operations. This will favorably affect the log trade, and as the stocks of Quebec goods are becoming very light, it should stiffen prices. Some of the Quebec shippers have been here trying to place cargoes for spring shipment; but so far, only one Tyne firm is reported to have bought. 21s to 22s. Quebec to Tyne is quoted for spring shipment.

Canadian woods to the Liverpool markets are reported by Farnworth & Jardine as follows:—Yellow pine timber: The deliveries as is usúal at this season of the year. have been small; the stock is very moderate, but there is no improvement either in the demand or value. Red pine is seldom inquired for, and prices rule low. Oak logs:—There has been a moderate enquiry for prime wood, but inferior quality is neglected. Oak planks have been imported moderately; the demand continues good, and prices are firmer, and the stock remaining over is light. Ash is in fair request, and the stock is low. Pine deals are in dull demand: the stock is far to heavy, and prices nnchanged. Quebec staves are seldom inquired for. From New Brunswick the following is reported —The import has consisted of two small cargoes; there has been a fair demand throughout the month, and the stock is now reduced to a more healthy condition; notwithstanding this, prices do not improve, aud several sales have been made on contract for the season's shipment at very low rates. Pine deals are in dull demand, and the stock is sufficient. Birch: Only one parcel has been imported, which has chiefly gone direct from the quay into consumption; there has been a fair demand, but late sales show a slignt decline in value, and the stock is ample. Birch planks:—Several sales have been made on contract but at rather lower prices.

THE LUMBER WORLD.

A scheme is being worked up by Mr. E. H. Bronson, M.P. P., for the purpose of building at the Chaudiere mills for the manufacture of pulp out of sawdust. Mr. Bronson has been encouraging the scheme for some time and it is expected that before long a company will be formed with a large capital, a powerful water power at the Chaudiere purchased and extensive mills erected for the manufacture of pulp from the sawdust which has for so long been a nuisance to both lumbermen and forwarders. This idea of manufacturing paper from sawdust has several times been attempted in this city and very favorable results obtained, but the want of capital caused the abandonment of the enterprise. Should Mr. Bronson's idea be carried out and a company formed with a sufficient capital to start the work of manufacture there is little doubt but that success will aftend the efforts of the company, as paper is now being manufactured in many places throughout the United States from sawdust, at a great profit to the manufacturers. Besides, if this idea was carried out we would get rid of a vast amount of that sawdust against which so many protest. A *Journal* reporter called upon Mr. Bronson's manager but could obtain no furter information beyond the confirmation of the fact, as Mr. Bronson is himself in Toronto and the scheme is not as yet sufficiently matured for publication. Mr. Bronson, it is said, has purchased Thompson's grist mill at the Chaudiere, and his firm intend to convert it into a paper pulp factory.—*Ottawa Journal.*

Bobcaygeon *Independent*:—The immense territory to the north of this village is still in a great measure clothed with the primeval forest, for settlement is so slight and scattered that no material change has been made in the original condition of the country. It is true that a large proportion of the pine has been cut and removed, but the forest has been but little changed in its character and thousands of square miles are yet untouched by the axe of the settler. Throughout this immense territory the best, most thrifty and largest timber is that of the black birch which grows everywhere in rich profusion. Up to the present time but little of this timber has been used for other purposes than fuel, but it would seem that its valuable qualities are at length beginning to be recognised. There is probably some exageration in the price mentioned, for black birch is a wood of too universal a growth throughout the Canadian forest to permit of so rapid a rise in price, but a general increase in its value may be safely calculated upon in the future. It is a beautiful furniture wood and becomes of exceeding hardness with age. Its present value is probably not more than $14 or $15 per thousand, but as soon as the price advances to $18 or $20 there will be an opening for an enormous trade. The supply is unlimited but as the logs cannot be floated in water, they have to be transported on the railway, and at a less price than that mentioned they can not be profitably handled. Those settlers in the back country who possess black birch within handling distance of a railway would do well to hold them, for their value is certain to become greater.

VALUE OF CANADIAN WOODS FOR EXPORT.

By Prof. John Macoun.

NOTES culled from the Indian and Colonial Exhibitions and a few practical observations founded thereon, may not be in appropriate in the coming issues of The Lumberman. At the present time much attention is given in England to woods of every description for the purpose of getting new material for both house decoration and carriage building. The Colonial and Indian Exhibition held out inducements to the various experts and wood-workers in London and the Provinces, to come up to the Exhibition and examine the woods from the various Colonies and India. This was soon taken advantage of and numbers came daily to examine and criticise. Generally speaking the woods from the other colonies claimed more attention at first, as they were brighter colored, closer grained, and more attractive looking, but as the novelty wore away it was discovered that these woods were very heavy, hard to work and in many cases so scarce that their introduction to the English market was an impossibility.

Following closely on the opening of the Exhibition came the reporters of the various scientific publications, and these found much to admire and to praise in our timber exhibits. We were kept busy from morning until night giving notes and answering questions. These in a short time bore fruit as parties soon came forward to make enquiries as to the best means to be employed in opening up a trade with Canada for the various species of hardwood which we have so abundant n many districts.

* * *

The senior partner of the largest chair manufacturing company in England, located at High Wycombe, called upon me and after talking the matter over and examining our specimens asked me to put him in communication with some parties in Canada, which I did. He would guarantee to take $35,000 worth every year, but not in the form of square timber, but just in the round log and short lengths. My discussion with him brought out the fact that there is much difficulty experienced in England, from overcharges on railways than in Canada, and that the great cause of a want of success in the timber trade is the middlemen in combination with the railways. It costs as much to carry a single barrel of apples from Liverpool to London and deliver it as it does to purchase it in Canada, carry it 1000 miles on land and 2500 miles by sea to Liverpool. Dealers g t more *liberal* rates, and the business by this means is kept in the hands of a few.

* * *

When it is considered that English beech is getting scarce, and that there are at least 20,000,000 of people in England who sit on common chairs, the importance of this trade cannot be over estimated. My advice to Englishmen was always the same : open up communication with our lumbermen, get them to cut all kinds of timber to the sizes required, immediately after being felled, and ship nothing that would by any possibility become waste or would be difficult to handle. I had a double object in this advice, one was to employ our own people and the other to prevent deterioration by rotting, caused by the decomposition of the sap.

* * *

This naturally leads to the all-important question of cutting and drying. Pine timber, cut in winter and put in the water in spring and floated down to the mill and only taken out of the water to be sawed into lumber, remains perfectly sound, and the sapwood often quite white. Hardwoods and pine, but especially the former, are drawn to the various local mills and perhaps allowed to lie all summer exposed to the heat and rain without apparently a thought being given to the injury already done or any attempt made to protect it from further injury. A careful perusal of that section of my paper, read before the Coachmaker's Institute in London, which deals with the "deterioration of woods after cutting," will make clear to any one the absolute necessity of a complete change in our present mode of procedure in this respect.

* * *

Following closely on the footsteps of the Chair-makers came the Coach-builders with their multifarious wants. Some wanted spokes, others hubs, shafts, or materials for bodies, but none seemed to know anything of Canadian wood, With the permission of the various leading coachmakers in London, I examined their stocks and saw their modes of seasoning and of course heard the praises of English oak and ash, and soon became convinced that our plan of shipping hardwood to England was altogether at fault.

* * *

Ransome & Co., of Chelsea, experimented on fourty-five different species of woods from India and the Colonies, and amongst others who addressed the meeting was the writer. A few days after in conversation with an eminent engineer he remarked that our wood—ash and oak—bore no comparison to theirs as regards toughness and elasticity. Further enquiries showed me why our wood was condemned by practical men, and this subject I also took up in the paper read before the Coach-builders Institute, (the report of which appeared in the last issue of your paper,) in the section on "toughness." Conversations following the reading of the paper showed me that I had made an impression on the general public and that many of my hearers believed my statements.

* * *

One dealer came to see me about elm hubs, who supplies many of the omnibus builders with the material for wheels. He told me the young tough elm which grew so plentifully with us was just the material he wanted, and he was prepared to take immense quantities either in the round log with the bark off or sawed the proper lengths for a hub. I found that the American Rock elm in London, was chiefly our common elm, and much of that which came as square timber was gray elm or common elm grown on dry soil. Large white oak spokes are wanted by the same firm, but many complaints are made of the unreliability of the dealers. Only a few weeks before our conversation a large consignment of spokes had been received and a cablegram despatched to repeat the order. When the latter lot arrived they were much inferior to those sent at first. The first lot were real white oak (*Quercus alba*) but the second while still white oak, was the more brittle species (*Quercus Macrocarpa*).

* * *

A very profitable business could be done in these lines by men with a little capital, getting a portable sawmill and just cutting up on the ground, where people are clearing land, all the smaller of the valuable trees that are now worse than wasted. It is now high time that our farmers and others, owning tracts of half grown trees, should realize their great value as permanent remunerative property. Owing to the increase of population and the ever increasing demand for agricultural implements, suitable timber will become more and more difficult to obtain, and when this time arrives the man who has a tract of young hickery, ash, oak or elm, or all intermixed, will have a mine of wealth of untold value. At present the Americans are seeing the end approaching, and are looking with longing eyes at our wealth of forest lands. The timely export duty on logs will do something to retard the the wholesale destruction of our pine forests, but to these as to everything else there is a limit and the end will surely come.

* * *

Passing from wheels to bodies I found that mahogany was the chief wood used. White wood (*Liriodendron Qulipifera*) was used for a variety of purposes and so was Sycamore (*Platanus occidintalis*) or Button wood. When I asked about Basswood no one seemed to know much about it, but the tests we subjected it to showed them its valuable properties, and make it the coming rival of mahogany when color is not a requisite. At present mahogany is eighteen cents the square foot inch measure, and basswood could be delivered at less than one third the cost. Before I left London I introduced Mr. Bennett, of the "Bennett Furnishing Company," of London, (Canada), and Glasgow, Scotland, to a number of gentlemen engaged in the business, and before I left he had taken a number of orders for sample lots of oak, ash, hickory, basswood, and elm at eight cents a foot per small orders. Since then he has obtained the contract of furnishing all the city schools of London with desks for three years. I mention this to show what may be done by coming in contact with men who are desirous of doing business in the changed conditions of the present active age.

* * *

Yellow pine deals as our "White Pine" is called, hardly reaches London at all except by way of Liverpool. I made numerous enquiries about it and never succeeded in finding any except what came by rail. Arnold & Co., of the Royal Dockyard Wharf, Woolwich informed me that the present mode of shipping timber from Canada, greatly curtailed the trade and in many cases stopped it altogether. This firm receives square timber from Quebec, and on its arrival it is thrown into the water and lies there until it is wanted for a customer, when it is drawn out, if the tide suit, and is sawed up as the customer may desire. Should the tide not suit, Norwegian or Archangel deal or scantling is sold instead, as it is always cut before shipment, in Norway, to the size the London market requires. Having noticed the various Ottawa lumber merchants cutting from six inches to two feet off the ends of most of their deal, I enquired if that were necessary, and was answered by being shown Norwegian deal from six feet to twenty-eight feet long. In Norway they take all they can out of the tree and do the sawing in their own country. I was informed by the foreman that in the five years he had charge of the yard a whole log of ash or black birch had never been bought. He wondered with me why we cut away so much of the tree and then sent the heart, which every one knew was the poorest. While in conversation he counted up the cost of sawing 750 feet of ash out of the square log as it lay in the pond. The sum total was £1.17.6 or about $9.-50 in our currency.

* * *

I am quite convinced that the days of squared timber have departed, and that the sensible, economical, and profitable plan is to have an intelligent agent who knows the requirements of the market, and have all lumber manufactured to suit the wants of the purchasers. If this be done it would place lumbering on a more certain basis and give a far wider market for one of our most important industries. Squaring timber belongs to the time when sawmills were not in existence and as it has served its purpose the sooner such work ceases the better. Quebec has filled her cup to the brim by being ruled by the Longshoremen. The middle-men in England are in the same positions and the producers and consumers are looking forward to a closer union which will be of mutual advantage. By doing business like merchantile men lumbermen can get a share of the profit by shipping direct from Montreal to London. The Tilbury Docks, twenty miles below London, are now open and Canadian lumber can go direct to London without being re-shipped at Quebec and Liverpool as much of it is now.

* * *

Another most important product is the pulp that has become such an article of trade in a few years. At present England imports immense quantities from the North of Europe, but the matter has only to be taken up in an energetic manner in Canada and a valuable business will soon be established. It is only a matter of time, perhaps in the near future, when balsam, spruce and the refuse of pine and even sawdust will be made into pulp, and no prophetic powers are needed to fortell the thousand and one uses to which such material will be put.

CANADIAN PACIFIC ACQUISITION.

That the Canadian Pacific railroad will one of these days raise Cain with some of its American competitors may be seen in the following despatch from Boston :—Quickly and surely the Canadian Pacific is completing its control of access to the Eastern seaboard. The latest move on the checker-board is the lease of the Connecticut and Passumpsic rivers railroad to the Boston and Lowell, which, though not yet consummated, has progressed so far as to become a practical certainty. The Directors of the Passumpsic road considered the matter to-day, and it is understood that they talked very favorably of the Lowell proposition. Whatever conclusion they reached will be indorsed by a good majority of the stockholders. The Passumpsic line is something over 100 miles long, and runs from White River Junction, Vt., north to Sherbrooke, Canada, thus forming the connecting link between the Boston and Lowell at White River Junction, or Well river, and the Canadian Pacific at Newport. Obviously its acquisition will be of great importance to the Canadian Pacific and the Boston and Lowell in carrying out their far reaching plans.

THE MANUFACTURE OF EMERY WHEELS.

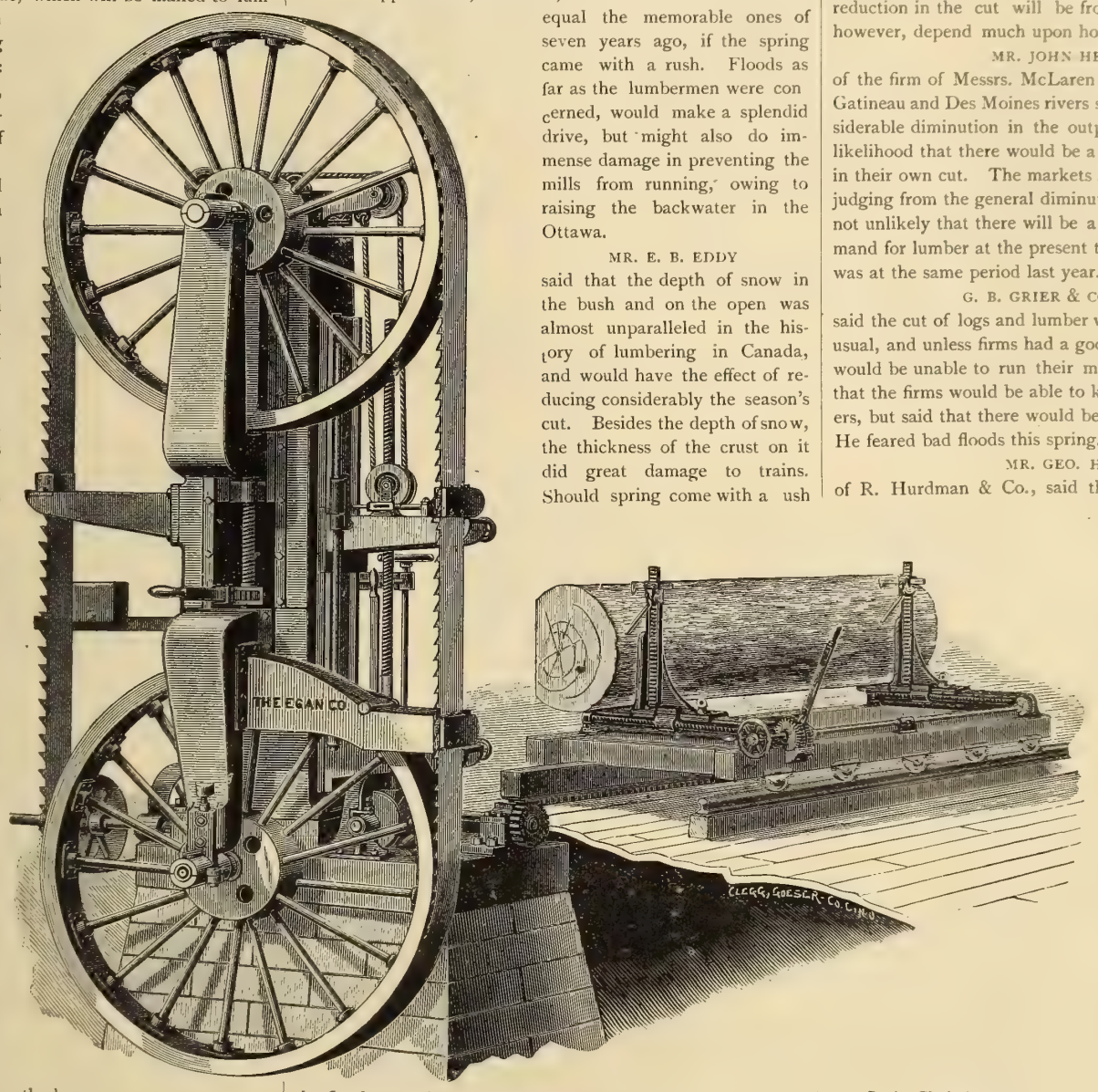
Among the outfits of saw mills there seems to be one article that of late years has proved itself indispensible. Both for gumming and sharpening saws, Emery Wheels are in great request. No makers of these goods have a higher or more extended reputation than the manufacturers of the "Hart" Wheel. It has become well known in Australia, India is a customer, France and England are steadily using them, while in the United States and Canada, probably as many are used as of all other makes together. Besides a large factory in Detroit there has been for the lasst even years an establishment in Hamilton, Canada, where the Hart Wheel is made. In the latter place besides manufacturing emery wheels a large number of mechanical devices for running emery wheels are turned out every year. Prominent among these and of interest to our readers is the line of RogersPatent Saw Gummers and Sharpeners.

Mr. S. C. Rogers, one of the directors of the Hart Emery Wheel Co., of Hamilton, has invented a very complete yet low priced devise for grinding circular saws, and also three machines for sharpening them. One of these is illustrated in an advertisement on another page. These circular saw filers will take respectfully 36 up to 48 and 72 in. circular saws, and will sharpen cross-cut saws also. There is in addition a device, (forming an attachment if needed) for the three machines which sharpens up to 72, for sharpening gang saws.

These files although not automatic may claim to be semi automatic, for the shape of the teeth and the degree of filing they need are fixed by positive stops and guides, at the will of the operator in such a way that all the teeth are filed alike. Any part of a tooth can be filed, the throat, back, breast, or point only. Having set the machine to do the work, the operator has nothing more to do than to move a lever back and forth. This motion works both the saw and emery wheel so that the latter comes in contact with just that part of any tooth that requires sharpening. The work is done wholly with emery wheels, no files are needed as the saw is finished by the machine ready for use.

NEW BAND SAW MILL.

THE economical production of lumber is a point to which lumbermen have been giving considerable attention lately. The introduction of Band Saw Mills into mills in the U. S. has been attended with considerable difficulty. Lumbermen admitted the economy of the Band Mill, but doubted its efficiency and utility. Consequently the tests that band mills have had to undergo, have been in many instances severe. The Egan Company, of Cincinnati, Ohio, U.S.A., sold a Band Mill to a lumberman of that city and he set it just across the logway from a circular, so that the cut and general behavior, figuratively speaking, of the two mills could be closely watched and compared. Of course the circular mill cut the most lumber, but it was evident that the great saving of the band mill, together with the finer quality of lumber it produced, overcame by far, the difference in the amount cut, and at the end of thirty days, the circular mill was taken out and a band mill put in its place. We illustrate on this page, the Egan Company's latest Band Mill, embodying many new and advantageous improvements over any other band mill now built. The following detailed description of this mill is taken from the Company's Catalogue, which will be mailed to lumbermen and wood-workers on application, and mentioning the CANADA LUMBERMAN :



The column is cored out, and is the stiffest that mechanical skill can construct of iron.

The base is also cored, and is braced for great strength and strain.

The axles or shafts, both above and below, are of steel and large in diameter ; both shafts can be lined up, and the lower shaft boxes are not on the base, but in separate, independent adjustable boxes.

The outside bearings on both upper and lower shafts are adjustable.

The upper shaft has boxes and bearings almost five feet in length, and in the solidity and construction of this shaft and bearings we excel all other manufacturers.

The wheels are 8 feet in diameter and 10½ inch face. They have staggered spokes, and are very stiff, with extra heavy rims and hubs, and will stand a speed of 1,000 revolutions per minute without springing, and will carry a 10-inch saw blade.

The guides are very perfect, and have a "throw" of about ½ inch so as to clear the log in gigging back. The patent rollers at back of saw are much improved in their arrangement, and prevent the saw from becoming crystalized and cracking. The last plank can be cut to 1 inch without raising the guide above the knees.

Head blocks of any special manufacture will be furnished to suit purchasers, or they can buy what suits them, and we can make the carriage to order. If desired we can adapt the mill to suit any carriage parties may have.

The feed can be either friction feed, rope feed, or steam feed. Many of our latest mills have been furnished with rope feed, and it has given general satisfaction, working very easy and without a jar. The steam feed has also given good satisfaction on our new mill, and where the carriage and logs are heavy and fast sawing is wanted, it is a great improvement.

The mill is built in the most perfect manner. The best materials are used throughout, and we test and run the mill in our works before shipping, and will warrant it in every way.

For further information, prices of this or cuts and prices of any other Improved Wood-Working Machinery, address the manufacturers, The Egan Company, 176 to 196 W. Front St., Cincinnati, O., U. S. A.

—The saw-mill at South River, formerly owned by Mr. Erb, has been purchased by a firm of Americans who intend extending and refitting it. The price paid is said to be in the neighborhood of $3,000

REDUCTION IN THE OTTAWA LUMBER CUT.

IT is a common subject of remark that the present winter's snow-fall has been almost unparalleled. Reports from various parts of the country speak of the great depth of snow in the woods, the consequent bad roads and general unsatisfactory state of affairs in the country.

The following information, kindly given by representatives of the big Ottawa Valley lumber firms to a *Journal* reporter, show how the snow is affecting them.

MR. J. R. BOOTH

said that the difficulty experienced this winter by the lumbering firms in the Ottawa districts in cutting and getting out logs and timber will have the effect of lessening the cut by at least one-fourth. This reduction in the amount of timber cut will of course lessen the amount of lumber sawn during the summer and unless all the firms have a large reserve of logs from last spring many of the mills will have to shut down before the summer is over. In cases where lumbermen sell their whole season's cut before they begin to saw it this state of affairs may prevent those who do so from keeping their contracts, but most of the large firms sell only a part of the season's cut beforehand.

To all appearances, he added, the floods this season would equal the memorable ones of seven years ago, if the spring came with a rush. Floods as far as the lumbermen were concerned, would make a splendid drive, but might also do immense damage in preventing the mills from running, owing to raising the backwater in the Ottawa.

MR. E. B. EDDY

said that the depth of snow in the bush and on the open was almost unparalleled in the history of lumbering in Canada, and would have the effect of reducing considerably the season's cut. Besides the depth of snow, the thickness of the crust on it did great damage to trains. Should spring come with a ush the floods would be terrible and might do much damage in stopping some of the mills from working till late in the season owing to the height of the backwater. The amount of sawn lumber that will be turned out during the summer was sure to be much smaller than for years previous.

MESSRS. PERLEY & PATTEE'S MANAGER

said the lumber cut would be reduced one-fourth. At present all hands were engaged in cutting roads and hauling the logs to the creeks chopping being to a great extent stopped. Last fall was splendid for log making, and large quantities were made and piled in the bush, so that notwithstanding the reduced cut there was plenty to do. Lessening the cut at least a quarter, and where firms have not a good reserve of logs, it will effect the amount sawn.

Big floods, he thought, were inevitable, and injury would be done to the mill business, especially to those mills whose wheels are low, by the water in the Ottawa rising and preventing some of them from running for a month or so.

MR. BRONSON

of Bronson & Weston, said that the state of affairs in the shanties was very unsatisfactory. The great depth of snow which had only been equalled by the spring of seven years ago, would have the effect of very much lessening the number of logs turned out. His own firm, he said, would, however, have a sufficient supply of reserve logs to keep them running all summer. He thought from appearances that bad floods were probable, and that some damage might be done by the mills being prevented from running until the water lowered.

MESSRS. GILMOUR & CO.,

who have extensive lumber operations on the Gatineau River, state that the depth of snow in the Gatineau districts is unparalleled in the remembrance of the oldest inhabitants, and never was the work of cutting and getting out logs more retarded. Nearly all choppers had been set to work hauling and breaking roads for the teams in order to get hauled all the logs which had been cut during the season. This would lessen the cut at least 25 per cent., and will have some effect upon the cut of timber at the mills.

MR. HIRAM ROBINSON,

general manager for Messrs. Hamilton Bros., said : "Lumber operations have been going on by our firm this season on the Gatineau and Des Moines rivers, and it is my opinion that the output will be considerably reduced. Our men who have been cutting are now shovelling snow and breaking the roads for the teams, hauling logs that are cut and piling up. The probable reduction in the cut will be from 15 to 20 per cent. ; it will, however, depend much upon how the season may wind up.

MR. JOHN HENDERSON,

of the firm of Messrs. McLaren & Co., who have limits on the Gatineau and Des Moines rivers says that there would be a considerable diminution in the output of lumber. There was a likelihood that there would be a decrease of about 25 per cent. in their own cut. The markets at present are very steady, but judging from the general diminution in the cut this year, it is not unlikely that there will be a rise in the prices. The demand for lumber at the present time is very much less than it was at the same period last year.

G. B. GRIER & CO'S MANAGER,

said the cut of logs and lumber would be 25 per cent. less than usual, and unless firms had a good supply of reserve logs they would be unable to run their mills all summer. He thought that the firms would be able to keep their contracts with buyers, but said that there would be no reserve logs for next fall. He feared bad floods this spring.

MR. GEO. HURDMAN

of R. Hurdman & Co., said there would not be nearly the quantity of logs got out this season as there was last. "We have stopped most of our choppers and have them engaged in getting out the logs already cut. This shortness in the cut will not effect our cut of lumber at the mills as we have a large reserve of logs on hand. I expect we will have bad floods if spring opens early. This will of course make a good drive and enable lumberman to get their logs very early."

MANITOBA AND THE NORTH WEST.

—The annual report of the Winnipeg Board of Trade places the business done in lumber last year at $1,342,000.

—J. A. Christie, lumber dealer, Brandon, talks of giving up the retail trade at that place.

—Mr. T. E. Martin, of Regina, N. W. T., has commenced importing lumber from the mills at Vancouver B. C. If satisfactory rates of freights and terms of purchase can be secured, he expects to do a large trade.

—Frank Dick, lumber dealer, Calgary, N. W. T., has sold out his stock and business at that place to Fred Robinson, proprietor of the Beaver saw mills, B. C. F. Dick will continue as manager of the yard at Calgary.

—Manitoba advices state that the immediate demand for lumber is almost nil at the present time, and very little business expected before the first of April. It is probable that the cut will be in excess of last year. Dealers feel that prices are too low, and think they should have an advance of from $1 to $3 per M. They furthermore think that the improved condition of the trade, consequent upon the reduction of old stocks, would warrant them in advancing prices. The only trouble in the way is the lack of union among mill men, and the apparent suspicion with which they regard each other. It is hoped that some arrangement may be come to whereby a regular schedule of prices may be arranged, on a common sense, business basis.

ADVERTISEMENTS

THOSE wishing to **BUY** or **SELL TIMBER LANDS, LUMBER** or **SECOND HAND MACHINERY** will find THE CANADA LUMBERMAN an excellent medium in which to make known their wants. Advertisements of this character will be inserted at the low rate of **ONE CENT A WORD**, cash to accompany the order in every case. Address

A. G. MORTIMER, Publisher,
Peterborough, Ont.

TRADE REVIEW.

TORONTO.

March 28th, 1887.

From our Own Correspondent.

With the opening of spring the lumber business is beginning to assume a degree of activity and the outlook for the coming season is being regarded as decidedly encouraging. Prices remain unchanged, a tendency towards an advance bill stuff being about the only noticeable alteration. There seems to be a scarcity at present of dry lumber, several dealers reporting their stock as lighter than for years past. This will make a demand for green lumber as soon as the mills commence operations. The only thing that may interfere with what promises to be a good season's trade is strikes, but from present indications such is not likely to occur. Building operations are going on here as rapidly as ever, and this will not only make a boom in the lumber trade, but also furnish plenty of employment to mechanics and laborers. Those of our lumbermen who operate or are interested in mills in Simcoe and Muskoka territory report that their cut will be from 25 to 50 per cent. heavier than is customery. The output will therefore be considerably larger.

The following are the ruling quotations in this city at present :—

Mill cull boards and scantling	$10 00
Shipping cull boards, promiscuous widths	12 00
" stocks	13 00
Scantling and joist, up to 16 ft	13 00
" " " 18 ft	14 00
" " " 20 ft	15 00
" " " 22 ft	16 00
" " 24 ft	17 00
" " " 26 ft	18 00
" " " 28 ft	19 00
" " " 30 ft	20 00
" " " 32 ft	21 00
" " " 34 ft	22 50@22 50
" " " 36 ft	24 00
" " " 38 ft	27 00
" " 40 to 44 ft	30 00
Cutting up planks 1¼ and thicker dry	20 00@25 00
" boards "	20 00
Dressing stocks	16 00@18 00
Picks Am. inspection	30 00
Three uppers, Am. inspection	40 00
B. M.	
1½-inch flooring, dressed	25 00@30 00
1½ " " rough	14 00@15 00
1¼ " " dressed	23 00@25 00
" " undressed	14 00
" " dressed	16 00@20 00
" " undressed	12 00@14 00
½ Beaded Sheeting, dressed	18 00@20 00
Clapboarding, dressed	12 50
XXX sawn shingles, ₱ M	2 75@ 2 90
Sawn Lath	2 25
Red oak	20 00@25 00
White "	25 00@30 00
Basswood, No. 1 & 2	18 00@20 00
Cherry, No. 1 & 2	50 00@60 00
White ash 1 & 2	25 00@30 00
Black ash 1 & 2	20 00@25 00

MONTREAL LUMBER MARKET.

MONTREAL, 24th March.

There has been no special activity in the lumber market since our last report, bad roads have still mulitated considerably against country business, and the demand fell off largely. Dealers are anxiously looking forward to spring for an increase in trade. Business this month so far, does not show an increase over the corresponding portion of last year, and most likely by the end of the month we will find that there has only been an average trade done. Advices from the lumbering districts say that only about two thirds of the average cut of logs will be made this season, owing to the immense quantity of snow in the woods. Consequently there is a prospect of an advance in prices in the spring, as the stock left over from last year at the mills is very light.

An early opening of navigation is anticipated here, and several charters for lumber freights have been made from Quebec to the Clyde at 19 s. There is no change as yet to note in prices.

The following are the quotations of the yards here :—

Pine, 1st quality, ₱ M	$00 00@40 00
Pine 2nd " "	00 00@30 00
Pine, shipping culls, ₱ M	14 00@16 00
Pine 4th quality deals ₱ M	10 00@12 00
Pine, mill culls, ₱ M	8 00@10 00
Spruce, ₱ M	10 00@13 00
Hemlock, ₱ M	9 00@10 00
Ash, run of log culls out, ₱ M	20 00@25 00
Bass, " " ₱ M	18 00@20 00
Oak, ₱ M	40 00@50 00
Walnut ₱ M	60 00 100 00
Cherry, ₱ M	80 00 100 00
Butternut, ₱ M	35 00@40 00
Birch, ₱ M	20 00@25 00
Hard Maple, ₱ M	25 00@30 00
Lath, ₱ M	1 50@ 0 00
Shingles, 1st, ₱ M	2 00@ 3 00
Shingles, 2nd, ₱ M	2 50@ 0 00

HAMILTON.

HAMILTON, MARCH 15th.

The lumber trade during February was dull in the retail yards, and although the trade was dull prices were firm. Now that the weather is moderated and the snow all gone, and considerable building has started, trade is reviving in the yards and prices are being fairly maintained, and the prospects are very good for a fair seasons business. Advanced prices are looked for in some lines.

The following are the ruling prices in the retail yards :

Mill cull boards and scantlings	$ 9 00 to $10 00
Shipping cull boards, promiscuous widths	10 00 to 12 00
Shipping cull stocks	13 00
Scantling and joist up to 6ft	13 00
" " 18ft	13 00
" " 20ft	14 00
" " 22ft	15 00
" " 24ft	16 00
" " 26ft	17 00
" " 28ft	18 00
" " 30ft	10 00
Cutting up plank 1½ and thicker, dry	20 00 to 25 00
Cutting up boards	20 00
Dressing stocks	16 00 to 18 00
1¼ flooring, rough	16 00 to 18 60
1¼ flooring, rough	16 00 to 18 00
1¼ flooring, dressed face measure	32 00
1¼ " " "	25 00
1 " " "	23 00
1 Beed sheeting	28 00 to 30 00
Picks A M. Inspection	30 00
Three Uppers A. M. Inspection	40 00
XXX sawn shingles per M	2 75 to 2 90
Sawn Lath	2 25
Red oak	20 00 to 25 00
White oak	25 00 to 30 00
Basswood No. 1 and 2	18 00 to 20 00
Cherry No. 1 and 2	50 00 to 60 00
White Ash No. 1 and 2	25 00 to 30 00
Back Ash No. 1 and 2	20 00 to 2 00

CHICAGO.

CHICAGO, March 18th, 1887.

From our own Correspondent.

The lumber trade has been booming here all through March and prices have advanced accordingly. I think the output here will exceed that of any previous corresponding month for several years past. The cause is generally assigned to the effect of the "Inter-State Commerce Bill" as the railways have advanced their western freight rates to take effect April 1st, consequently some of the yards here who are interested in 15 or 20 branch yards each in the west have been pushing shipments for all they were worth, not only from their own yards but from all others where they could buy anything at a fair price. One firm alone here have shipped on an average over half a million per day on cars from their own yard all this month and part of last month. The prospects for the regular country trade are only fair and so far country yard dealers have been ordering very little. Farmers can not do any very great amount of building with wheat at 75 to 80 cts. per bushel, and other produce in proportion, so I conclude we will not be over run with country orders this spring. The stock of dry lumber on hand here now is considerably short of what it was a year ago and this assortment very much broken up, there being plenty of good lumber on hand to meet all requirements, but a scarcity of the lower grades, and my latest information from Muskegon is that about the same state of things prevails at the mills, consequently we need not expect much dry lumber from there when navigation opens up, which by the way will not likely occur before April 15th or 20th. About six firms going out of the yard business here, May 1st, and any amount of Dock property to rent which is quite a change from a few years ago when it was impossible to get a yard location at any price. At a lumberman's annual blow out, which occured here a short time ago, the *Chicago Tribune* reported S. K. Martin, as saying (when speaking his little piece) that "*the brains* of the lumber trade was right here in Chicago." How is that for a case of "swelled head." There is no doubt as smart men in the lumber trade here as anywhere, but the sun does not rise and set in Chicago. I enclose price list, &c.

From Our Own Correspondent.

Piece Stuff, short green	$ 9 25@ 9 50
Piece stuff, short dry	10 50 11 00
Piece stuff, long	11 00 14 00
Boards and strips, No. 2	11 00@13 00
Boards and strips, medium	12 00 15 00
Boards and strips, No. 1	15 00 20 00
Shingles, standard	2 00 2 10
Shingles, extra	2 25 2 45
Shingles, cedar, standard	1 65 1 70
Shingles, cedar, extra	1 90 1 95
Lath, white pine	1 50 1 60
Lath, Norway	1 40 1 50

RECEIPTS FOR WEEK ENDING MARCH 24.

	Lumber.	*Shingles.*
1887	10,051,000	661.000
1886	6,597,000	1,741,000

RECEIPTS FROM JAN. 1, TO MARCH 24, INCLUSIVE.

	Lumber.	*Shingles.*
1887	89,602,000	7,536,000
1886	53 667,000	12,381.000

STOCK ON HAND MARCH 1, INCLUDING SOUTH CHICAGO.

	1887.	1886.	1885.
Lumber	460,611,789	555,895,847	577,364,279
Shingles	08,892,410	386,355,440	344,896,350
Lath	40,931,866	79,569,688	53,107,169
Pickets	1,860,243	2,716,568	2,305,476
Cedar posts	176,995	396,808	270,707

EASTERN FREIGHT RATES.

FROM CHICAGO AND COMMON POINTS ON CAR LOAD LOTS OF HARD AND SOFT LUMBER.

To New York	25c.
Boston	30c.
Philadelphia	23c.
Baltimore	22c.
Washington	22c.
Albany	24c.
Troy	24c.
Buffalo and Pittsburgh	15c.
Shenectady	24c.
Wheeling	15c.
Suspension Bridge	15c.
Salamanca	15c.
Black Rock	15c.
Dunkirk	15c.
Erie	15c.
Toronto	15c

LAKE FREIGHTS.

From Muskegon, green	1 62½
From Whitehall	1 62½
From Ludington	1 75
From Manistee	1 37½@1 87½
From Menominee, dry	2 00
From Menominee, green	2 00
From Cheboyan	2 00
From Bay City	3 00
From Oscoda, dry	2 75
From Alpena, dry	2 50

ALBANY.

Pine, clear, ₱ M	$55 00@60 00
Pine, fourths	50 00@57 00
Pine, selects	42 00@44 00
Pine, good box	22 00@33 00
Pine, common box	13 00@15 00
Pine 10-in. plank, each	00 45@00 47
Pine, 10-in. plank, culls, each	00 25@00 27
Pine boards, 10-in	00 30@00 32
Pine, 10-in. boards, culls	00 16@00 20
Pine, 10-in. boards, 16 ft., ₱ M	28 00@32 00
Pine, 12-in. boards, 16 ft	28 00@32 00
Pine, 12-in. boards, 18 ft	28 00
Pine, 1¼ in. siding, select	40 00@43 00
Pine, 1¼-in. siding, common	15 00@18 00
Pine, 1-in. siding, select	40 00@42 00
Pine, inch siding, common	13 00@15 00
Spruce, boards, each	00 00@00 16
Spruce, plank, 1¼-in., each	00 00@00 20
Spruce, plank, 2-in., each	00 00@00 30
Spruce, wall strips, each	00 00@00 12
Hemlock, boards, each	00 00@00 14
Hemlock, joist, 4x6, each	00 00@00 32
Hemlock, joist, 2¼x4, each	00 00@00 14
Hemlock, wall strips, 2x4, each	00 00@00 11
Black walnut, good, ₱ M	100 @120 00
Black waluut, ¾ inch	80 00@90 00
Black walnut, ¾ inch	00 00@85 00
Scaymore, 1-inch	28 00@30 00
Scaymore, ¾-inch	21 00@23 00
White wood, 1-inch and thicker	38 00@40 00
White wood, ¾-inch	28 00@30 00
Ash, good, ₱ M	40 00@43 00
Ash, second quality, ₱ M	25 00@30 00
Cherry, good, ₱ M	00 00@55 00
Cherry, common, ₱ M	25 00@30 00
Oak, good, ₱ M	40 00@43 00
Oak, second quality, ₱ M	20 00@25 00
Basswood, ₱ M	25 00@30 00
Hickory, ₱ M	00 00@40 00
Maple, Canada, ₱ M	28 00@30 00
Maple, American, per M	26 00@28 00
Chestnut, ₱ M	38 00@40 00
Shingles, shaved, pine, ₱ M	0 00@ 6 50
" 2nd quality	0 00@ 5 50
" extra, sawed, pine	4 30@ 4 00
" clear, "	0 00@ 3 00
" cedar, mixed	0 00@ 3 13
" hemlock	2 25@ 2 37
Lath, hemlock,	0 00@ 2 35
Lath, spruce,	0 00@ 2 25

NEW YORK CITY.

SPECIAL CONTRACTS.

Pine, very choice and ex. dry	$65 00@70 00
Pine, good	55 0 @60 00
Pine, shipping box	21 00@ 2 50
Pine, common box	18 00@2 00
Pine common box ¾	16 00@18 00
Pine, tally plank 1¼ 10 in	00 44@00 50
Pine, tally plank 1¼ 2nd qual	00 35@00 38
Pine, tally plank 1¼ culls	00 30@00 32
Pine, tally boards dr'd good	00 32@00 35
Pine, tally boards dressed common	00 28@00 30
Pine, strip boards culls	0 18@00 20
Pine, strip boards merchantable	0 20@00 22
Pine, strip boards clear	00 25@00 26
Pine, strip plank, dr clear	0 33@00 35
Spruce boards dressed	00 25@00 28
Spruce, plank, 1¼ inch each	00 28@ 0 30
Spruce, plank 2 in each	00 38@00 40
Spruce plank 1¼ in dressed	00 2 @00 30
Spruce plank 2in dressed	0 44@0 45
Spruce wall strips	00 15@00 18
Spruce timber	20 00@22 00
Hemlock boards each	00 18@00 20
Hemlock joist, 2¼x4	00 16@00 18
Hemlock joist 3x4	00 18@00 20
Hemlock joist 4x6	00 40@00 44
Ash, good	45 0 @58 00
Oak	50 00@60 00
Maple cull	20 00@25 00

Cargo rates 10 per cent. off.

EXTRA SELECTIONS.

Maple good	40 00@48 00
Chestnut	40 00@48 00
Cyprus, 1, 1½, 2 and 2½ in	35 00@40 00
Black Walnut good to choice	140 00@160 00
Black Walnut ¾	85 00@100 00
Black Walnut selected and seasoned	150 00@175 00
Black Walnut counters	00 22@28 00
Black Walnut 5x5	150 00@160 00
Black Walnut 6x6	160 00@170 00
Black Walnut 7x7	175 00@180 00
Black Walnut 8x8	175 00@180 00
Cherry wide	100 00@120 00
Cherry, ordinary	70 00@80 00
Whitewood inch	45 00@50 00
Whitewood ¾ in	35 00@40 00
Whitewood ¾ panel	45 00@50 00
Shingles ex. shaved pine 18 in	8 00@ 9 50
Shingles ex. sawed pine 18 in	5 75@ 6 00
Shingles clear sawed pine 16 in	4 50@ 5 00
Shingles cypres 24x7	22 00@24 00
Shingles cypress 20x6	00 00@14 00
Yellow pine dressed flooring	30 00@40 00
Yellow pine girder	26 00@35 00
Locust posts, 8 ft	00 18@00 20
do 10ft	00 24@00 25
do 12ft	00 29@00 34
Chestnut posts	00 03@00 3½

OSWEGO, N.Y.

From Our Own Correspondent.

Three uppers	$46 00@47 00
Picking	36 00@37 00
Cutting up	26 00@27 00
Fine Common	22 00@25 00
Common	14 00@18 00
Culls	12 00@15 00
Mill run lots	19 00@21 00
Sidings, selected, 1 in	30 00@38 00
" 1¼ in	28 00@36 00
Mill run, 1x10, 13 to 16 ft	19 00@21 00
Selected	24 00@26 00
Shippers	14 00@16 00
Mill run 1¼x10	15 00@17 00
Selected	21 00@30 00
Shippers	14 00@16 00
Mill run, 1 & 1¼ in, stripe	19 00@21 00
Selected	32 00@34 00
Culls	12 00@15 00
1x6 selected for clapboards	32 00@34 00
Shingles, XXX, 18 in. pine	3 65@ 3 80
XXX Cedar	3 30@ 3 50
Lath 1¼, No 1	1 80@ 2 00
No 2	1 60@ 1 80
Ash, 1st & 2nd 1 to 4 in	16 00@20 00
Basswood, 1st & 2nd, 1 & 1¼ inch	20 00@22 00
" culls, " "	11 00@12 00
Hard Maple, ₱ M	23 00@25 00
Lath, ₱ M	1 50@ 0 00
Shingles, 1st, ₱ M	2 00@ 3 00
Shingles, 2nd, ₱ M	2 50@ 0 00

CORDWOOD.

Long Maple, per cord	$ 6 00@6 50
Long Birch "	6 00@6 00
Long Beech "	5 00@5 50
Tamarack "	5 00@0 00

DETROIT, MICH.

Uppers, 4x4	$48 00
5 " 6x4 & 8x4	50 00
3 & 4in	50 00
Selects, 4x4	42 00
5x4, 6x4 & 8x4	45 00
Fine common, 4x4	35 00
5x4, 6x4 & 8x4	38 00
Shop, 44	22 00
5x4x 6x4 & 8x4	25 00
Flooring, selected common	20 00
No, 1 common	18 00
No., 1 fencing	16 50
Roofing, D. & M	16 00
Siding, clear	22 00
A	21 00
B	19 00
C	14 00
Ceiling, select common	25 00
Ceiling, No. 1 common	22 00
No. 1 fencing	20 00
Stocks, 1x12 & 1x10, No 1	18 00
1x12 & 1x10, No. 2	14 00
1x12 & 1x10, No. 3	11 00
Ship culls	10 00
Mill Culls	8 00
Bill stuff ordinary sizes :	
12 to 16 ft	11 00
18 to 20 ft	12 00
22 to 24 ft	13 00
26 to 28 ft	14 00
30 to 34 ft	16 00
Shingles clear, 18 in	3 80
10 in, clear, 18 in	2 30
6 in, clear, 18 in	2 00
6 in stocks clear, Ex	4 00
5 in. " "	4 80
Lath, per M pcs	2 50

Add for S. 1 or 2 S. $1 ₱ M

EXCHANGE ECHOES.

Lumberman's Gazette, Bay City, Mich.—There has never been a winter since the first saw mill was erected in this country where there were so many mills in operation, and so much lumber and timber manufactured as during the winter of 1886-7 just closing. This shows unusual activity in the trades which demand timber and lumber for their prosecution, and expected activity in railroad rolling stock building.

* * *

Ottawa Free Press.—Lumbermen generally express themselves quite pleased at the outlook for the coming season. Notwithstanding the passage of the Inter Commerce bill the prospects for large and brisk sales are as bright, if not brighter, than in past years. This applies principally to the American and Canadian markets. As regards the English trade, however, one firm reports a decided falling off both in square timber and sawn lumber. On the other hand another firm reports that their business in these lines with the English market will be exceptionally heavy. Prices will certainly rule as high as last year, and the opinion is generally held there will be a shade of advance. Owing to the Inter Commeree bill coming into force on the 1st of April, there is a heavy rush to get as much of the contract lumber as possible shipped to the United States before that date, and complaint is made of an insufficiency of cars. The actual amount of lumber which will be manufactured this season will be much heavier than that of last year. Not one firm reports a falling off in this respect, while two firms, Messrs. Hurdman & Co., and Messrs. Grier & Co., report a decided increase; the former of about 25,000,000 feet and the latter of about 20,000,000 feet. The new mill which Messrs. Grier & Co. are building, will increase their manufacturing capacity enormously. The lumber manufacturing industry of the Ottawa Valley was never so prosperous as at present, and notwithstanding all the disadvantages under which it labors for want of a more reciprocative commercial policy with the United States, it can compete successfully in Eastern American markets with the Michigan lumber.

* * *

Monetary Times.—We have repeatedly besought the attention of mill-men, lumberers and builders to the desirability of a freer use of hemlock timber and lumber for building uses. The supply of pine will not last for ever; and it would be well to familiarize people with the fact that there is a wood easily available and will take its place for many purposes. This is coming into use in Canada, year by year, more freely. That hemlock is making progress in popular esteem in the States, too, is evident. The Bay City *Gazette* tells us that a larger product of this wood is looked for in Michigan this year than ever before. It is coming into competition with pine in the lake cities, and indeed it is no mean competitor, light and strong and durable as it is, especially when it can be furnished for two dollars less per thousand. Then again, as we learn from the *Timberman*, in Central and Southern Ohio the hemlock from the forests of western Pennsylvania has been coming in alongside the pine from States further west and for some purposes beating its rival. "Within the past year, the development of the Western trade in Pennsylvania hemlock has been very marked, and the indications are that the rise has but just begun." That journal ventures to declare that it is the bill stuff of the future, and is besides, successfully used for shingles. Pennsylvania makers turn out hemlock shingles and sell them, with a fifteen year guarantee, at prices which pine producers can hardly match.

WE respectfully invite all readers of "The Lumberman" who are not already subscribers to fill up this sheet and return same at once. Our offer to new subscribers is the most liberal yet published, and should be accepted by every member of the trade in Canada.

The Canada Lumberman and Scribner's Lumber & Log Book

To A. G. Mortimer, Publisher.

Please send to the following address "The Canada Lumberman" and "Scribner's Lumber and Log Book" from this date until the end of the present year, for which inclose the sum of one Dollar.

.....*1887.* *Name*.....

Address.....

BEWARE OF THE SHODDY SPECULATOR.

TORONTO, March 18th, 1887.

To the Editor of the Canada Lumberman.

"This is the fool who lent money gratis."—*Merchant of Venice.*

It is a trite observation that history repeats itself. We cannot avoid enquiring: Are we on the eve of another stagnation in trade as was from '72 to '79, when the crash of falling firms was heard daily? In one of our Eastern provinces a bank has gone down accompanying an extensive lumber firm; in Great Britain Stewart Bros. have failed for $500,000; while south of us a monetary panic is predicted by the Solons of Wall street, and at home the feeling is not one of security, many houses being supported by flying buttresses.

It were well did lumbermen take something more than a superficial glance at the standing of the parties to whom the bulk of their sales are made, and endeavour to realize the fact that sooner or later a reaction will follow from which they will suffer the inevitable consequences of supplying men who have nothing to lose. As long as our speculative builders are able to make sales of the miserable tenements erected by them, so long can our dealers expect with a degree of certainty, to be paid a portion of the amount due them, but the moment any stringency is felt then payments cease, and the lumberman finds too late that he has supplied material to increase the value of the property mortgaged to the individual furnishing the cash.

It is worse than folly to ignore what is patent to all in the trade. We all know that sales are made to men who have not one cent to lose, and who, trusting to the future, expect to realize sufficient means to stave off the evil day. It is not to speculative builders alone that reference is made, but to contractors as well. Men eager to do an extensive business tender for work far too low, and having obtained the contract find that with a number of such low priced contracts on hand, they cannot attend to each as it deserves and are compelled to call a meeting of creditors at which a compromise is made of about 30 or 40 per cent. on the dollar to be paid in installments at 3, 6 and 9 months, the payments of which cannot be met as their assets are not in existence, but merely suppositious margins due on contracts, which have to be earned and subject to whatever may happen. The final winding up of the affairs of the ambitious incompetent builder is the result.

Competition among both the lumber dealers and builders is to a very great extent the cause of the evil. Nor can the real estate agent escape censure. Blocks of land are thrown on the market, (so far realizing more than their actual worth) easy terms are offered to such as will build. Houses spring up like Jonah's guard in a night—bad material, bad workmanship, and our pushing, energetic, speculative builder

"Fix'd on his house he leans; his house
And all its props decay;
He holds it fast; but, while he holds
The tottering frame gives way."

Notwithstanding the severe losses experienced almost monthly the lumber dealers continue to sell to a class of men the most worthless—men who in the majority of cases are not competent to correctly calculate the cost of a building, and in almost every instance have not the most remote acquaintance with the science of accounts. Scarcely one of our dealers but has been victimized by this unsavoury class, the shoddy speculative builder and his more pretentious brother the ambitious incompetent contractor.

Lumbermen have the remedy in their own hands, which if applied, will, to a certain extent at least, save them many a dollar obtained from small margins. Let them combine, if that can be done, and agree to supply material to none but those having some means of their own, or to such as can give the most satisfactory security, and above all, absolutely refuse all contractors who have taken contracts so low that there is not a fair margin to cover all contingencies.

CANADA.

NEW BRUNSWICK MATTERS.

MADAWASKA, N.B., March 21st, 1887.

To the Editor of the Canada Lumberman.

This has been one of the most discouraging winters for lumbering on the Upper St. John we have seen for many years. There will be a falling off of one-third the usual output. The great depth of snow we have had so long is decreasing rapidly, and, contrary to the general expectation, is passing away without causing floods. Quite a large quantity or logs are still left to haul.

The Vanburn Mills, on American side, start operations next week. There is annually shipped from this mill from 25 to 30 millions shingles, besides clap-boards and other lumber, all cut on this side, and shipped to the States without the payment of one cent of duty.

Holmes & Hammond expect to have their new mill running about the first of April. The principal machinery consists of five shingle machines. This new mill is situated opposite Green River, on American side, and it is expected that a large business will be done.

Our National Policy is like all first-class machines, easily disgraced by unskilled workmen and neglect, and through the neglect on the part of our Government officials, who are encouraging the robbery of our forest wealth by Americans, the benefits of which accrue to our neighbors instead of our own people. Canadian enterprise is being discouraged, and in a very few years, if the present state of affairs continues to exist, what little timber we have left will be stripped by Americans, leaving them not worth building mills on; whereas if a heavy export duty were exacted, our streams would be provided with mills and the ring of saws would testify to the opening up of additional labor, and encourage our children to hue out a home of their own in the land of their birth, who now are compelled to go abroad and seek work from those who have robbed us of our timber, and manufacture the same across the border. If this lumber was manufactured in Canada we could soon encourage a boom in milling, besides encouraging a channel to cultivate thousands of acres of our best lands into fields of wheat and other cereals, which now show nothing but the blackened stumps of hardwood, from which our spruce and pine have been taken.

I cannot see the policy of granting subsidies to railroads for the purpose of opening out our country, and then allow Americans to come over and rob our forests out of all the traffic required to support them after they are built. It is too much like a cow giving a good mess of milk and then kicking it over.

We have very little standing pine left on the river St. John, spruce is scattering, small and scarce; cedar is rapidly disappearing, and this year the American woodsman, in his eagerness to obtain a stock of logs at all hazards, cut from the top of the snow, leaving several feet of stump.

There seems to be a great cry among lumber monopolists over the high stumpage tax in New Brunswick, but to our mind the Government has acted wisely in this respect.

The only way to successfully open up our country is to restrict the cut of our lumber by adding more stumpage and export duty and manufacturing our lumber at home. In the near future agriculture must be resorted to in order to keep up our towns and cities instead of lumber, and the sooner politicians take this matter up the sooner there will be a boom in farming, and our province placed on a solid foundation.

A new line of railway has been run out from Campbelltown, Restigouche, to Grand Falls, which will open out one of the finest tracts of land in New Brunswick, besides bringing this upper country within one hundred miles from the seaport, making a market for Restigouche fish and a channel through which to ship our lumber. Many of our people are talking about locating on this line.

Yours truly,
P. O. BYRAM.

GRAVENHURST, March 24th, 1887.

To the Editor of the Canada Lumberman,

The stocking on Muskoka River and its tributaries is about completed, the following quantities being for Gravenhurst: Mickle, Dyment & Son, 12 millions; Ontario Lumber Co., 8 millions; Thomson & Baker, 7½ millions; Isaac Cockburn, 6 millions; McBurney & Laycock Co., 6 millions; Thomas Tait, 4 millions. The drive on the Muskoka River this year is expected to be about 60 millions. Snow still very deep and no prospects of going off as yet.

The cost of stocking has been considerable in excess of the estimate, mainly on account of severe snow storms.

Repairs on the mills have commenced, and owners anticipate a good season. Yours truly,

LUCIUS.

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After the 1st of April, J. HADDEN & SONS will be prepared to furnish Bill Stuff to the trade, up to fifty feet in length, at fair prices.

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NOTICE to CONTRACTORS

CHANGE OF TIME.

THE time for seeing the Plans and Specifications for the

NEW EXAMINING WAREHOUSE AT OTTAWA,

is hereby extended to Monday, the 21st February, and the time for receiving tenders to Tuesday, the 8th March.

By order,

A. GOBEIL,
Secretary.

Dept. of Public Works,
Ottawa, 12th Feb., 1887.

CANADA AND WEST INDIES.

TENDERS FOR STEAMSHIP LINES.

TENDERS will be received at the Finance Department, Ottawa, up to and including the 1st day of May next from persons or companies, for the performance of the following steamship services, viz:—

1st, a line of mail steamers sailing from Halifax to Havana, thence to Kingston, thence to Santiago de Cuba, thence to Canada; and (2nd) a line of mail steamers between Canada and Porto Rico and adjacent islands. Trips to be made by each line fortnightly. Steamers to be of a size sufficient to carry 2,000 tons of cargo, and to be able to steam twelve knots an hour, averaging not less than eleven knots an hour. The contract in either case to be for a period of five years. Tenders will be received for the above services either separately or together. Tenders to be marked on the outside "Tenders for Steamship Service to West Indies." The Government of Canada do not bind themselves to accept any tender.

By command,

J. M. COURTNEY,
Deputy Minister of Finance

Finance Department,
Ottawa, 7th Feb., 1887.

The American Contractor.

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The object of this publication is to furnish information in advance of contracts, to Architects, Builders, Contractors, Decorators, Painters, Roofers, Manufacturers, Producers, Investors, Bankers, Plumbers, Gas Fitters, Sewer Builders, Bridge Builders, Insurance Men, Real Estate Men, Lumbermen, Foundrymen, Hardware Men, Iron Men, Railroad Men, Supplymen, etc.

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$1.25 SCRIBNER'S LUMBER and LOG BOOK, and the CANADA LUMBERMAN for one year, sent, postpaid, on receipt of $1.25. This book contains tables for finding the correct measurement of scantlings, boards, planks, cubical contents of square and round timber, saw-logs by Doyle's rule, stave and heading bolt tables, cord wood, prices of lumber per foot, speed of circular saws, weights of wood, strength of rope, felling of trees, growth of trees, tables of wages by the month, price of standard logs, interest tables, etc., etc., to which is added 60 pages of new tables, making 160 pages in all. It is the most complete book of the kind ever published. It is worth many times the price of the subscription, and no lumberman or wood-worker can afford to be without it.

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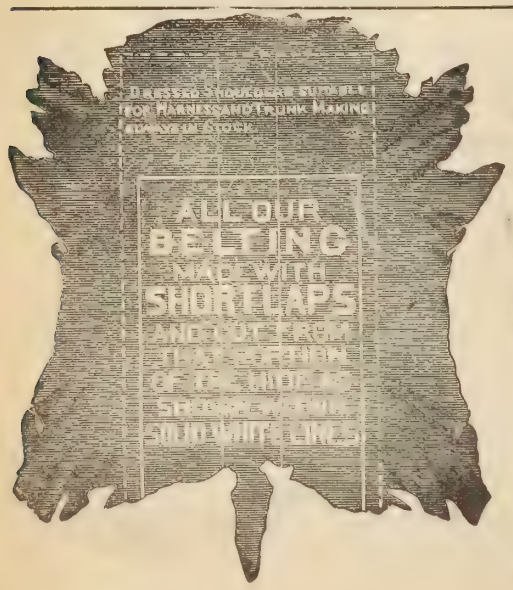

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Having for its special objects the furnishing to subscribers of reliable information on the financial standing or otherwise of tradesmen and others, the collection of outstanding accounts and the procuring of the most reliable information from independent sources of the value and condition of landed and other properties in any part of Canada and the United States, with correspondents in Great Britain and other parts of Europe.

Our method of procuring for our subscribers the most reliable information is through solicitors of the highest standing, and from other equally reliable sources in the several localities indicated, who are under contract with us to supply the necessary information promptly.

The Landed Enquiry Department of this Agency, the only institution of this kind known, is invaluable to Solicitors, Loan, Investment, and Insurance Companies, Estate Agents, and others, preventing fraudulent land transactions resulting from misrepresentations.

The Department for the collection of outstanding accounts is conducted on an entire change of the system usually followed by Collecting Agencies, viz.:—Subscribers may have their collections paid either direct to themselves, or to the offices of the Agency, in which latter case remittances will be deposited to an account provided for that purpose, and immediately remitted to the parties to whom it is due, and will not be applied to any other purpose.

Another important feature in connection with this department is, that subscribers depositing accounts for collection will, if requested, be furnished with a Form of Script, on which will be entered the name of each debtor, the amount owing, and a full report of the prospects of collection, and providing that the receipts thereof be paid to bearer only, thus enabling subscribers to realize on their outstanding accounts.

The Agency will forward at least once in three months, or oftener if desired, a report and statement of all accounts in hand.

NOTE.—The offices of the Agency are open to the Solicitors and subscribers for reference to our numerous maps, atlasses, directories and correspondence, and for the transaction of business with their clients and customers when in Toronto.

W. SMITH, Manager.

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SEND FOR PRICES

Notice to Contractors.

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for New Examining Warehouse, &c., Ottawa," will be received at this office until TUESDAY, 1st March, for the several works required in the erection and completion of the

New Examining Warehouse, &c.,

—AT—

—OTTAWA.—

Plans and specifications can be seen at the Department of Public Works, Ottawa, on and after MONDAY 14th February.

Intending contractors should personally visit the site and make themselves fully cognizant of the work to be done, according to the said plans and specifications, before putting in their tenders.

Persons tendering are further notified that tenders will not be considered unless made on the printed forms supplied, and signed with their actual signatures.

Each tender must be accompanied by an *accepted* bank cheque, made payable to the order of the Honorable the Minister of Public Works, *equal to five per cent.* of the amount of the tender, which will be forfeited if the party decline to enter into a contract when called upon to do so, or if he fail to complete the work contracted for. If the tender be not accepted the cheque will be returned.

The Department does not bind itself to accept the lowest or any tender.

By order,

A. GOBEIL,
Secretary.

Department of Public Works,
Ottawa, January 27th, 1887.

EVERY *MAN who is in any way interested in the Lumber and Wood-working industries of the country should send ONE DOLLAR for a year's subscription to the Canada Lumberman. The investment is a small one and will pay you ten-fold. Sample copy sent to any address on application.*

English Timber Trade

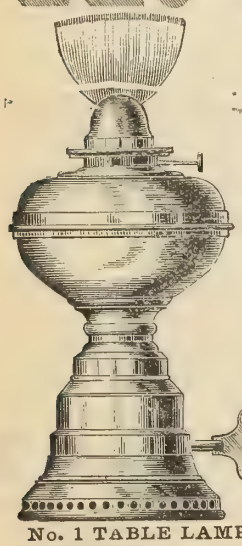
Timber reports trade in England in American black walnut as very quiet and principally of a hand to mouth character, with little disposition to purchase stock on speculation The logs sold recently brought very fair prices. Stocks are moderate, there is an improving dema d, and the prospects are very favorable. The dem nd for American whitewood keeps up well. Planks and boards seem to go off more readily than logs, but of the last named there are some very good parcels in the West India Docks, for which the importers seem to be very firm in their prices. The consumption of sequoia (California redwood) has not increased so much as expected. It does not seem to be taken to so freely in Europe as is the case in the United States and in Australia.

The aroma of red cedar is fatal to house moths; the aroma of black walnut is fatal to fleas It is a matter of common observation that persons engaged in the business of making shingles from odoriferous cypress timber in malarial districts are rarely, if ever, affected by malarial diseases, and that persons engaged in distilling turpentine do not suffer from either malerial diseases or consumption. It is said that when cholera was epidemic in Memphis, Tenn., persons working in livery stables were entirely exempt from it. It is affirmed that since the destruction of the clove trees on the island of Ternate the colony has suffered from epidemics unknown before; and in times when cholera has prevailed in London and Paris, those employed in the perfumery factories have escaped its ravages.

The Rathbun Co. have introduced into the Cedar Mill two new Perkins' patent shingling machines, manufactured by the William Hamilton Manufacturing Co., any, of Peterborough. One of them was tested last Friday and made 106 cuts per minute, turning out in one hour 5,250 shingles. The shingle department is now turning out 100,000 shingles per day.

The Wanzer Lamp

Patented at Home and Abroad, 1886.



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Positively Non-Explosive!

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Every Lamp Guaranteed

OUR LAMP is all we claim for it, being positively non-explosive, the oil being kept continually cool, consuming only half a pint of ordinary coal oil during six hours burning; using only an inch wick, and producing a fine clear 50 Candle Power light. No chimneys are required, but ordinary globes or shades may be adjusted to it. No smoke or offensive odor. Water can be heated in a few minutes. Tea or Coffe made, and Oysters Cooked, &c., without obstructing the light. Reflectors of entirely new designs for both out-door and in-door use are furnished at low figures. Made in all styles—Table, Hanging, Library, attach to Chandeliers, Gas Fixtures, etc. *Agents wanted where territory has not already been taken.*

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NOTICE.

SEALED TENDERS, addressed to the undersigned and endorsed "Tender for Indian Supplies," will be received at this office up to noon of SATURDAY, 30th April, 1887, for the delivery of Indian Supplies during the fiscal year ending 30th June, 1888, consisting of Flour, Bacon, Groceries, Ammunition, Twine Oxen, Cows, Bulls, Agricultural Implements, Tools, &c., duty paid, at various points in Manitoba and the North-West Territories.

Forms of tender containing full particulars relative to the Supplies required, dates of delivery, &c., may be had by applying to the undersigned, or to the Indian Commissioner at Regina, or to the Indian Office, Winnipeg.

Parties may tender for each description of goods (or for any portion of each description of goods) separately or for all the goods called for in the Schedules, and the department reserves to itself the right to reject the whole or any part of a tender.

Each tender must be accompanied by an accepted Cheque on a Canadian Bank in favour of the Superintendent General of Indian Affairs for at least five per cent. of the amount of the tender, which will be forfeited if the party tendering declines to enter into a contract based on such tender when called upon to do so or if he fails to complete the work contracted for If the tender be not accepted, the cheque will be returned.

Tenderers must make up in the Money columns in the Schedule the total money value of the goods they offer to supply on their tender will not be entertained.

Each tender must, in addition to the signature of the tenderer, be signed by two sureties acceptable to the department, for the proper performance of the contract.

When implements of a particular make are mentioned it is because the articles so designated suit the department for the purpose required better than others; in such cases the competition between tenderers must, of course, be in the transportation to the place of delivery.

In all cases where transportation may be only partial by rail, contractors must make proper arrangements for supplies to be forwarded at once from railway stations to their destination in the Government Warehouse at the point of delivery.

Tenderers will please note carefully the following conditions:—

1. Supplies will not be paid for until the Department has been assured of the satisfactory delivery of each article for which payment is claimed.
2. No tender for supplies of a description different to that given in the index will be considered, and supplies which are found on delivery, to be of kind or quality different to those described, will be rejected by the agents of the department; and the contractor and his sureties will be held responsible for any loss entailed on the Department through failure to deliver in accordance with terms of contract.
3. It must be distinctly understood that supplies are to be delivered at the various points for the prices named in the tender; *that no other additional charge for packing or any other account will be entertained*, and that an invoice must accompany each separate delivery of supplies. An invoice for each separate delivery must also be sent to the Department of Indian Affairs at Ottawa, and one to the Indian Commissioner at Regina, if the supplies are for the North-West Territories. When the supplies are for points in the Manitoba Superintendency the triplicate invoice should be sent to E. McColl, Winnipeg.
4. Prices must be given for articles to be delivered at each point of delivery named in the Schedule for each article for which a tender is submitted, and not an average price for each article at all points of delivery; no tender based on a system of averages will be considered
5. Tenderers should understand that they must bear the cost, not only of sending their samples to the Department of Indian Affairs, but also freight charges incurred in returning such samples to the tenderer.
6. When supplies are to be delivered "equal to sample," tenderers should understand that the sample is to be seen either at the Department of Indian Affairs, at the office of the Indian Commissioner at Regina, at the office of the Inspector in charge at Winnipeg, or at any one of the undermentioned Indian Agencies.

MANITOBA.

Agent.	*Agency.*
H. Martineau	The Narrows, Lake Manitoba.
F. Ogletree	Portage La Prairie
A. M. Muckle	St. Peter's
R. J. N. Pither	Fort Francis.
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J. B. Lash	Muscowpetung's Reserve.
H. Keith	Touchwood Hills
J. M. Rae	Prince Albert.
J. A. MacKay	Battleford.
G. G. Mann	Union Lake.
J. A. Mitchell	Victoria.
W. Anderson	Edmonton.
S. B. Lucas	Peace Hills.
W. Pocklington	Blood Reserve.
M. Begg	Blackfoot Crossing.
W. C. de Balinhard	Sarcee Reserve.

and that no attention will be paid to a sample of any article which may accompany a tender, if a standard sample of such article is on view at the department of Indian Affairs or any one of its Offices or Agencies aforesaid.

7. These Schedules must not be mutilated—they must be returned to the Department entire even if the supply of one article only is tendered for—and tenders should in the covering letter accompanying their tender name the pages of the Schedule on which are the articles for which they have tendered.

The lowest or any tender not necessarily accepted.

L. VANKOUGHNET,
Deputy of the Superintendent-General of Indian Affairs.

Department of Indian Affairs, Ottawa, Feby., 1887 } 5d75

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MINING REGULATIONS

To Govern the Disposal of

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1886.

THESE REGULATIONS shall be applicable to all Dominion Lands containing gold, silver, cinnabar, lead, tin, copper, petroleum, iron, or other mineral deposits of economic value, with the exception of coal.

Any person may explore vacant Dominion Lands not appropriated or reserved by Government for other purposes, and may search therein, either by surface or subterranean prospecting, for mineral deposits, with a view to obtaining under the Regulations a mining location for the same, but no mining location or mining claim shall be granted until the discovery of the vein, lode, or deposit of mineral or metal within the limits of the location or claim.

QUARTZ MINING.

A location for mining, except for iron, on veins, lodes, or ledges of quartz or other rock in place, shall not exceed forty acres in area. Its length shall not be more than three times its breadth, and its surface boundary shall be four straight lines, the opposite sides of which shall be parallel, except where prior locations would prevent, in which case it may be of such a shape as may be approved of by the Superintendent of Mines.

Any person having discovered a mineral deposit may obtain a mining location therefor, in the manner set forth in the Regulations which provide for the character of the survey and the marks necessary to de-ignate the location on the ground.

When the location has been marked conformably to the requirements of the Regulations the claimant shall, within sixty days thereafter, file with the local agent in the Dominion Lands Office for the district, in which the location is situated, a declaration or oath setting forth the circumstances of his discovery, and describing, as nearly as may be, the locality and dimensions of the claim marked out by him as aforesaid; and shall, along with such declaration, pay to the said agent an entry fee of FIVE DOLLARS. The agent's receipt for such fee will be the claimant's authority to enter possession of the location applied for.

At any time before the expiration of FIVE years from the date of his obtaining the agent's receipt, it shall be open to the claimant to purchase the location on filing with the local agent proof that he has expended not less than FIVE HUNDRED DOLLARS in actual mining operation on the same; but the claimant is required before the expiration of each of the five years, to prove that he has performed not less than ONE HUNDRED DOLLARS' worth of labor during the the year in the actual development of his claim, and at the same time obtain a renewal of his location receipt, for which he is required to pay a fee of FIVE DOLLARS.

The price to be paid for a mining location shall be at the rate of FIVE DOLLARS PER ACRE cash, and the sum of FIFTY DOLLARS extra for the survey of same.

Not more than one mining location shall be granted to any individual claimant upon the same lode or vein.

IRON.—The Minister of the Interior may grant a location for the mining of iron, not exceeding 160 acres in area, which shall be bounded by north and south, and east and west lines astronomically, and its breadth shall equal its length, Provided, that should any person making an application purporting to be for the purpose of mining iron thus obtain, whether in good faith or fraudulently, possession of a valuable mineral deposit other than iron, his right in such deposit shall be restricted to the area prescribed by the Regulations for other minerals, and the rest of the location shall revert to the Crown for such disposition as the Minister may direct.

The Regulations also provide for the manner in which land may be acquired for milling purposes, reduction works, or other works incidental to mining operations.

Locations taken up prior to this date may, until the 1st of August, 1884, be re-marked and re-entered in conformity with the Regulations without payment of new fees, in cases where no existing interests would thereby be prejudicially affected.

PLACER MINING.

The Regulations laid down in respect of quartz mining shall be applicable to placer mining as far as they relate to entries, entry fees, assignments, marking of localities, agents' receipts, and generally where they can be applied.

The nature and size of placer mining claims are provided for in the Regulations, including bar, dry, bench, creek or hill diggings, and the RIGHTS AND DUTIES OF MINERS are fully set forth.

The regulations apply also to

RED-ROCK FLUMES, DRAINAGE OF MINES AND DITCHES.

The GENERAL PROVISIONS of the Regulations include the interpretation of expressions used therein; how disputes shall be heard and adjudicated upon; under what circumstances miners shall be entitled to absent themselves from their locations or diggings, etc., etc.

THE SCHEDULE OF MINING REGULATIONS.

Contain the *forms* to be observed in the drawing up of all documents, such as:—"Application and affidavit of discoverer of quartz mine." "Receipt for fee paid by applicant for mining location" "Receipt for fee on extension of time for purchase of a mining location." "Patent of a mining location." "Certificate of the assignment of a mining location." "Application for grant for placer mining and affidavit of applicant." "Grant for placer mining." "Certificate of the assignment of a placer mining claim." "Grant to a bed-rock Flume Company." "Grant for Drainage." "Grant of right to divert water and construct ditches."

Since the publication, in 1884, of the Mining Regulation to govern the disposal of Dominion Mineral Lands, the same have been carefully and thoroughly revised with a view to ensure ample protection to the public interests and at the same time to encourage the prospector and miner in order that the mineral resources may be made valuable by development.

COPIES OF THE REGULATIONS MAY BE OBTAINED UPON APPLICATION TO THE DEPARTMENT OF THE INTERIOR.

A. M. BURGESS,

Deputy Minister of the Interior.

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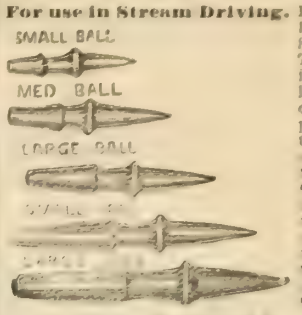

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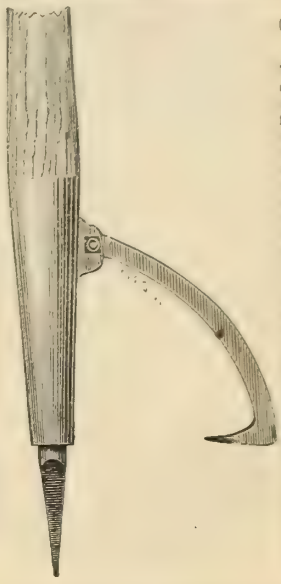

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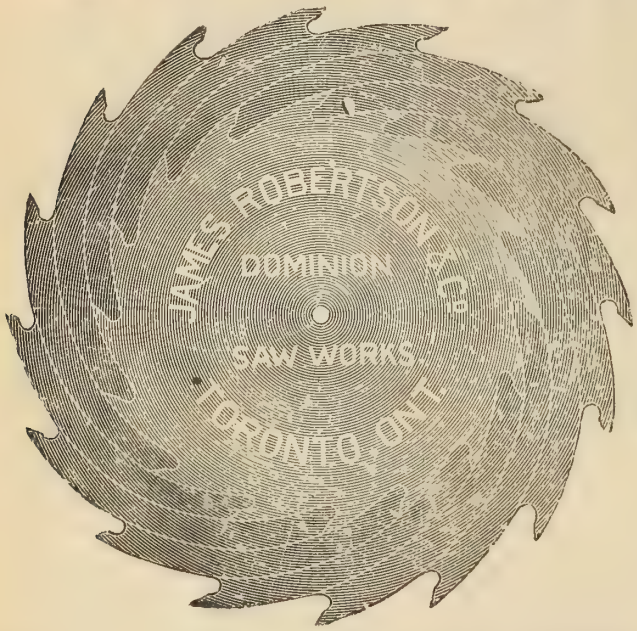

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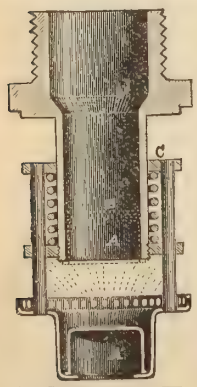

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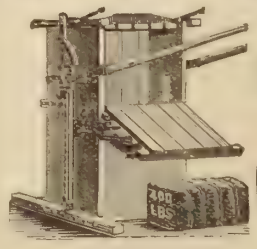

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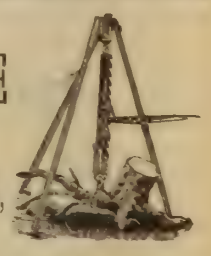

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VOL. 7. PETERBOROUGH, ONT., MAY, 1887. NO. 5.

BAND AND SCROOL SAWS.

A VERY useful tool in a pattern shop is a good band saw. The more it is used the better it is liked, and one is continually being surprised by its capabilities. It will do nearly everything that a circular saw can do, and a great many things that can't be done by a circular saw. The band saw, if kept in good order will do nice work, but if the guides are allowed to get worn out of shape, leaving the edge of saw loose, the saw so badly set and filed that each and every tooth strikes it in a new place on the stuff being sawed, and then the hole through the table so large that you can stick your finger down through the table all around the saw, it won't be likely to do very nice work, and it wouldn't be safe to get very close to the line in sawing, because you never would be sure of where the saw was cutting on the bottom side of the stuff. With a saw that is set and filed accurately, you may safely cut right up to the line, when necessary, if it don't crowd the saw, but allow it time to cut free and clean.

In sawing short curves it is very easy to cramp the saw by feeding too fast, or in the wrong direction. It is hard to give any explicit directions in regard to feeding when sawing curves, but let the feeding be so done that all the power exerted will tend to force the saw against the collar or plate behind it. You should not twist the stuff so that the saw is pressed hard against the sides of the guide, as this causes great friction and consequently throws a great strain on the saw, also heating it. If you persist in doing this you will break a great many saws, besides wearing out the guides very fast. The rubber covering on the wheels will also come in for an excessive amount of wear.

When the saw needs setting or filing, before you take it off the wheels, brush the dirt and gum out of the teeth. A file card does this first rate; then joint the saw with an emery stone, taking care to hold the stone square across the saw. Take off the saw and if it needs setting, set it just as little as possible. Don't try to make a wide saw do the work for which you should use a narrow saw by setting it very wide, for it won't work nice, and it is hard on the wheel covering. In filing, it is customary to file all from one side and square across, although the saw would cut better if filed partly from each side.

After the saw is replaced on the wheels, and the guides adjusted to the saw, not the saw made to run in the guides, just as they are, because it runs so before filing, unless both the top and bottom guides are just right to fit and hold the saw. Make sure that they are just right. They should be exactly in line with the saw, and take in the whole width of saw except the teeth. Then adjust the upper wheel. This will usually, and I presume always, be provided with means for tilting it over toward the front or back as may be necessary so that the saw won't run off. It should run against the back of the guide very lightly when not doing any work. This saves the guides and also prevents any unnecessary heating of the saw.

Now joint off both sides of the saw in this way, use an emery stone having a flat surface, then holding the stone against the side of the saw touching the back edge, first keeping it in contact with the back edge, swing it around until it touches the sides of the teeth. This method will prevent any possibility of cutting off the front corners of teeth, and therefore the saw will cut to its full width.

The saw should run straight and true when in motion and not squirm around like a snake, as I have seen some do. You can perhaps imagine how close to the line it would be advisable to get with a saw that runs back and forth sidewise, three or four times in each revolution. Of course this sidewise motion should be controlled by the guides, but the same saw that has the most need of the controlling influence of the guides doesn't get it, because the guides are in no better shape than the saw itself.

A saw that has been broken and mended a number of times is very apt to run crooked not only on account of the joints, but because the soft places which the brazing of the joints make, are very apt to get bent. When your saw gets broken and you wish to mend it, begin by filing down the ends you wish to join. Make the joint from one-half to one inch long, taking care to file the ends to a straight taper, so that the joint will fit closely together without springing and also to be of the same thickness as the rest of the saw. This is important, as you will find that if you have to spring the joint together when you braze it, you will spring the saw on each side of the joint. Then when you are ready to braze the joint, take care to clamp it down straight, and don't get more thickness of brass, silver or whatever solder you use than there will be of steel after the joint is finished. Put the saw on the machine, adjust the guides and try it. If the edge runs in a straight line, and the new joint passes the guide without being heard, you have done a good job, and you will be repaid for all your troubles by the quality of work turned off.

If I should try to tell all that might be done by a band saw I should wear out the patience of the reader, and perhaps not tell him anything new after all. The best job I ever heard of as being accomplished on a band saw was the sawing of gear teeth, right to the line, so that they only required sandpapering to complete them. I didn't see the gear teeth, but I always thought they must have been finished before the sandpaper touched them. Seriously, about the only thing in the line of sawing that can't be done on a band saw is making holes. This is where the band saw has to yield to the jig saw, its older relative. This machine (the jig saw) as in use in most shops, makes more noise than all the rest of the machinery together, and does comparatively little work. It is just the opposite with the band saw, which makes very little noise, but does a great deal of work.

There are, of course, some exceptions to the kind of jig saw noted, but even the best of them require constant care and a good deal of it. The saw wants filing very often, and why shouldn't it when you remember that about five inches in length of it does all the work, and consequently gets dull very quickly? Then the guides for the cross heads—perhaps there are two cross heads—must be kept snug, and the connecting rod or pitman mustn't be allowed to get loose, and there is usually trouble in keeping the machine oiled, as the sawdust, more or less of it (generally more) falls directly on the cross-head and pitman, and soon obsorbs the oil from these parts and from the guides. But we must put up with all their faults, because we can't saw holes with a band saw, until some genius (?) makes a band saw with a joint in it.

One great difficulty in the way of a smooth running jig saw is a little too much speed; they run too fast. If the pitman and crosshead are very heavy, and are not well balanced, you can easily see what a little too much speed will do. Then there are jig saws that are not provided with any appliance to ease the shock of reversing the motion at the end of stroke. The spring commonly used at the top to strain the saw helps the reversing at the lower end of the stroke, but hinders it at the upper end. Another point where the jig saw has the advantage of band saw is in the size of work which may be done. On the band saw the size is limited to the diameter of the wheels which carry the saw, but with the jig saw the only limit to size of stuff sawed is the size of room where the saw is located.

A good jig saw should have its crosshead and pitman as light as is consistent with the necessary strength, and well balanced, with good tension for saw at the top end. This is a sure method of holding the saw, and one that can be operated quickly. The pitman must not be too short; neither should it be too long, as this will add unnecessary weight to the reciprocating parts. Not less than three, or more than five times the length of stroke will put the length within reasonable limits. The tension spring helps the reversing at lower end of stroke. Then if the blower for removing the sawdust could be located at the top end of stroke; but the difficulty in the way of this is the pipe necessary to convey the compressed air from the blower to the upper surface of work. Still an air cushion might be utilized to keep the sawdust off the crossheads and guides, and it would certainly make the saw run steadier. Then, to bring out the good points, and make them show to the best advantage, the saw should stand on a good foundation.

It is not a good plan to use much oil on the saw, or the saw guides, because the sawdust sticks to it, and the oil gets on your work, and it makes things dirty and disagreeable. This applies equally as well to the band saw. It is much better to keep the saw in such good order that it will need no oiling at these.

I recollect reading in the *American Machinist* about the influence poor tools, dirty machines, and the poor work resulting therefrom, had upon the character of the workman. Where these things are chronic, the men's work will soon become like the shop, poor and dirty in looks, and whoever saw a dirty machine do a good job?

Take, for example, a band saw that hasn't had the oil and dirt wiped off in six months, and this too, where it has been the rule to oil the saw and saw guide as often as any one thought necessary. The oil will collect all the sawdust that will stick to it: the saw itself I should expect to find in keeping with the machine, every tooth set to a different width, and filed to a length of its own. This saw won't do good work, and the man who has the care of it won't be apt to lose much sleep on this account.—*F. W. Barrows in American Machinist.*

A new lumber tariff has been publlshed by the C. P. R. which fixes rates from Shuswap and all shipping points east of Shuswap to all points from Banff to Emerson. On the longer distances the rates in, comparison with those in force are slightly lower, but on shorter hauls rates are doubled. The new tariff is regarded with great displeasure by dealers in Calgary and by mill men in the naighborhood of Donald as calculated to destroy their trade. Calgary and Banff are deprived of all advantages from their proximity to timber, and will have to pay as much for lumber brought 150 miles as they would have to pay if it was 600 miles distant.

NOTES FROM THE MILLS.

ONTARIO.

—The Rathbun Co. has established an agency at Smith's Falls.

—Scrimgeour Bros., sash and door manufacturers, Stratford, have admitted Jas. Bennock a partner.

—The firm of Hastings & Peterkin, planing mill, Toronto, has dissolved, Wm. Hastings retiring.

—Maunder's sash, door and shingle factory at Little Britain, Ont., is being overhauled and improved.

—Mr. Ed. Bradley has been repairing his saw-mill at Kilgorie, Ont., and has put in a new engine.

—Mr. Wm. Hall, late of Stanton, has leased the Shelburne planing mills, and has commenced operations.

—Messrs. Hamilton & McGowan, of Laurel, Ont., have moved their saw-mill to lot 26, con. 5, Amaranth.

—Messrs. John and Thomas Cross, of Chesley, Ont., have purchased Gardner's saw mill at Dobbington, Ont.

—One million feet of oak lumber on Walpole Island has been purchased by the St. Clair steamship company.

—The estimated cut of logs for Mr. J. R. Booth, in the Nipissing District this season is put down at 174,000.

—Lewis and Hiram Vanest have purchased from W. Estis one half interest in the saw and feed crushing mills at Parkham, Ont.

—Pocock & Haynes, sawmakers, recently of Hamilton, have been voted a bonus of $5,000 to establish their works at Oshawa.

—Work on the new steamer to be constructed at the Rathbun Company shipyard will be commenced in the course of a few weeks.

—Mr. John N. Stewart, an old resident of Ashton, Ont., has removed to Eastman's Springs, where he has purchased a valuable mill.

—The bulkheads and booms at the Chaudiere, protecting the saw mills and slides, have been completely repaired in anticipation of the spring floods.

Messrs. Gilmour & Co., in addition to other improvements, have built a fine new saw mill at Chelsea, and will soon be ready to begin the season's sawing.

—A gang of 28 shantymen were recently sent to the Georgian Bay lumbering district by the Grand Trunk railway to work on the drive and in the mills.

—The Kingston and Pembroke Iron and Mining company, with a capital of $5,000,000, has been formed to develop the iron ore district along the K. & P. Ry.

—Messrs. J. R. Booth & Co., of Canada, shipped in one week recently over one hundred and fifty car loads of lumber to various points in the Eastern States.

—The Terra Cotta Lumber Company are making preparations for the erection of extensive buiklings, &c., in the so-called hospital field in the east end of Deseronto.

—Messrs. Perley & Pattee, lumber merchants of Ottawa, have extended their docks around Blyth's Point on the Ottawa river. The extension entailed great labor and expense.

—Mr. D. McLeod, of Marsden, Ont., got out about 20,000 ties and a large quantity of birch this year. Morrison & Co., of the same place, expect to have their saw mill running soon.

—The Ontario Lumber Company are making extensive shipments of lumber from Burk's Falls this spring. They have hundreds of thousands of feet piled in the station yard awaiting cars.

—Says the Orillia *Packet*, lumbermen agree that the shanties will yield a very good average cut this spring as the result of the winter's work, notwithstanding the prolonged and severely bad weather.

—The new Paper Pulp Company, at Ottawa. have a large gang of men employed in fixing up the old Thompson mill on the Chaudiere. The old driving water-wheels are being removed and heavy iron ones put in their place.

—Mr. John Ellison, of Port Stanley, has been granted a bonus of $6,000 by that town on account of the wood bending and turning works which he is erecting there. It is expected that these works will be in operation about April 1st.

—Mr. James, of Pickering, Ont., is opening a large lumber yard in Toronto. He has 25 men at work near Gambridge, Ont., getting out cedar for fence posts, paving blocks, etc., for shipment via the Midland railway to this city.

—One of the largest turbine wheels ever imported into Canada passed through Ottawa last month. It was purchased in Holyoke, Mass., by the Du Lievre Milling and Manufacturing Co., and will be utilized in increasing the power of their phosphate crushing mill at the Du Lievre Basin.

—Mr. J. Dovey has arranged to at once build at Lindsay a large shingle mill. The site selected is on the east side of the river, where the Thurston mill stood some years ago. The mill is expected to be in operation by the end of May.

—A consignment of sixteen car loads of laths was shipped the other day to the New England states by Messrs. Bronson, Weston and Dunham, lumbermen of the Chaudiere. The shipments of laths to the other side this spring have been large.

—Messrs. Fox & Co., Toronto, manufacturers and dealers in lumber, sash, doors, blinds, etc., inform us that an unusual amount of building in Toronto is in contemplation for the coming season, and that nothing short of an earthquake or a strike among the building trades, which terms are synonymous, can retard or prevent the boom.

—The splendid new iron tug which the Upper Ottawa Towing Company is building at Pembroke is fast nearing completion and will be ready for launching when the ice goes off the river. After the engine and boilers are placed she will be taken to the Lower Allumette lake by way of the Culbute canal, to engage in the season's towing.

—Mr. W. P. Sweatman, for many years manager of the lumber firm of Messrs. A. & P. White, at Pembroke, is leaving with his family to enter the service of the celebrated Massey Mfg. company at Winnipeg. He was presented recently with a handsome silver tea service and a most feeling address by the congregation of Holy Trinity Church at that place. The workingmen also presented him with an address and a gold chain and locket, also a case of silver dinner knives. A deputation of clergymen waited upon him, presenting a beautiful address and valuable present of books as a recognition of their appreciation of his untiring and faithful labors in all good works.

—Messrs. Train & Son are thoroughly overhauling the saw mill at Burk's Falls. The building is being enlarged by the addition of 30 ft. in length, and 10 ft. in width along the whole structure, making the mill to cover 40x100 ft., thus affording an increased power of 4 ft. head, and bringing the two Leffell Wheels nearer their work. They are also putting in a new saw rig and carriage, independent rope feed, trimmers, burner, slush chains and live rolls. This is being supplied by the well known firm of The William Hamilton Manufacturing Company, of Peterborough. The drag saw, shingle machine and lath cutter have been removed to the mill floor for convenience of the workmen and oversight. This mill when completed will cut 30,000 ft. per diem of lumber, and about 25,000 shingles. The firm have now about two and a half million feet to cut, and are arranging for an additional amount. Cutting will begin about the 15th of May, when 25 or 30 hands will be employed. Mr. W. H. Train has the general management of the work at Burk's Falls.

QUEBEC.

—A gentleman, who has recently arrived from River Desert on the Gatineau, states that the roads to the lumber shanties are now impassable by teams, and that it is impossible to take provisions to the shanties.

—An immense iron gang for cutting lumber, with a 54 inch sash, and taking saws 3 feet 8 inches long, weighing in all about 25 tons, was loaded the other day for shipment to the Charlemagne Lumber Co., below Montreal. This monster machine, was made at the Wm. Hamilton Manufacturing Company's Works, at Peterboro' Ont., whose invention it is.

—Messrs. James MacLaren, of Buckingham, lumber manufacturer; Albrech T. Pagenstether, of the city of New York, merchant; Warren Curtis, of Corinth, state of New York, paper manufacturer; John Edward Doyle, and John Forman, of Montreal, merchants; will apply to the Quebec Legislature to be incorporated as the Laurentides Pulp Company (Limited), with a capital of $200,000. A factory is proposed to be built in Montreal.

—*L'Electeur* defends the Mercier Government's action in increasing from two dollars to five dollars the ground rent payable by lumber merchants on their timber limits. It does so on the ground:—1. That the Government requires $125,000 a year additional revenue to put an end to deficits and meet the interest on the new loan. 2. That for twenty years owing to the low rent, the lumber merchants have been gradually getting into their hands all the best timber lands to the detriment of the settlers, and holding them, not so much to work them as to sell them on the first chance at enormous profits, paying little or no stumpage, and thus robbing the Province of the revenue which it has a right to expect from its forest resources. 3. That it is desirable to protect these resources against speculation; and 4. That it is time the lumber merchants should contribute their proper share of the revenue, and that all the public burdens should not fall on the people. *L'Electeur* adds that there are actually 4,000 square miles under license, and that the increase from $2 to $5 per acre will yield an additional revenue of about $138,000.

—Commencing this date the extensive lumbering and manufacturing business so long conducted by Mr. E. B. Eddy, with headquarters at Hull, becomes merged into and will be conducted as a company. Mr. Eddy remains at the head of the concern, with Mr. S. S. Cushman (long connected with the establishment) as vice-president, and Mr. W. H. Rowley, formerly manager of the Merchants' Bank, as secretary-treasurer. The company is incorporated by Act of Parliament, and starts out with a capital of a million and a half. The business, which has now assumed very extensive proportions, was established in 1854, just thirty-three years ago. The house has always enjoyed a first-class reputation for business enterprise and integrity, and in its new relationship will doubtless hold the valuable connections already established throughout Canada, the United States and abroad.—*Ottawa Journal.*

NEW BRUNSWICK.

—Spruce logs are worth $9.25 for American, $8 for Canadian.

—Freights to New York by water are $3 to load above Suspension Bridge, $2.75 below.

—Miller & Woodman's and A. Cushing & Co's mills commenced sawing on the 21st March.

—The ice in the St. John River and lakes is not heavy and there is every prospect of good driving.

—Operations in the woods are done. The cut is probably one fifth short, as the great depth of snow prevented anything like good work.

—Mr. Jordan foreman for Hayford & Stetson will build a shingle and rotary mill on the site of the Warner mill destroyed by fire in December last.

—Hayford & Stetson have built during the winter seven lime kilns close to their Indian Town saw mill, which they propose to fire with their refuse.

—The annual meeting of the St. John River Log Driving Company will be held in the city of Fredericton on the 20th April. The driving rights and duties will be sold at public auction the same day to the lowest bidder.

—The St. Croix, (N.B.) *Courier* says the authorities of the United States have sent men to the upper waters of the St. Croix and Saint John rivers to take account of marks and the quantity of logs got out on American soil with a view of stopping the alleged smuggling of Canadian lumber into Maine ports.

—Advices from St. John's, N.B., states that the cut of logs on the St. Croix river the past winter, was intended to be about 50,000,000 feet, but in reality it will not amount to more than 30,000,000 feet, or less than half of last year's cut. An early break-up of the ice in the streams is anticipated, and driving operations are likely to be very successful.

—A Springfield correspondent of the St. John, N. B., *Sun* writes: "Chas. Perkins, of Norton, has given employment to quite a large number of men. He has now under his employ some 22 men. During the winter he has got out some 150 cords of pulp, which is now at Norton station ready to ship to the contractors in the United States. He is now getting lath wood, and expects to ship some 100,000. He says the winter in our country has been very favorable for his business."

MANITOBA AND THE NORTH-WEST.

—The Minnesota & Ontario Lumber Co., of Rat Portage, have sent men to the mountains to examine the timber limit which the company purchased there recently.

—The contract for supplying tamarac poles for the telegraph line between Battleford and Clarke's Crossing has been awarded to Mr. Tupper, of Victoria; and for the line between Clarke's Crossing and Humboldt to Baptiste Boyer.

—Winnipeg *Free Press:* The winter's cut in the lumber regions of Lake of the Woods will amount to about 32,000,000 feet. The Keewatin Lumber and Manufacturing Co. have had five camps established all winter, and will get out twelve million feet saw logs and 150,000 ties. Some 30 million feet of logs are reported. Immense quantities of ties have been taken out this winter. A Selkirk estimate of the lumber which will be brought in from Lake Winnipeg during the coming summer is:—Wood & Co., one million feet; Brown, Rutherford and Neilson, fifteen hundred thousand feet; Selkirk Lumber Company, four million; Captain Robinson, two million; Drake & Rutherford, two million; Jonasson, Frederickson and Walkley, fifteen hundred thousand; J. Woods, one million, an aggregate of fifteen millions. Apart from this J. Woods will bring in fifteen hundred thousand shingles, and Messrs. Howell & Scarry about 50,000 railway ties. This would make the total lumber output for the winter about 45,000,000 feet—probably an outside estimate. There is, however, no doubt but that the output this year is considerably in advance of previous years, and the prospects for the summer business are fairly bright.

A STANDARD GANG SAW MILL.

WE noted in our last issue that the Wm. Hamilton Mfg. Co. of Peterborough, Ont., had just made arrangements with Wm. M. Wilkin, of Erie, Pa., to manufacture his improved patent Compensating Balance Gang, and now give description and cut which very clearly shows its general construction and operation. The radical departure in this machine from previous practice consists in the device adopted for preventing the excessive vibrations to which the ordinary gang mill has been subject. The immense weight of a heavy sash full of saws, reciprocating at the rate of 200 to 300 strokes a minute required an absolutely stable foundation ; and even then many gangs tore themselves to pieces.

The shaft of the compensating gang here illustrated is provided with three cranks, the centre one operating the main pitman and the sash. The other two carry inverted pitmans attached to a counterweight sliding in vertical ways. The counterweight is exactly equal to the sash and its saws. The three cranks have the same throw, the two inverted pitmans are of the same weight as the driving pitman, and as the motions of the sash and the counterweight are in exactly opposite directions, it will be seen that the reciprocating parts are self-balanced, the opposing shocks and vibrations will thoroughly neutralize each other, and the machine will run at any speed without jar. Such are, in brief, the claims of its makers. Moreover, it will be seen that the vertical throw of the mechanism being absorbed within itself, the journal boxes are required to bear only the uniform weight of the sash, rods and counterweight.

The sash is made of one casting of steel, and is oscillated by long inverted pendulums pivoted at the bottom, and oscillated near the top by means of an eccentric rod and rock-shaft, so timed with reference to the stroke that the saws enter the cut without shock, leave it when stroke is complete and rise clear of the log, being again thrown into action near the top of the down stroke. The feed is continuous, and variable at the will of the operator.

In the machine shown the rolls open high enough to take in a 14 inch cant 32 inches wide, or the rolls may be filled with several smaller cants or "flitches," piled in tiers, so that flooring may be rapidly made. The ordinary feed carried is ¼ inch per revolution of shaft, and the number of revolutions per minute is 300. The saws are held by tabs and buckles keyed at the top. They may be placed any distance apart for making lumber of any desired thickness by the insertion of guage blocks between the buckles. The capacity claimed for this gang is about 40,000 feet of inch boards a day, with but one attendant aside from the saw filer.

LATEST NEWS NOTES.

Messrs. Sherwin & Kelly, Allanwick, have started a shingle mill at that place.

Winnipeg, Manitoba, done a business in lumber last year amounting to $1,342,000.

The Rat Portage *News* reports that the Keewatin Lumber Co. will open a yard at Winnipeg.

Carswell, Thistle & Mackay, Calabogie, expect to cut 8,000,000 feet of lumber this season.

Alpena, Mich., parties are reported to have recently sold 1,000,000 feet of lumber to Buffalo parties at $8.50, $17 and $37.

Mr. H. T. Pierce, of Martinville, is now associated with the management of the Flint Saw Mills at Three Lakes Quebec. This concern will now manufacture bobbins and spools in the rough for Messrs. Thompson & Co., Sherbrooke.

The Eliza Cook, lumber laden, from Halifax, N. S., for Bermuda, encountered bad weather April 2nd, in which she lost her deck load of lumber, and subsequently became a total wreck. The crew were rescued by the steamer Concordia, of Glasgow, the hulk and cargo being abandoned.

Messrs. McLachlin Bros. of Arnprior, are said to be contemplating the erection of a railway from their Pettewawa limits to the Madawaska, in order that they may have more rapid carriage of their lumber, under their own control, and free from the annoying delay of towing down the Ottawa.

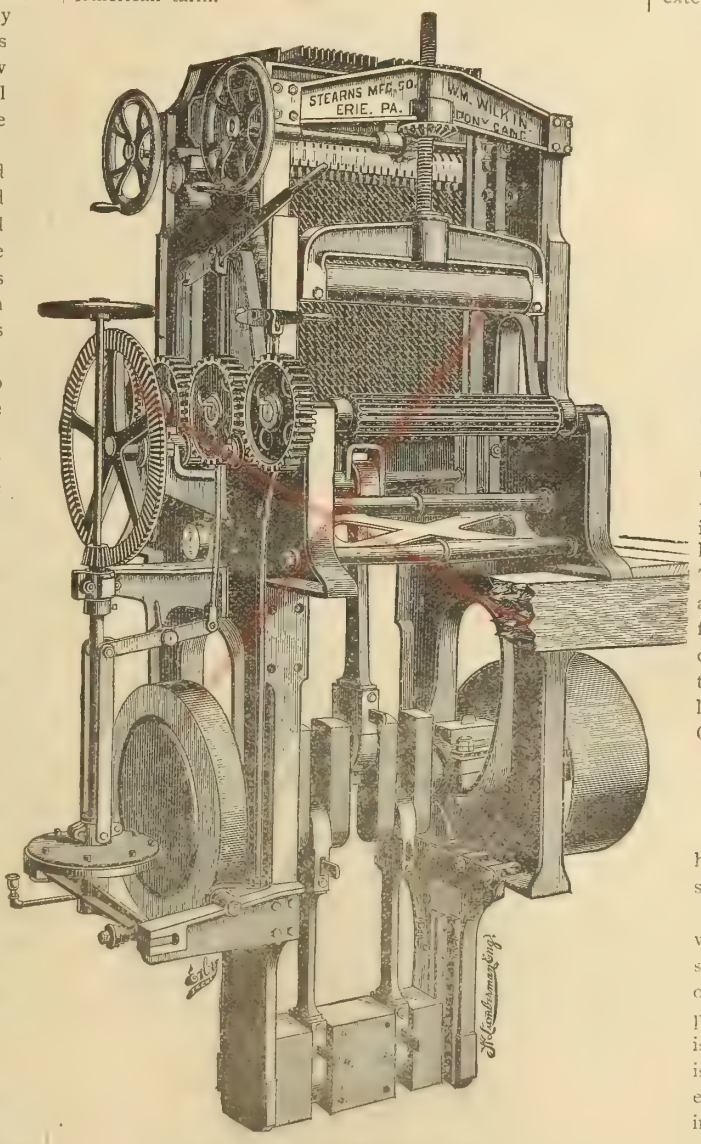
When the south extension of the Algoma branch of the Canadian Pacific railway is finished, it will be easier than now for Michigan lumbermen to reach the pine forests on the Serpent, Spanish and French rivers, for then they can go by the way of Mackinaw and the Sault instead of Toronto.

According to the Halifax *Herald* quite an extensive business has been done at Minudie and River Hebert, N.S., in lumbering and piling. The vessels at both places are putting on their cargoes and preparing for loading, but the depression occasioned by St. John failures has seriously affected the deal trade.

The following tariff of tolls to be charged by the Rouge Boom Company during the season of 1887 has been approved: Pine logs 3 cts. each, spruce logs, 2 cts., long, round or flat timber 5 cts., square timber 10 cts. Railway ties 1 cent. A duty of 10 per cent. *ad valorem* has been imposed upon molded celluloid balls and cylinders, coated with tinfoil or not, but not finished or further manufactured.

The lumbermen at the Chaudiere state that no difficulty will be experienced by them in securing the required number of hands to work in the mills during the summer. The wages will be the same as last summer from $1.20 to $2.75 per day. Most of the firms regulate the pay of their hands according to the success of the season. If a season is unusually good the pay of the men is raised 25 or 50 cents a day as the case may be.

Chaudiere lumbermen have been apprized of the fact that two or three wealthy Michigan lumber companies which own large quanities of Pine in Ontario will import a considerable quantity during this year, notwithstanding the Canadian export duty. A single raft of 3,000,000 feet was put together in Georgian Bay last autumn, and will be started for Saginaw on the opening of navigation. The Dominion tax will, it is said, be removed whenever lumber is put on the free list of the American tariff.



THE STANDARD GANG SAW MILL.

The projectors and builders of the great Joggins log raft that came to such an ignominious end last summer are again at work rebuilding the monster, and instead of curtailing its dimensions are making it 200 feet longer. Mr. Robinson, the designer and constructor, is confident of success at the next trial, and as the unsuccessful past will give experience for the future, it is thought not unlikely the next launch will have a successful termination. The saving of freight on the immense mass of logs and timber will be very considerable, in fact it amounts to a moderate fortune.

Messrs. Smith & Sutwell, of Thornbury, Ont., have for some time past been negotiating with Mr. J. Ferguson and the Ontario Government, to secure a site for a saw and planing mill, sash and door factory at North Bay, and arrangements are about completed satisfactorily. They will also open a local market for all the hardwood timber such as birch and maple that can be furnished, as the quantity of pine which they will secure from the Government will be limited, and in order to keep the mills going the whole season a larger quantity of hardwood would be required than the sett'lers at present in the township of Shadowfield can furnish.

The New Brunswick Trading Co., says the Miramichi *Advance*, is removing its head office to Black Brook, but will also continue to occupy a town office. The company has added a fine new building to its already large share of Black Brook village, which is fitted up as a counting-room, store, etc. Preparations are being made at the mill for the coming season's sawing, and the indications are that the company intend to push business as usual notwithstanding the reverses of firms lately connected with it in an indirect way.

Lumber operations at Fisher River, Man., [illegible] a correspondent :—The lumber camps are breaking up for the season. C. W. Bubar finished last Saturday and started for Selkirk on last Monday morning to bring in supplies and men for the summer. He has had a successful winter's work. Messrs. Brown, Rutherford & Neilson's teams will start for Winnipeg on Monday, the 9th inst. They have taken out an excellent stock of logs this season. They are the largest average I have ever seen in any camp during any season on this lake. The Selkirk Lumber Company have still two teams at work, but will soon be breaking camp also. They have the largest cut of any on the lake, having about 60,000 logs.

The lumbering interests of [illegible] extensive and the equipments complete. [illegible] which has both circular and gang [illegible] 350,000 feet of lumber every ten hours, and is driven by an engine of 1,500 horse power, with sixteen boilers. The timber mill turns out 50,000 feet of ordered stuff for builders, and the shingle mill equipped with the best machinery, cuts 125,000 shingles per day by means of a 250 horse engine. Five hundred men are employed in these mills. A line of railway runs the entire length of the firm's property, through its lumber yard. These yards have storage capacity for 40,000,000 feet of lumber. The planing mill is run by water power. At present it has four modern planers and there is room in the building for five more. The mill has a capacity for planing 80,000 feet of lumber per day. Connected with the mills is a complete fire system. A commodious brick fire shed has been erected at the water's edge, between the two largest mills, with stables, engine room and quarters for the 25 men who constitute the fire company. They have charge of an Amoskeag steam fire engine. Then there is a force pump in the engine house connected with a 12 inch pipe which leads around the different mills and through the yards. This pump can throw 15,000 gallons per minute. There are 10 hydrants outside the mills and 18 inside. An electric fire system, 16 bells, connects the several principal parts of the yard with the fire department. At the head waters of the Moira and Otonabee rivers there are extensive timber limits. The Central Ontario Railway also taps one of Gilmour & Company's limits.

HOW TO CLEAT LUMBER.

Something may be said as to the advisability of cleating hardwood lumber, especially ash, oak and hickory, when sawed rough edged.

Cleating is beneficial if done at the proper [illegible] when the plank comes from the saw and before it has [illegible] split by handling. After a split has opened a plank [illegible] or three feet, a cleat cannot be put on securely enough to prevent the split from extending the first time the plank is handled or "dumped" from a truck. The proper way is for the mill hands or foreman to select the planks, generally the ones coming from the center of the log, that indicate by their appearance a tendency, by small checks or free, straight grain, to be liable to split [illegible] whole length of the plank, and at once nail on a cleat of tough, strong wood. Oak or elm is best.

Care should be taken that the cleat does not extend over the edges of the plant or lap over the sides so as to be easily pulled off in handling, or take up extra room in stowing is shipped where freight is charged by the cubic foot instead of board measure. Plenty of nails should be used. For two inch plank, the cleats should be ¾ inch thick and 6d or 8d nails used. Nailing on strips of laths is only a waste of time and material.

Ash splits more readily than any other plank, and the better the quality and the freer from defects, the easier it splits.

Inspectors usually take this fact into consideration : and if a plank is otherwise perfect, will measure down in width one or two inches, and grade it as firsts when it would be classed as seconds if ordinary square edged plank. Most of the best ash, oak and hickory is used for carriage material, and consequently cut into small and short pieces, and the quality is more important than the width and length. In such kinds of lumber, knots are a much more serious defect than splits. Cleats will help much to prevent the latter if put on as suggested.—*New York Lumber Trade Journal*.

The Canada Lumberman

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PETERBOROUGH, ONT., MAY, 1887.

NEW MARKETS.

THE passage of the Retaliation Bill by the United States, makes it possible, though not very probable, that the chief foreign market for our lumber may be closed against us. This possibly, makes additionally necessary what was already highly expedient, that we should extend or open new markets. This as a matter concerning our commerce is especially with the jurisdiction of the Dominion authorities. As the Parliament of Canada is now in session the Government should be urged to take such steps as may assist in bringing about the desired result.

Among the markets which force themselves upon attention as being easily accessible, important and capable of receiving far more largely from us, the foremost in all these respects is the West Indies. We already export to them the products of our forests but the amount is by no means what it ought to be, or what it might be made. The great share of this trade is enjoyed by our neighbors of the United States, though Canada is as well situated for conducting it and is as well endowed with the supplies required by the islanders. Indeed it is certain that much of the export to the West Indies from the ports of the United States consists of Canadian lumber. There is no reason why we should allow our neighbors to be middlemen and to deprive us of much of the profit of a commerce which we could quite as well conduct at first hand. We ought to be able to extend our supplies to the West Indies by replacing to a considerable extent the lumber sent there from the Northwestern States. It must be remembered also that a large proportion of the exports to this market consist of goods in a more highly manufactured condition than mere lumber, such as sashes, doors, &c. Thus the extension of this trade is a matter of importance, not only to our owners of timber limits and sawmills, but also to our numerous planing mills and kindred industries. One circumstance that facilitates the extension of this trade is the fact that Canada is receiving large quantities of raw sugar from the islands, and the vessels bringing it are seeking return cargoes. Why should they not be afforded by the products of our forests, the freights for which would thus be made reasonable?

Another important market which is attracting more attention of late is that of the Australian colonies. They have an abundance of excellent hardwoods, but are deficient in pine and kindred timber. Their imports in this line are consequently large and are mainly drawn from the United States and Europe, much from England having been first imported by that country from Norway or Russia. Now British Columbia should be able to compete advantageously for this trade with the Pacific Coast of the United States, and other parts of Canada must be at least as well situated for it as England or other European countries. The proposed great Australian exhibition would afford an opportunity for making a display of the produce of our Canadian forest, which should not be neglected.

There are other available markets which either have not been tried at all or have not been adequately tested.

The Canadian authorities should be urged to make renewed and greater efforts to open these markets. But they can only aid, and it is upon the exertions of enterprising men of the trade that the chief dependance must be placed.

A LUMBER ORGANIZATION.

WE have on several previous occasions referred to the necessity existing for the formation of some organization calculated to benefit the lumbermen, and from which both the large and small operators would be equally benefitted. In the past organization among lumbermen has received but little attention. Even among the largest dealers the opinion seemed to exist that mutual assistance was not required. Every man wanted to lay out his own plans, and keep his system as much as possible from his neighbors. This feeling of independence, however, is giving way, and to-day there are lumber exchanges, or similar organizations, in most of the prominent markets. At a meeting held in Toronto during the past month, at which many of the representative lumbermen were in attendance, the question of forming a trade branch or lumber section of the Toronto Board of Trade was discussed. The chair was occupied by Mr. A. H. Campbell, of Toronto. By invitation Mr. Henry W. Darling, Ex-President of the Board of Trade, and Mr. Willis, Secretary, were present. Mr. Darling explained the method of organization, and also set forth the advantages to be gained by connection with the Board. The meeting resulted in a unanimous expression in favor of taking advantage of the facilities offered by the Board. Messrs. A.H. Campbell, of Toronto ; David Gilmour, Trenton ; J. L. Barton, Barrie; and Jas. M. Irwin, Peterborough, were appointed a committee to prepare an address to the Council for permission to organize and also to prepare the necessary by-laws.

It is indeed satisfactory to know that at last there is a prospect of bringing the lumbermen into closer business (and social) relations with each other, a step which must undoubtedly have a tendency towards bettering the condition of this extensive industry, but the question may arise in the minds of some of our readers, as it has to us, whether or not an alliance with the Board of Trade is going to have the beneficial results that most of those who are taking the initiative in this matter imagine. By introducing this question we have no intention of casting a reflection on the workings of the Toronto Board of Trade. On the contrary we believe it is a very necessary institution and is doing a good work, but we think it possible to overdo almost everything, and on these grounds we are of the opinion that an entirely separate organization would result in more work and far more satisfactory results. While possessing a large amount of influence, which if properly used in the interest of any branch of trade, this Board could be of incalculable service, but when its interests are so varied, intricacies arise which often tend to injure one or other of the industries represented. This has been the experience of other representative industries, and we much fear that should the lumbermen ally themselves to this body that in the no distant future our forecast may be found to be true. To more fully explain our argument we mean that the Toronto Board of Trade has already assumed more work than it can successfully carry out, and in consequence some one must suffer. The man who attempts to carry on a dozen different branches of trade usually goes to the wall, but he who centers his mind on one object is the man who, generally speaking, winds up with a good bank account and reputation. What is good for an individual, applies also to the largest industry of the country, therefore we say let the lumbermen have a separate organization, look after their own interests without depending upon disinterested parties to do it for them, and with the extensive influence they can bring to bear, the organization will be a success and they can claim credit to themselves alone.

OUR TIMBER LANDS.

THE suggestion that a map should be prepared by the Ontario Department of Crown Lands showing not only the timber limits now under license, but also those still unappropriated, is one that should not be lightly rejected, for the adoption of it gives promise of great usefullness. The Ontario Administration would do well to consider whether the objections it saw to complying with this request are of sufficient moment to be prohibitory. On second thought they may probably admit that their main objection, namely the expense, is hardly sufficient. Even if it were to cost $10,000, a hasty estimate which is probably largely excessive, that sum would be well expended in affording such valuable information. It could hardly fail to bring into the Provincial treasury an amount of money that would far more than compensate for the expenditure, besides its other advantages.

To the lumbermen it would be very useful to have such an authoritative indication, not only of the extent of timber limits that are already appropriated, but also of that area that remains available, with the localities in which it is situated. This information could hardly fail to stimulate their biddings and to produce an effect in augmented receipts at the next sale of timber limits that would be most satisfactory to the Provincial Treasurer.

It would obviously be most useful, nay it is indispensable, that the Province should know as nearly as possible what amount of this class of property it possesses. By such means it would be better able to form an idea of the extent of its resourses and their probable duration, while it would at the same time be enabled more intelligently to turn them to advantage. It would be well, too, that the whole community should be better informed as to the quantity of timbered lands still remaining.

The Province of Quebec could, without much difficulty, be induced to follow the good example. The other Provinces of Canada, and the Dominion authorities for Manitoba and the Territories, might be expected to fall into line, and then there would be presented at least an approximate idea of our existing forest wealth, and the period within which it would be exhausted. These maps might by degrees be rendered more complete as information was obtained as to the quantity and kinds of timber on the different areas. Already there must be much of such material available in the field notes of the Provincial Land Surveyors who have been engaged in laying out townships, &c. Such information, even though imperfect, would be of immense assistance to lumbermen wishing to extend their operations. Of course it would not supercede that personal inspection which must always precede a purchase, but it would at least indicate the likely locality in which to institute the search. The knowledge also of the limited amount of timber left in certain localities would have a beneficial tendency in promoting economy in the operations of the lumbermen. Even the best informed are apt to exaggerate an imperfectly known quantity and to assume without sufficient reflection that large resources are practically inexhaustible.

There would be another advantage in such maps, that they would encourage the adoption of the system of not opening forest areas for settlement, while better lands for agricultural purposes are available. It is no kindness to the agricultural settler to set him to grow wheat on land far better fitted to produce timber, while it has a prejudicial effect upon lumbering operations. Oftentimes a lumberman is hurried on to cut in some portions of his limits through fear of the consequences of settlement, when otherwise he would not have been so hasty in his operations.

By all means let us have these maps, for they will well repay the cost and trouble of producing them.

EDITORIAL COMMENTS.

THE Government has decided to reimpose, for the coming season, on the St. Lawrence canals, the same tolls that prevailed in 1885 and 1886, viz., two cents per ton.

ATTENTION is directed to the new advertisement of Mr. Peter Hay, of the Galt Machine Knife Works, which will be found on another page of this issue. Those of our readers who are at any time in need of machine knives should remember that no better article is turned out than that furnished from the Galt works.

THE *Official Gazette* of a fortnight since, contained an order-in-council to the effect that clause No. 2 of the timber regulations of 1868, for the Province of Quebec, which established a uniform ground rent of $2 per square mile for each mile under license for cutting timber is modified, and the imposition of a fixed rent of $5 per square mile for cutting timber is substituted therefor.

THE PATENT REVIEW, a neat and tidy little paper, devoted exclusively to matters affecting patents, has recently made its appearance in Ottawa. Mr. A. Harvey, C. E., is the publisher, and from the amount of energy he has already shown in its arrangement we have good reason to believe that the venture will be a success. The public at large are more or less interested in a journal of this discription and should extend it a liberal support.

MATTER for publication in THE LUMBERMAN to be in time for any specified issue, should reach us not later than the 20th of the month. If something of importance is to reach us later than that date we should have notice of it, so as to make our calculations accordingly. We trust our correspondents will make a note of this. Changes of advertisements must be in by the 22nd of the month to insure attention, and new advertisements not later than the 24th.

WE have to thank our contemporaries throughout Canada and the United States for the many kindly greetings extended the LUMBERMAN during the past few months, as also the kind words of encouragement which daily reach us from subscribers from all over the country. We are not so far above flattery that we can fail to appreciate such expressions of good-will, and shall continue to do all in our power to merit a continuance of the good opinions of our readers.

SAULT STE. MARIE people are delighted in the anticipation of an unusual boom this year. Two great American trunk railroads are to be built to that point from the west, and two from the Canadian side. The Hay lake channel is to be deepened, and the canal enlarged for vessels of heavy tonnage. Building operations will be carried on with great vigor and real estate is going up rapidly. From present indications the "Soo" is likely to become a place of no mean importance.

AN unusual amount of changes and improvements are going on this spring amoung the saw mills, which of itself indicates that the lumber trade is prospering. New mills are being erected in different parts of the country, while many others are being overhauled and the latest improved machinery added. In this, as in all other branches of trade, operators are continually tearing down and building, in order to keep pace with the demands of the trade, and as a consequence manufacturers of the latest style of machinery are reaping a harvest.

ONE evil effect of the proposed enormous ground rents of Quebec timber limits is that it would drive the limit owners to strip them as speedily as possible, so as to free themselves quickly from the heavy rent. This would for the moment help to fill the Quebec treasury through an artificial influx of anticipated income, but this would be no gain as it will only be robbing the revenue of future years of the receipts that would naturally accrue then. It would be equivalent to the case of a tenant for life, or for a term "wasting" the timber on the property

NOTWITHSTANDING the very sensational reports concerning the financial crisis in New Brunswick, which have been published in Canadian and American papers, it is now evident that the state of affairs is not by any means as serious as was at first generally supposed. The after results of the failure of the Maritime Bank, the private bank of McLennan & Co., the lumber firms of Stewart Bros. and Geo. McLeod, while certainly affecting to a greater or less extent the operations of other firms, did not result nearly as disastrous as the public at first imagined. Confidence is now being restored, and it is not probable that further failures of any importance will occur.

FROM the Trade and Navigation returns for the last fiscal year we learn that the amount of export duties collected on saw logs &c., was $20,726.07. Of this $2,869.46 was on pine logs, $17,585.11 on spruce logs, and $271.50 on shingle bolts. This is an improvement on preceding years, but it can hardly be supposed that the duty was very closely collected especially on pine logs or the sum would be larger. This was before the increase of the duty, which will make an increase for the current year. Every effort should be made to collect these duties in all cases, so as to protect our lumbermen and mill owners from the unfair competition of our neighbors.

THE pine forests of Michigan are getting played out. Although lumbering is carried on to a large extent there is not nearly as much timber exported as ten years ago. Indiscriminate chopping has done its work. The men would cut a sapling down rather than run a log around it. No thought was given to the future, and now the lumbermen have to be content with timber that a few years ago they would not have thought worth cutting. The result of the havoc which the men played among the young trees is that the State Legislature is being petitioned to pass a Forestry Act making it unlawful to cut down trees under a certain thickness.

WE take pleasure in drawing attention to the full page display in this issue of the Canadian Rubber Co., of Montreal and Toronto. This extensive company recently made large additions to their factory, and are about increasing their already large capital of $1,000,000 to double that sum, in order to more fully keep pace with their rapidly growing trade from every point throughout the Dominion. The many friends of Mr. Walker, manager of the Toronto branch, will be pleased to learn that he has fully recovered from his recent severe illness, and is again in his old quarters, better than ever prepared to attend to the wants of his customers.

AN idea of the magnitude and relative importance of the timber trade industries of Canada may be obtained from the Trade and Navigation tables for the last financial year. The exports of "Produce of the Forest" amounted to the enormous sum of $22,865,087. This ranks in almost the foremost place, "Animals and their Products" coming first with $23,077,513, "Agricultural Products" being next with $21,441,817. And in the amount thus given for forest products is not included carts and carriages $25,992, ships $266,363, furniture, doors, sashes and other manufactures of wood $685,466, besides other items. Thus it will be seen that as regards the value of their export the timber trades stand first among the industries of the Dominion.

THERE are expressions of discontent in British Columb and a portion of the Northwest Territories in regard to th freights charged for the carriage of lumber by the C. P. I Hitherto the C. P. R. has earned a favorable reputation f reasonable freights, and it should take care not to forfeit i good character in this respect. Its monopoly of transport ca only be endured through its acting fairly and even liberally such matters. It is also for its own permanent advantage th it should aid in building up the country from which it mu seek its customers if such a gigantic undertaking is to pro lastingly and progressively remunerative. The C. P. R. shou carefully revise its rates for lumber, so as to remove any occ sion for discontent. By a liberal policy it will best serve its own interests as well as those of the trade and of the public.

BUT few names in Canada are more familiar to the general public than that of Mr. E. B. Eddy—the great match man—who first established himself at Hull, Que., in 1854. He has of late years been among the heaviest lumber operators in Canada, in addition to which his extensive wood-working establishment is acknowledged to be one of the largest on the continent. During the past month we have been made acquainted with a change in name, Mr. Eddy having associated with himself a number of other gentlemen of capital and standing, who have formed themselves into what will hereafter be known as the "E. B. Eddy Manufacturing Co., Limited," a body corporate duly incorporated by an Act of Parliament, with a capital of one and a half million dollars. Mr. Eddy has been elected President of the company and also Managing Director; Mr. S. S. Cushman is the Vice-President, and Mr. W. H. Rowley, Secretary-Treasurer.

FROM the official report of the Commissioner of Crown Lands of the Province of Quebec, for the twelve months ending 30th June, 1886, we find that the total revenue for that period was $630,475.82, made up as follows: Of the lands specially designated Crown Lands, there were 99,019 acres sold for the price of $45,851.27; and the sum of $52,450.35 was collected on account of these sales, and those of previous years; $46,252.10 being derived from sales of land for agricultural purposes, and $6,198.25 from those of mineral lands. The revenue derived from timber dues, ground rents, bonus, etc., is given as $528,574.80. The result of the transactions of the Department of Crown Lands for the twelve months as stated above, is almost the same as that obtained in the preceding fiscal year. The figures show a slight decrease, but this is attributed to the fact that during this last period no extraordinary sale of either timber limits or mining locations took place, while in the year 1884-5, a sum of $68,145.41 was derived from a very important sale of timber limits.

WE have before us parts VI and VII of "Architectural Studies," just issued by Wm. T. Comstock, of New York. The first of these is devoted to small and low-priced country houses, giving among them a number of designs that can be executed for $1,000 or less. One is impressed, in looking over these designs, at seeing how much a little good taste can do for the improvement of houses where only a small sum of money is to be expended. The second of the two, part VII, is devoted to the interiors of moderate-cost houses, giving a large number of examples of window finish, wainscoting, window seats, staircases, hall and library finish, book shelves, china closets, mantels, bath room fittings, with full working details drawn to large scale, carrying out the idea of good, tasteful, but moderate-cost interior fittings, as part VI does that of good planning and well proportioned exteriors, the whole scheme being to furnish suggestions for building a good comfortable home, after a well thought out plan and within the limits of a moderate purse. They are published in paper, portfolio, at the cost of $1 each.

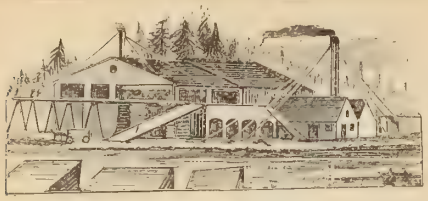
THE *Southern Lumberman* being asked its sentiment regarding the admission of Canadian lumber into the United States, says:—"We favor a tariff on all lumber or timber brought into our ports, except such woods as do not grow in the United States. When we say tariff, we don't mean a tariff for revenue only, but a *protective*, or if you please a *prohibitory* tariff. We don't want any money sent from our country to pay for any kind of timber or lumber that we have for sale ourselves." Our contemporary very courteously acknowledges its selfishness, and when we reflect on the amount of grumbling that is going on among the trade across the lines because the Canadian Government has seen fit to protect our people against the slaughter of our forests in favor of the Americans, we cannot help but think that the average Yankee is indeed *very* selfish. Canadians don't grumble because the Americans choose to adopt a prohibitory tariff, on the other hand we rather like it, and consider that what's sauce for the goose is sauce for the gander. We propose to make our cousins *pay* for the woods that do not grow in the United States. We hold the trump card.

THE SPANISH BAY TIMBER.

A LANDLOOKER who has lately been examining some of the Spanish river timber, in the Georgian Bay region of Ontario, reports, on his return, that the pine he saw there is not of a very high average grade. It will run but a low percentage to uppers, but makes common of excellent quality, free from black knots and shakes. The country he describes as well drained, but with streams that are ill-adapted to the driving of logs. In consequence, logging is much more expensive than the average of such work in Michigan and W[illegible] rails have to be shifted. Creosoted elm and birch did well, and are to be recommended. Chestnut was unfortunately not included in the experiment, although it is considered one of the best woods for ties. The behavior of the catalpa was one of the most interesting features of the case, all [illegible] wood being sound, except just under the rails, where they are crushed nearly to a pulp.

THE intention of the new Administration of Quebec to increase the provincial revenue at the expense of the lumbermen is one of most serious consequence for the trade in Quebec. Hitherto that Province has been disposed to foster rather than to discourage its greatest industry, so that the new policy is as startling as it is ill-advised. Even as an expedient for augmenting the revenue, Mr. Mercier may find that he has made a false calculation in adopting this step. For the moment it may raise the receipts, but in the long run the effect may be the very contrary. Such an enormous increase in the ground rents as that from $2 to $5, must have a crushing effect upon the industry. If so it would be the old story of killing the goose that laid the golden eggs. If the business is rendered stagnant the receipts of rents, &c., may fall off instead of increase. Limits placed in the market would find bidders shy of property depreciated not only by heavy additional burden imposed upon it, but also by the uncertainty whether there might not be another sudden turn of the screw. And the depression and impoverishment of a great industry cannot have its baleful effects confined to those who have their capital invested in it. The vast army of men employed would also share in the loss and indeed its influence would pervade the whole community. It is to be hoped that the Quebec Ministry will yet reconsider a decision which must be so injurious if carried out.

As has been previously stated in THE LUMBERMAN it is quite probable that a still higher export duty on Canadian logs will be imposed during the present session of the Dominion Parliament. The lumbermen are asking for the change, in order to more fully diminish the shipments of forest produce in its unmanufactured state. It is to the interest of not only the lumber trade but the public in general, that whatever of our forest products finds a market in the United States, or any other country, should be sent in the shape of sawn lumber, thus securing additional employment for Canadians. Our American contemporary, the *Northwestern Lu[illegible]*, thinks that the policy of the Dominion Government in regard to the export duty is of doubtful wisdom, for the reason, as it says, that it has the effect of checking the movement of Canadian logs to Lake Huron mills, on the American side, that had begun to assume important proportions. We are also called upon to reflect that "but for American enterprise and capital the lumber industry of Algoma and Muskoka would be of slow growth." We would remind our contemporary that Canadians are not as anxious to have their forest wealth slaughtered as it seems to imagine. Our object is to *protect* our forests as much as possible, so that in future years we will, unlike our cousins across the border, have something to fall back on. No attempt has been made to prevent Americans from cutting timber in this country, but when this privilege has been allowed we claim that i should be manufactured here also, or the alternative of a high export duty. Canadian lumbermen are sufficiently wide awake and have the capital necessary to do full justice to the lumber trade of Canada, but at the same time a welcome is extended to any outsider to open out operations here, provided they will comply with the just demands laid down by our government. It may fairly be open to question whether even it is advisable that we should export considerable quantities of saw logs or lumber to the States, seeing that in a very few years we may need all that we can produce for our own use. If Americans complain so bitterly now about the duty on saw logs, what would be the result were our government to further restrict the output of forest productions, by putting an export duty on sawn lumber also? In consideration of the fact that Americans are so eager for our fish, forests, minerals, coal and other natural products we would suggest that they forsake that God-forsaken country, emigrate to Canada, and take the oath "For Queen and Country.'



The Canada Lumberman

DEVOTED TO THE LUMBER AND WOOD WORKING INTERESTS OF THE DOMINION.

TRADE REVIEW.

TORONTO.

Trade, which for some time back was rather quiet, seems to have greatly improved, with fair prospects of being good, provided no untoward circumstances occur. There is a scarcity of 18 and 20 feet joists, both 2x8 and 2x10., few, if any yards, have enough to fill an ordinary bill. Mill cull boards are fetching better prices than usual. The Grand Trunk, R.R. has issued a circular to lumbermen notifying them that on and after May 1st, rent will be charged for piling ground at the rate of 5c. per M. ft. for each week or any part thereof. This is a move in the right direction.

The following are the ruling quotations in this city at present:–

Mill cull boards &scantling..$10 00	Dressing stocks.....16 00@18 00
Shipping cull boards, promiscuous widths..... 12 00	Picks Am. inspection..... 30 00
" stocks 13 00	Three uppers, Am. inspection 40 00
Scantling and joist, up to 16 ft 13 00	B. M.
" " " 18 ft 14 00	1½-in flooring, dressed 25 00@30 00
" " " 20 ft 15 00	1¼ " " rough .14 00@15 00
" " " 22 ft 16 00	1¼ " " dressed 23 00@25 00
" " " 24 ft 17 00	" " undressed ... 14 00
" " " 26 ft 18 00	" " dressed 16 00@20 00
" " " 28 ft 19 00	" " undres'd 12 00@14 00
" " " 30 ft 20 00	½Beaded Sheeting, dressed ..... 18 00@20 00
" " " 32 ft 21 00	Clapboarding, dressed.. 12 50
" " " 34 ft .....22 50@22 50	XXX sawn shingles, ₱M 2 75@2 90
" " " 36 ft 24 00	Sawn Lath..... 2 25
" " " 38 ft 27 00	Red oak..... .. 20 00@25 00
" " 40 to 44 ft 30 00	White " .....25 00@30 00
Cutting up planks 1¼ and thicker dry.. .....20 00@25 00	Basswood, No. 1 & 2..18 00@20 00
" boards " 20 00	Cherry, No. 1 & 2 ...50 00@60 00
	Whiteash 1 & 2.....25 00@30 00
	Black ash 1 & 2.....20 00@25 00

HAMILTON.

APRIL, 25th, 1887.

There is nothing of any importance to note from this market. Prices are firm and bill stuff is in good demand.. Considerable difficulty is experienced in obtaining long bill stuff.

The following are the ruling prices in the retail yards:

Mill cull boards and scantlings .....$ 9 00 to $10 00	1¼ flooring, rough. 16 00 to 18 60
Shipping cull boards, promiscuous widths..... 10 00 to 12 00	1¼ flooring, ro gn. 16 00 to 18 00
Shipping cull stocks 13 00	1¼ flooring, dressed face measure ... 32 00
Scantling and joist up to 6ft..... 13 00	1¼ flooring dressed face measure ... 25 00
Scantling and joist up to 18ft..... 13 50	1 flooring dressed face measure ... 23 00
Scantling and joist up to 20ft 14 00	Beed sheeting 1,.. 28 00 to 30 00
Scantling and joist up to 22ft..... 15 00	Picks A M. Inspection..... 30 00
Scantling and joist up to 24ft..... 16 00	Three Uppers A. M. Inspection..... 40 00
Scantling and joist up to 26ft ... 17 00	XXX sawn shingles per M..... ... 2 60 to 2 70
Scantling and joist up to 28ft ... 18 00	Sawn Lath 2 25
Scantling and joist up to 30ft 10 00	Red oak..... 20 00 to 25 00
Cutting up plank 1¼ and thicker, dry 20 00 to 25 00	White oak..... 25 00 to 30 00
Cutting up boards 20 00	Basswood No. 1 and 2 ..... 18 00 to 20 00
Dressing stocks... 16 00 to 18 00	Cherry No. 1 and 2 50 00 to 60 00
	White Ash No. 1 and 2..... 25 00 to 30 00
	Black Ash No. 1 and 2..... 20 00 to 25 00

MONTREAL LUMBER MARKET.

MONTREAL, April 25th, 1887.

During the early part of this month, business in the lumber trade was very quiet, a condition of affairs which was due principally to the rough weather, and bad condition of the country roads which prevented farmers and others from drawing their supplies. The movement altogether was very light, and quite a decrease in business could be noted in comparison with the corresponding period of last year.

Latterly, however, a distinct improvement has taken place, and we have to report a fairly active trade; still, the business done does not show an increase over last April. The demand at the yards has been rather brisk, but not much has been done in carloads. Late advices from mill owners do not give much hope for higher prices this summer, although the cut has been much less than last year's, prices therefore remain steady. Dealers here confidently expect by the middle of next month to turn over a good many carload lots. The delivery in the city has been considerably interfered with the last few days, owing to the inundation of the lower part of the city. There is a bright outlook in the building line for this season. Among the more prominent buildings to be constructed being the magnificent stations of the Grand Trunk and Canadian Pacific Railway.

The following are the quotations of the yards here:—

Pine, 1st quality, ₱ M $00 00@40 00	Bass, run of log culls out, ₱ M..... .....$18 00@20 00
Pine 2nd " " 00 00@30 00	Oak, ₱ M..... 40 00@50 00
Pine, shipping culls, ₱ M..... ..... 14 00@16 00	Walnut ₱ M 60 00 100 00
Pine 4th quality deals ₱ M..... 10 00@12 00	Cherry, ₱ M 80 00 100 00
Pine, mill culls, ₱ M. 8 00@10 00	Butternut, ₱ M..... 35 00@40 00
Spruce, ₱ M ..... 10 00@13 00	Birch, ₱ M..... 20 00@25 00
Hemlock, ₱ M..... 9 00@10 00	Hard Maple, ₱ M.... 25 00@30 00
Ash, run of log culls out, ₱ M..... 20 00@25 00	Lath, ₱ M..... ... 1 50@ 0 00
	Shingles, 1st, ₱ M... 2 00@ 3 00
	Shingles, 2nd, ₱ M.. 2 50@ 0 00

CHICAGO.

RECEIPTS FOR WEEK ENDING APRIL 21.

	Lumber.	Shingles.
1887	7,598,000	535,000
1886	28,811,000	2,874,000

RECEIPTS FROM JAN. 1, TO APRIL 21, INCLUSIVE.

	Lumber.	Shingles.
1887	130,857,000	9,841,000
1886	122,576,000	21,204,000

STOCK ON HAND APRIL 1, INCLUDING SOUTH CHICAGO.

	1887.	1886.	1885.
Lumber	295,563,682	429,650,022	454,053,007
Shingles	203,858,250	3 3,847,250	242,084,250
Lath	20,161,190	47,709,453	36,555,645
Pickets	1,406,278	1,975,986	1,977,411
Cedar posts	161,894	288,541	178,241

FINISHING LUMBER ROUGH.

1st and 2d clear, 1 inch.. $46 00	A select, 2 inch $41 00
1st and 2d clear, 1¼ and 1½ in 47 00	B select, 1¼ in..... 31 00
1st and 2d clear, 2 inch..... 47 00	B select, 1 in..... 30 00
1st and 2d clear, 3 inch 48 00	Clear and select 2x4.. 27 00
3d clear, 1½, and 2 inch..... 44 00	2x6 ..... 34 00
3d clear, 1¼ inch 44 00	2x8 ..... 36 00
A select, 1 inch..... 38 00	All one length $1 extra.
A select, 1¼ inch 39 00	

STOCK BOARDS.

12 in. A, 12 to 16 ft.....$42 00	12 in. 20 ft..... 23 00
12 in. B..... 37 00	10 in. A..... 37 00
12 in. C..... 33 00	10 in. B..... 33 00
12 in. D, 12, 14 and 16..... 20 00	10 in. C..... 26 00
12 in. D, 18 ft..... 23 00	

FLOORING—DRESSED AND MATCHED.

A flooring $34 00	B flooring 4 in.....29 00
B flooring..... 31 00	C flooring 4 in..... 25 00
C flooring..... 24 00	Norway clear and A..... 22 00
Fencing flooring..... ..... 15 50	B, 4 or 6 in. 20 00
Clear and A, 4 in..... 32 00	

SIDING—TIED.

1st and 2d clear, 12 ft.....$21 00	B siding..... 17 50
1-t and 2d clear, 14 and 16 ft 22 00	C 13 50
A 19 50	Fencing 10 50

BEADED CEILING—TIED.

Clear, ⅜x4@6 in.....$22 00	C clear, ⅜x6 in..... 14 50
A, ⅜x6 in 20 00	Clear and A, ⅜ or ⅜x6..... 32 00
B, ⅜x6 in..... ..... 19 00	B, ⅜ or ⅜x6 in..... ..... 29 00

COMMON BOARDS—ROUGH.

Com boards, 12in. 18 to 20ft $13 00	12, 14, 16 and 18 ft..... 13 00
10, 12 to 16 ft..... 13 00	1½ and 1½ common..... ... 13 50

FENCING—DRY.

No. 1 all lengths.....$14 50	4 in. common..... 13 00
No. 2, 12, 14, 16 & 18ft..... 11 50	Norway 13 00

TIMBER AND DIMENSION—DRY.

Joist and scantling, 2x4, 12, 14 and 16 ft.....$12 00	12, 14 and 16 ft.....$13 00
2x6, 2x8 2x10, 12, 14 and 16 ft 12 00	2x4, to 8x8, 18 ft..... 13 00
Timber, 4x4 to 8x8 inclusive,	2x4, 4x4, 20 ft 14 00

ALBANY.

Pine, clear, ₱ M.... $55 00@60 00	Black walnut, good, ₱ M.... .. ..$100 @120 00
Pine, fourths ..... . 50 00@57 00	Black walnut, ⅞ inch. 80 00@90 00
Pine, selects..... 42 00@44 00	Black walnut, ¾ inch. 90 00@85 00
Pine, good box..... 22 00@33 00	Scaymore, 1-inch.... 28 00@30 00
Pine, common box.. 13 00@15 00	Scaymore, ⅞-inch.... 21 00@23 00
Pine 10-in. plank, each 00 45@00 47	White wood, 1-inch and thicker..... 38 00@40 00
Pine, 10-in. plank, culls, each..... 00 25@00 27	White wood, ⅞-inch... 28 00@30 00
Pine boards, 10-in.... 00 30@00 32	Ash, good, ₱ M..... 40 00@43 00
Pine, 10in. boards, culls 00 16@00 20	Ash, second quality, ₱ M..... ... 25 00@30 00
Pine, 10-in. boards, 16 ft., ₱ M..... 28 00@32 00	Cherry, good, ₱ M... 60 00@65 00
Pine, 12-in. boards, 16ft 28 00@32 00	Cherry, common, ₱ M 25 00@30 00
Pine, 12-in. boards, 13ft 28 00@32 00	Oak, good, ₱ M..... 40 00@43 00
Pine, 1¼in. siding, select 40 00@43 00	Oak, second quality, ₱ M..... 20 00@25 00
Pine, 1¼-in. siding, common ..... . 15 00@18 00	Basswood, ₱ M..... 25 00@30 00
Pine, 1-in. siding, select 40 00@42 00	Hickory, ₱ M..... 00 00@40 00
Pine, inch siding, common..... ..... 13 00@15 00	Maple, Canada, ₱ M. 28 00@30 00
Spruce, boards, each. 00 00@00 16	Maple American, per M 26 00@28 00
Spruce, plank, 1¼-in., each ..... 00 00@00 20	Chestnut, ₱ M ... .. 38 00@40 00
Spruce, plank, 2-in., each ... ... 00 00@00 30	Shingles, shaved, pine, ₱ M.. ..... 0 00@ 6 50
Spruce, wall strips, each ..... 00 00@00 12	shingles 2nd quality. 0 00@ 5 50
Hemlock, boards, each 00 00@00 14	" extra, sawed, pine ..... 4 30@ 4 00
Hemlock, joist, 4x6, each..... 00 00@00 32	shingles clear, sawed. 0 00@ 3 00
Hemlock, joist, 2½x4, each .... 00 00@00 14	" cedar, mixed 0 00@ 2 13
Hemlock, wall strips, 2x4, each..... 00 00@00 11	" hemlock .... 2 25@ 2 37
	Lath, hemlock ..... 0 00@ 2 53
	Lath, spruce, ... 0 00@ 2 39

DETROIT, MICH.

Uppers, 4x4 .....$45 00	Siding, clear 21 50
5 " 6x4 & 8x4..... 45 00	A 20 50
3 & 4in..... 50 00	B 18 50
Selects, 4x4..... 37 00	C 13 50
5x4, 6x4 & 8x4..... 39 00	Bill stuff ordinary sizes:
Shop, 44..... 22 00	12 to 16 ft 11 00
5x4x 6x4 & 8x4..... 25 00	18 to 20 ft..... 12 00
Fine common, 4x4..... 31 00	22 to 24 ft..... 13 00
5x4, 6x4 & 8x4..... 33 50	26 to 28 ft..... 14 00
Stocks, 1x12 & 1x10, No 1.. 19 00	30 to 34 ft..... 16 00
1x12 & 1x10, No. 2 ..... 16 00	Ship culls..... 12 00
1x12 & 1x10, No. 3 ..... 13 00	Mill Culls..... 10 00
Flooring, select common.... 22 00	Shingles clear, 18 in..... 3 25
No. 1 common..... 18 00	10 in. clear, 18 in Ex.... 2 30
No. 1 fencing..... 16 50	6 in. clear, 18 in..... 2 20
Ceiling, select common 25 00	6 in stocks clear, Ex.... 4 00
Ceiling, No. 1 common..... 22 00	5 in. " " 4 80
No. 1 fencing 20 00	Lath, per M pcs..... 2 50
Roofing, D. & M..... 16 00	Add for S. 1 or 2. $1 ₱ M

NEW YORK CITY.

SPECIAL CONTRACTS.

Pine, ver, choice and ex. dry.....$65 00@70 00	Pine, strip plank, dr clear..... 0 23@00 35
Pine, good ..... 55 00@60 00	Spruce boards dressed 00 25@00 28
Pine, shipping box.. 21 00@22 00	Spruce, plank, 1½ inch each ..... 00 28@ 0 30
Pine, common box.. 18 00@20 00	Spruce, plank 2in each 00 38@00 40
Pine common box ⅝ 16 00@18 00	Spruce plank 1½ inch dressed .... 00 28@00 30
Pine, tally plank 1½ 10 in..... 00 44@00 50	Spruce plank 2 inch dressed..... ..... 0 43@00 45
Pine, tally plank 1½ 2nd quality ... 00 35@00 38	Spruce wall strips.... 00 15@00 18
Pine, tally plank 1½ culls ..... 00 30@00 32	Spruce timber..... 20 00@22 00
Pine, tally boards dr'd good ..... 00 32@00 35	Hemlock boards each 00 18@00 20
Pine, tally boards dressed common..... 00 26@00 30	Hemlock joist, 2½x4 ... 00 [illegible] 18
Pine, strip boards culls ..... 0 18@00 20	Hemlock joist 2x4... 00 [illegible] 20
Pine, strip boards merchantable..... 00 20@00 22	Hemlock joist 4x6 ... 00 [illegible] 44
Pine, strip boards clear 00 25@00 26	Ash, good ..... 45 00@55 00
	Oak..... 50 00@60 00
	Maple cull..... 20 00@25 00
	Cargo rates 10 per cent. off.

EXTRA SELECTIONS.

Maple good..... .. 40 00@48 00	Whitewood ⅝ inch..... 35 00@40 00
Chestnut ..... 40 00@50 00	White wood ⅝ panel... 45 00@50 00
Cyprus, 1, 1½, 2 and 2½ in... ..... 35 00@40 00	Shingles ex. shaved pine 18 in..... 8 00@ 9 50
Black Walnut good to choice..... ....140 00@160 00	Shingles ex. sawed pine 18 in..... .. 5 75@ 6 00
Black Walnut ⅞..... 85 00@100 00	Shingles clear sawed pine 16 in..... 4 50@ 5 00
Black Walnut selected and seasoned .... 150 00@175 00	Shingles cypress 24x7. 22 00@24 00
Black Walnut count'rs 00 22@00 28	Shingles cypress 20x6 00 00@14 00
Black Walnut 5x5 .. 150 00@160 00	Yellow pine dressed flooring ..... 30 00@40 00
Black Walnut 6x6 160 00@170 00	Yellow pine girder.... 26 00@35 00
Black Walnut 7x7. 175 00@180 00	Locust posts, 8 ft ... 00 18@00 20
Black Walnut 8x8. 175 00@180 00	do 10ft .... 00 24@00 25
Cherry wide..... 100 00@120 00	do 12ft . 00 32@00 34
Cherry, ordinary.... 70 00@80 00	Chestnut posts ..... 00 03@00 3½
Whitewood inch..... 45 00@50 00	

OSWEGO, N.Y.

Three uppers.....$46 00@47 00	No. 2,5-4..... $ 1 90
Pickings .... 36 00@37 00	No. 1, 4-4..... 1 50
Cutting up, No. 1.... 26 00@27 00	Cedar, 4-4 ..... 1 70
Cutting up, No. 2.... 18 00@20 00	Pickets, 5 4 x 5-4x4,
Dressing .... 16 00@20 00	No. 1..... 14 00@15 00
No. 1 Culls..... 16 00@17 00	1x3x4, No 1..... 18 00@20 00
No. 2 Culls..... 13 00@14 0	1x3x4, No 2..... 10 00
Sidings, selected, 1 in 30 00@38 00	1st and 2nd black ash,
" 1¼ in 33 00@41 00	1 in ..... 23 00@25 00
Mill run, 1x10, 13 to 16 ft..... 19 00@22 00	5-4 and thicker.... 24 00@26 00
Dressing and better.. 24 00@27 00	Culls 10 00
1 x 10 shipping culls 16 00@17 00	Basswood, selected 4-4 and 5-4 ..... 20 00@22 00
Mill run, 1¼ in. strips 15 00@18 00	Strips selected 4-4 and 5-4 ..... 16 00@18 00
Selected ..... 32 00@34 00	Culls 4-4 and 5-4.... 11 00@12 00
1x6 selected for clapboards ..... 32 00@34 00	Birch and maple 1st and 2d..... ... 23 00@25 00
Clear butt cedar shingles, 18 in ..... 2 60@ 2 70	Molding strips,.... ⅝x1 ¼ 84 86 per M. pieces
Shingles, XXX, 18 in pine ..... 3 40@ 3 80	Door panels, 6 in., 16c per door 7 in wide 16c
XXX 18 in Cedar..... 3 40@ 3 60	Blind slats, ½x2x4, 6c per M. piece
XX 18 in cedar..... 2 20@ 2 30	
Lath No 1, 5-4..... 2 10	

TONAWANDA.

CARGO LOTS—MICHIGAN INSPECTION.

Three uppers .... ..$42 00@44 00	Culls..... .... 10 00@13 00
Common .... 18 00@24 00	

YARD PRICES—CAR LOTS.

3 uppers, inch..... ..$44 00@46 00	Dressing stocks .... 17 00@20 00
3 uppers, plank ..... 45 00@50 00	Dressing sidings .... 19 00@22 00
Pickings, inch ..... 36 00@38 00	Common stocks..... 14 00@15 00
Pickings, 1½ in. to 2 inch .... 38 00@42 00	Common sidings .. 15 00@17 00
Fine Common..... 32 00@34 00	Common box..... 12 00@13 00
Fine Common, thicker 35 00	Shingles, XXX, 18 in. sawed..... ... 3 40@ 3 50
Cutting up ... . 25 00@30 00	Do. clear butts, sawed 2 20@ 2 30
Shelving, 12 in. and up ..... 27 00@30 00	Shingles, XXX 16 in. cut ₱ sq..... @ 3 00
Coffin boards, 12 in. and up .... 16 00@18 00	Do. XX do..... .... @ 2 75
	Lath 1 90

SAGINAW VALLEY.

CARGO QUOTATIONS.

Shipping culls .... .$ 8 50@11 00	Under straight Measure .... 15 00@24 00
Common .... 15 00@22 00	Shingles, XXX ..... 2 85@ 3 00
3 uppers .... 37 00@40 00	Shingles clear butts 1 85@ 2 00
Bill stuff .... 8 50@10 00	White pine ath..... 1 75
Norway bill stuff .... 8 50@10 00	

YARD TRADE.

3 uppers wide and thick..... 43 00@45 00	Fencing, coarse common 8 00
Do. 1 in ..... 40 00@42 00	Fencing, mill cul's .. 4 00@ 6 00
Selects..... .... 35 00@38 00	No. 1 stock 12 in .... 14 00@15 00
Fine common .... 27 00@30 00	No. 2 stocks ..... 11 00@12 00
1, 1¼, 1½, 2 in. cut ups 20 00@25 00	Wide common .... 12 00@15 00
No. 1 base, 7, 8 and 9 in selects..... 35 00	Piece stuff and timber ..... 9 00@10 00
No. 2 do. (fine common) 27 00	12, 14, 16, 18 ft ..... 9 00@12 00
No. 1 floor strips 40 00	Do. do. 20 ft 12 00
No 2 " 27 00	Lath..... ..... 1 50@ 1 75
No. 3 " 17 00	Lath No. 2 (cul) 1 00
Fencing ..... 12 00@15 00	Shingles XXX .. 3 15@ 3 25
	Clear butts ..... 1 90@ 2 15

DRESSING.

Surfacing 1 00	Making drop siding.. 2 25
Dressing and matching 2 00	Making bevel siding and ceiling..... 3 00

THE AGE OF TREES.

Evidence as to the age of trees always requires careful examination. The *Lumber Trade Journal* says that many surveyors and lawyers know that the concentric rings are not to be taken as evidence of the lapse of time, and it gives the following as the result of an examination of pieces of wood from trees the age of which was known: Big hickory 11 years old showed 16 rings; green ash, 8 years, 11 rings; Ky. coffee tree, 10 years, 14 rings; Burr oak, 10 years, 24 rings; chestnut, 4 years, 7 rings; peach, 8 years, 6 rings; chestnut oak, 24 years, 18 rings.

MARITIME NOTES.

THE leading topic of conversation in mercantile circles is, of course, the Stewart failure, and the Maritime Bank suspension; the failure of Mr. S. Schofield, before, and the assignment of Mr. Geo. MacLeod, after the Bank break up, have been allowed to, as it were, drop out of sight. When compared with the overshadowing proportions of the smash up which has, I am afraid brought sorrow to many homes.

It is all very well, this lending money to one large house, but I cannot help thinking it savors too much of the plan of having all one's eggs in one basket, which is not good policy; of course it is all right as long as things go smoothly but let a pressure come, and then where are you? Report is very busy about some of the proceedings between the bankrupt firm and the closed bank, and at the meeting of the shareholders of the institution to be held shortly, some highly interesting developments will probably be reached.

* * *

Our great business is, of course, lumber, and as everybody knows, lumber has been an unprofitable article to handle for the last five years, and the reports so far from the English markets are not encouraging, although the stock there is light, and the cut here, not within thirty per cent. of that of last year; still this does not seem to have the effect of raising the prices in the trans-atlantic markets.

A number of our people have tried to make out that our local government charges too much stumpage on lumber cut on Crown Lands, and that that is the main reason why our shipments have decreased in quantity and our returns therefrom become so unremunerative. I cannot agree with this idea, for while I am of the opinion that our Government stumpage ($1.25 per thousand feet) is very high, still the opponents of this charge do not go far enough away and consequently do not see the real obstacle to our obtaining good prices for our lumber. They forget that the Baltic ports are very much nearer the English and Continental markets than we are, that their wood answers for all ordinary purposes, equally well with our spruce, and that there is a difference in freight alone of more than one pound sterling per standard or nearly two dollars and a half per thousand feet in favor of the Baltic ports, without taking into account the fact that labor is much cheaper with them than with us.

* * *

The American market is opening up very well this spring, and if the carpenters and other laborers can be induced to settle their little difficulties with their employers without having recourse to the lamentable strike, there seems to be a fair prospect for remunerative returns on wood goods shipped this season to United States ports.

There is one very important factor in the success or failure of our American shipments this season, and that is the action of the Dominion Government towards the American fishermen. So much has been said and written about this matter that it is not worth while for me to go into the question—I can give my opinion in a very few words—Canada is right to insist on the recognition of the three mile limit, but she is decidedly wrong to harass the American fishermen in the numberless petty ways that we see used last season. The result of such conduct will be that the Retaliation Bill will be put in force, which will simply mean almost ruin to these lower provinces, and will do more to further the fast growing feeling of secession, not to say annexation, that is spreading over the Atlantic portion of this country than anything else that could possibly happen. The interests of the Lower Provinces are very closely interwoven, much more so than with Upper Canada, despite our political union, and we, in this part of the country, cannot afford to quarrel with the United States no matter what the magnates at Ottawa may think.

CHIP.

OTTAWA LETTER.

OTTAWA, April 25th, 1887.

[*From our own Correspondent.*]

THE month is fast merging towards a close, and yet comparatively speaking everything wears a wintry aspect as far as the mill work at the Chaudiere is concerned. Everything to be sure is in preparation for opening the season's campaign, but the ice on the Ottawa is firm and as yet shows no signs of making a move. From all appearances this spring is going to be a repetition of the year 1876, the year so late in opening and so well remembered for its remarkable high water in the Grand River. This winter just past has been one exceptionally severe, and its effects on the log cut has been more or less marked. The great depth of the snow in many localities was remarkable, and jobbers who had signed contracts were put to a great deal of extra expense on this account. The main roads could readily enough be kept in order, but in the bush and on the roads to the railways the snow was of such prodigious depth and fell so frequently that in many cases as many as five snowplows were detailed to each team to make a passage for the logs out to the main road. Of course this meant very large expense, so that the output of logs was not only attended with difficulty, but also with a heavy outlay in the matter of labor. Horse labor was high and men's wages were on the whole good, and many more were employed than had the winter been of the ordinary kind. One effect the heavy snowfall had, however, and that was that the logs got out this year are of a better quality than those of the previous year. They were so hard to be got out that the log makers got directions to make none but those of the best quality. In many quarters in the Ottawa region drawing is yet in full blast, notably on the Upper Dumoine and Gatineau where Hamilton Bros.' men are still drawing logs to the ice and those engaged say the sleighing is of an excellent kind.

RIVER IMPROVEMENTS.

The Government have been active in making all due repairs to slides, booms and piers on the Ottawa and its tributaries. The south slide at the Chaudiere has been repaired and a new apron put in. The booms, slides and piers at the Petewawa, Dumoine, Madawaska, Magnissippi, Bonnechere, Black, Colounge, and Gatineau rivers have been strengthened as well as the slides at Des Joachim, Portage-du-Fort and Calumet. The Upper Ottawa Towing Company have issued their tariff. They have built a splendid new iron tug at Pembroke for towing operations on the lower Allumette lake, which was a want badly felt, and will greatly facilitate the transit of logs from the Upper Ottawa region. The tow will be managed between Des Joachine rapids and the head of Allumette rapids by the tugs "Hiram Robinson" and "Bronson" and the powerful steamer "C. O'Kelly."

THE CUT.

The sawlog cut is variously estimated between 600,000,000 and 700,000,000 feet, but the best informed say the former. The square timber cut is away down low, white pine 530,000 feet, waney white pine 355,000 feet, red pine 485,000 feet. This does not include some 14,000 pieces made and drawn to French River on the Georgian Bay. Besides the above Mr. R. White has 170,000 feet of white pine on Black River, stuck since last year, which he confidently expects to get to the market this season. He confined his operations this year to saw logs.

The Americans who have penetrated to the Nipissing and Georgian Bay districts, have not been idle this winter. With an eye to the main chance they have secured some of the finest limits in the localities named, and it is computed that 75,000 standards of logs will cross the lakes to the American mills—Canadian logs to be manufactured by American saws. Many of the Canadian dealers think that the export duty on logs leaving Canadian territory should be increased. Canadian shippers have to pay full rates to the United States government when shipping manufactured lumber, whereas these American saw log shippers get off comparatively scott free. This is claimed to be an injustice to the Canadian dealers as the competition is not equalized.

A HIGHER GROUND RENT.

The Mercier Government in the Province of Quebec propose raising the ground rents on timber limits in the Province of Quebec from $2 to $5 per square mile, and the limit holders in this locality feel quite wrathy over the proposal. The Quebec treasury is dry and a shift is made to fill the empty chest in this way. As there is some 47,000 square miles of limits taken up the revenue would be considerably augmented by the proposed increase. The lumbermen held a meeting here a few days ago and discussed the matter in all its moods and tenses. They think a great injustice is contemplated, and they propose making their grievances known to Mr. Mercier at an early date. A meeting will be held in Montreal in a few days when the protest will be formulated.

Bradstreet's, the weekly financial and commercial newspaper published by The Bradstreet Company, is now in its fifteenth volume, and is surpassed by none of the financial and commercial periodicals of this country or in Europe. In the fourteen volumns already issued can be found a greater diversity of original and carefully prepared matter—facts and figures—relating to business topics than in any other periodical during the same period. Nor is it surprising that it has reached and maintains this position, for it is owned and published by a large corporation—with its cash capital and assets of over $1,400,000, its nearly 100 branch offices, and its small army of over 1,600 salaried employes and 65,000 regular correspondents. This organization makes extensive investigations into industrial and other matters, gathers full reports of the condition and prospects of the leading crops, and reports regularly each week the condition of trade throughout the country, thus practically making *Bradstreet's* an authority as to the condition and prospects of the commercial world. It needs but a glance at the newspaper to satisfy any one that its publishers have been ambitious rather than avaricious. Files of *Bradstreet's* have become an acceptable and almost indispensable journal for progressive business men.

THE SPANISH BAY TIMBER.

A LANDLOOKER who has lately been examining some of the Spanish river timber, in the Georgian Bay region of Ontario, reports, on his return, that the pine he there is not of a very high average grade. It will run but a low percentage to uppers, but makes common of excellent quality, free from black knots and shakes. The country he describes as well drained, but with streams that are ill-adapted the driving of logs. In consequence, logging is much more expensive than the average of such work in Michigan and Wisconsin. There are but few improvements for facilitating work as yet, and though they will come after a while, it will be some time before they are available. Considerable purchases of timber have been made in that district by lumber manufacturers on this side, but it is not determined yet whether they are going to be immediately profitable. The way the pine supply on this side is shrinking, there is hardly any question but that anything in the way a tree belonging to this species that will make a saw log will be worth a proportionate part of its weight in gold within a very few years. Those who have dipped into Georgian Bay timber and the impression that they were buying Cass river pine, if there are any such, have doubtless some disappointing truths to learn regarding the quality of their purchases; but even they, and probably all others who have bought there, will be likely to see their money with good interest out of the property. The imposition of extra duty on unmanufactured timber has been a drawback to the owners of Canadian pine, and the possible retalatory measures on the part of the United States against the Dominion government may prove another, though the latter is not likely to amount to anything serious. The business relations of the two countries are too close and intimate to admit of much official foolishness, or of a little long continuing.—*Chicago Timberman.*

MR. MEREDITH'S REQUEST.

THE Toronto *World* editorially remarks: The request recently made by Mr. Meredith of the Commissioner of Crown Lands that the Government would prepare a map showing, in colors, the timber limits now under license and the area remaining undisposed of, was a reasonable one. The information would be extremely useful as a guide to legislators, lumbermen, and all others interested in knowing the condition and extent of our available timber resources. The Government ought to have the facts at hand or readily accessible, and the public have the right to the information. We cannot but think that Mr. Pardee's estimate of the cost of preparing such a map at $10,000 is a considerable over-statement, but even if it were approximately correct it might be worth the money to give the law-makers and the public a correct idea of how much of the resources on which the Province depends for future revenue is still intact. Our forest wealth should be husbanded with the greatest care. As has often been said, in using the revenue derived from timber sales to pay the current expenses of government, we are really living on our capital. When the forests are exhausted we shall be forced to resort to direct taxation. It is time that the whole question of provincial finances was reconsidered, with the object of ascertaining how long we can depend upon the crown lands as our main source of revenue, and whether some steps cannot be taken to capitalize at least a portion of our receipts from this source, so as to secure a permanent income when the timber is exhausted.

London, Eng, Timber.—We are glad to be able to report that the trade at last shows some signs of returning amination after the long spell of dulness and inactivity which have characterized it for so many months past. We have reported for a few months past a somewhat improved tone in the public sales, with more briskness and confidence on the bidding, which has kept prices very firm. This improvement appears to gain strength as the spring advances, and the sales held this week have shown not only continued firmness, but in some instances an advance in prices. By general consent the demand since the commencement of the month has shown a gratifying increase, which is confirmed by the very satisfactory dock deliveries for the week, which it will be seen total up to 4,513 stds. of deals, battens and boards, against 3,942 last year. These deliveries are all the more satisfactory as the dock stock is small, and they have not been unduly stimulated by heavy public sales without reserve, but represent an ordinary quiet week's consumption, and judged by this standard must be of good omen for the future. The deliveries may fluctuate week by week, but we think the tendency will be to an improvement over last year. Is is to be hoped that the shipments next season may again be on a reduced scale as, even taking a favorable view, our market will be hardly in a position to absorb an excessive quantity of stuff. It will take some time for the trade to recover from the weakening it has experienced during the past few years.

The Joseph Hall Machine Works,

OSHAWA,

Iron Pulleys, Hangers, Shafting, Couplings. A large assortment, almost every size and kind of Pulley in stock, finished and ready for use.

JOHN LIVINGSTONE, Trustee.

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SECOND-HAND Tight Barrel Stave and Heading Outfit, *Cheap.*
Address BOX 110, CLEVELAND, O.

YOU can live at home, and make more money at work for us, than at anything else in this world. Capital not needed; you are started free. Both sexes; all ages. Any one can do the work. Large earnings sure from first start. Costly outfit and terms free. Better not delay. Costs you nothing to send us your address and find out; if you are wise you will do so at once. H. HALLETT & Co., Portland, Maine.

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TENDERS

SEALED TENDERS, marked "For Mounted Police Provisions and Light Supplies," and addressed to the Honourable the President of the Privy Council, Ottawa, will be received up to noon on Monday, May 30th, 1887.

Printed forms of tenders, containing full information as to the article and approximate quantities required, may be had on application at any of the Mounted Police Posts in the North-West, or at the office of the undersigned.

No tender will be received unless made on such printed forms.

The lowest or any tender not necessarily accepted.

Each tender must be accompanied by an accepted Canadian bank cheque for an amount equal to 10 per cent. of the total value of the articles tendered for, which will be forfeited if the party declines to enter into a contract when called upon to do so, or if he fails to complete the work contracted for. If the tender be not accepted the cheque will be returned.

No payment will be made to newspapers inserting this advertisement without authority having been first obtained.

FRED WHITE,
Comptroller N. W. M. Police.

Ottawa, March 25th, 1887. 2d86

CANADA AND WEST INDIES.

TENDERS FOR STEAMSHIP LINES.

TENDERS will be received at the Finance Department, Ottawa, up to and including the 1st day of May next, from persons or companies, for the performance of the following steamship services, viz:—

1st, a line of mail steamers sailing from Halifax to Havana, thence to Kingston, thence to Santiago de Cuba, thence to Canada; and (2nd) a line of mail steamers between Canada and Porto Rico and adjacent islands. Trips to be made by each line fortnightly. Steamers to be of a size sufficient to carry 2,000 tons of cargo, and to be able to steam twelve knots an hour, averaging not less than eleven knots an hour. The contract in either case to be for a period of five years. Tenders will be received for the above services either separately or together. Tenders to be marked on the outside "Tenders for Steamship Service to West Indies." The Government of Canada do not bind themselves to accept any tender.

By command,

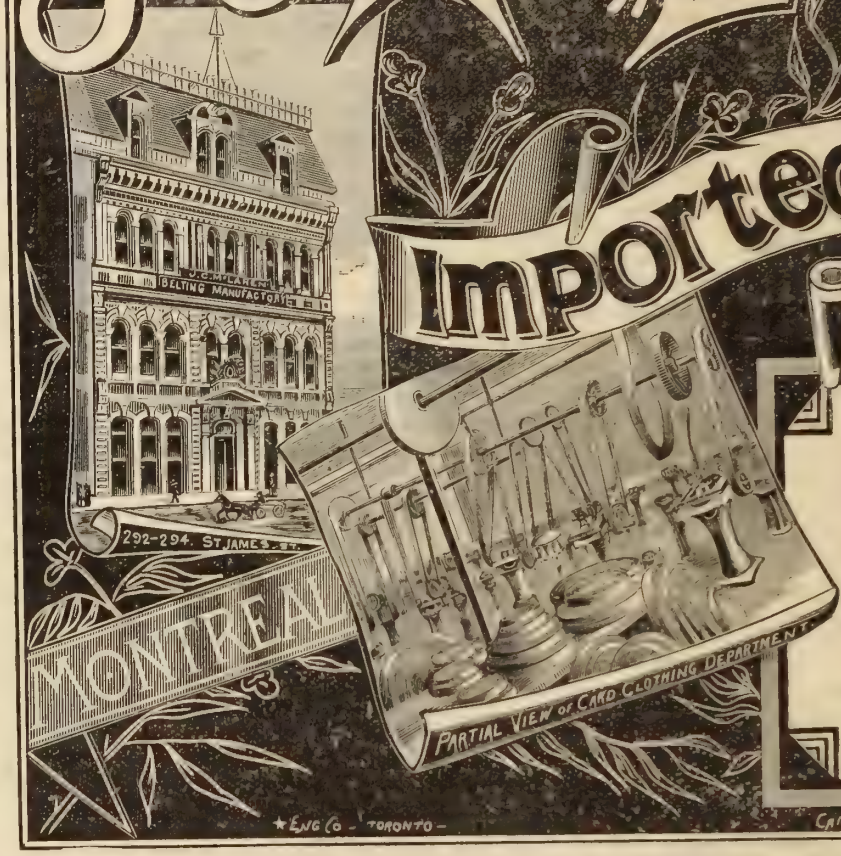
J. M. COURTNEY,
Deputy Minister of Finance.

Finance Department,
Ottawa, 7th Feb., 1887.

J. C. McLAREN

Imported Oak.

Belting.



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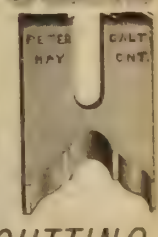

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PATENTS

SEALED TENDERS, marked "For Mounted Police Clothing Supplies," and addressed to the Honorable, the President of the Privy Council, Ottawa, will be received up to noon on Monday, 22nd May, 1887.

Printed forms of tender, containing full information as to the articles and quantities required, may be had on application to the undersigned.

No tenders will be received unless made on such printed forms. Patterns of all articles may be seen at the office of the undersigned.

Each tender must be accompanied by an accepted Canadian bank cheque for an amount equal to ten per cent of the total value of the articles tendered for, which will be forfeited if the party decline to enter into a contract when called upon to do so, or if he fail to complete the work contracted for. If the tender be not accepted the cheque will be returned.

No payment will be made to Newspapers inserting this advertisement without authority having been first obtained.

FRED WHITE,
Comptroller, N. W. M. Police.

Ottawa, March 25th, 1887. 2w14

MAIL CONTRACT.

TENDERS, addressed to the Postmaster General, will be received at Ottawa until noon, on Friday, 27th May for the conveyance of Her Majesty's Mails, on a proposed contract for four years, six times per week each way between WARSAW and PETERBOROUGH, from the 1st July next. Conveyance to be made in a public or other vehicle. The Mails to leave WARSAW daily, Sundays excepted, at 7.30 a. m., and to arrive at PETERBOROUGH at 11 a. m. To leave PETERBOROUGH daily, Sundays excepted, at 2 p. m., and to arrive at WARSAW at 5.30 p. m. Exchanging Mails at SOUTH DOURO passing each way.

Printed notices containing further information as to conditions of proposed Contract may be seen, and blank forms of Tender may be obtained at the Post Offices of WARSAW, SOUTH DOURO, and PETERBOROUGH and at this Office.

GILBERT GRIFFIN,
P. O. Inspector.

Post Office Inspector's Office, Kingston, April 8th, 1887. d89-w16

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F. SCHOLES, Man. Director.
J. O. GRAVEL, Sec.-Treasurer.

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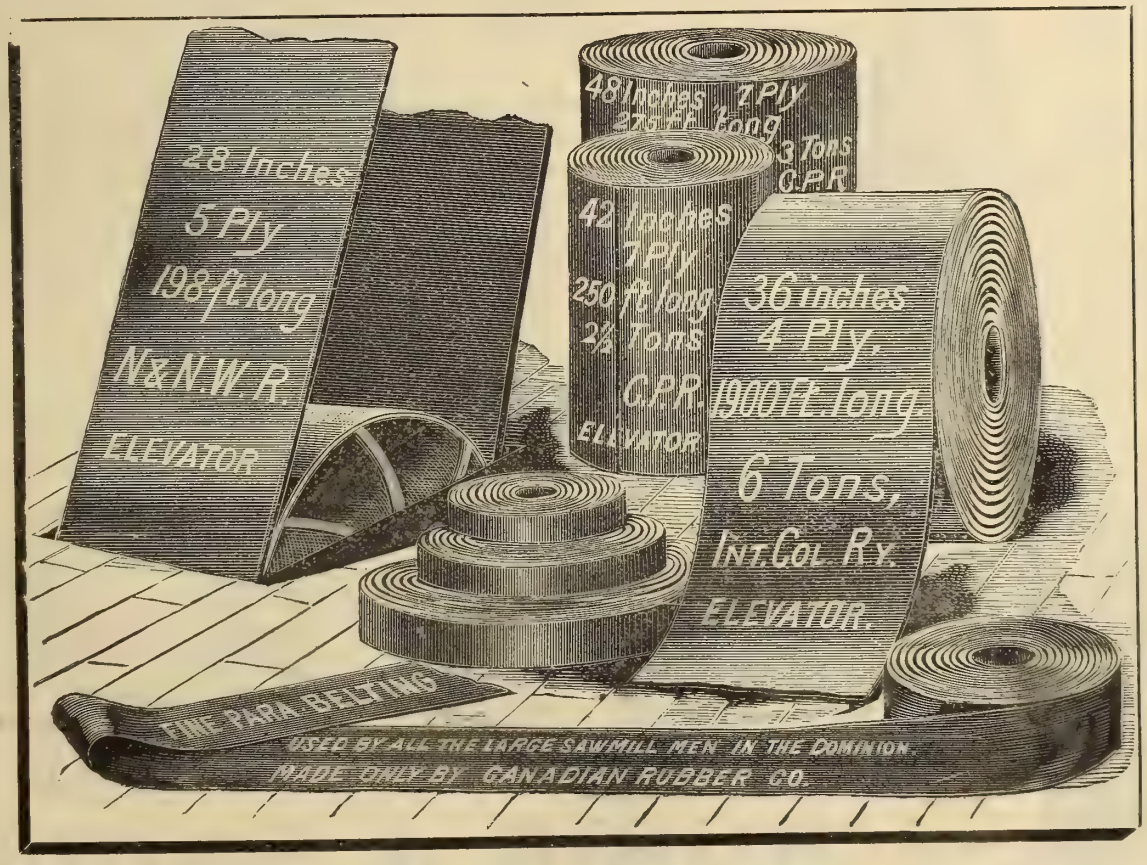
Valves of Superior Quality and Make, Car Springs, Wringer Rolls, Tubing, Gaskets, Corrugated Matting, Mats, Carriage Cloths, Rubber Horse Clothing,



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15,000 p tterns, in Wood, Iron and Brass, covering almost every requisi e for the most ex ensive Foundries in the Dominio , for :—
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LUMBER MILLS
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Every Description of Seasoned Lumber on Hand.

MONEY to be made. Cut this out and return to us, and we will send you free so ething of g eat va ue and imp rtance to you, that will start you in business which will bring you in more money right away than anything else in this world. Any one can do the work and live at home. Either sex : all ages. Something new, that just coins money for all workers. We will sta t you ; capital not needed. This is one of the genuine, important chances of a lifetime, Those who are ambitious and e terprising will not delay. Grand outfit free. Address TRUE & Co. Augusta, Maine.

CHARLES A. BRAMBLE, D.L.S.
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Surveys and reports upon Timber Lands in any section. Can effect sale of properties occasionally if desired. References from former employees.

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The Joseph Hall Machine Works
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Have on hand and for sale, the following:—

1 only	Improved	Leffel	Wa e	Wheel	52 in,	gainst sun,
1	do	do	do	do	do	52 in. with sun
1	do	do	do	do	do	48 in. with sun,
1	do	do	do	do	do	44 in. against sun,
1	do	do	do	do	do	44 in. with sun,
1	do	do	do	do	do	35 in. against sun,
1	do	do	do	do	do	35 in. with sun,
1	do	do	do	do	do	23 in. with sun,
2	do	do	do	do	do	20 in. against sun,
2	do	do	do	do	do	20 in with sun,
1	do	do	do	do	do	17½ in. with sun,
1	do	Champion	Water	Wheel	Governor.	

JOHN LIVINGSTONE, Trustee.

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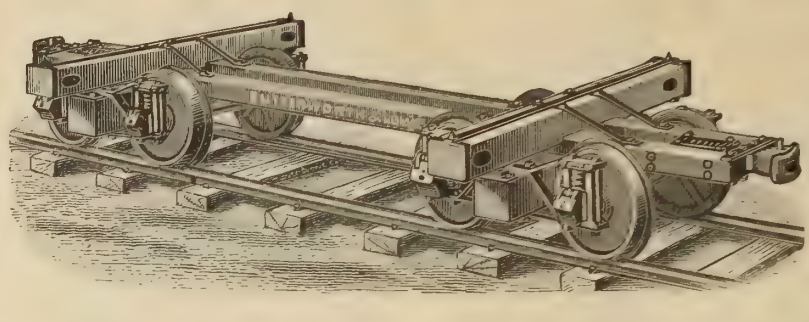

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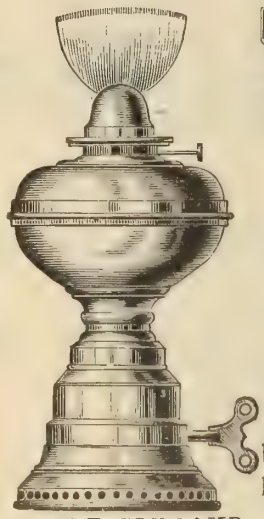

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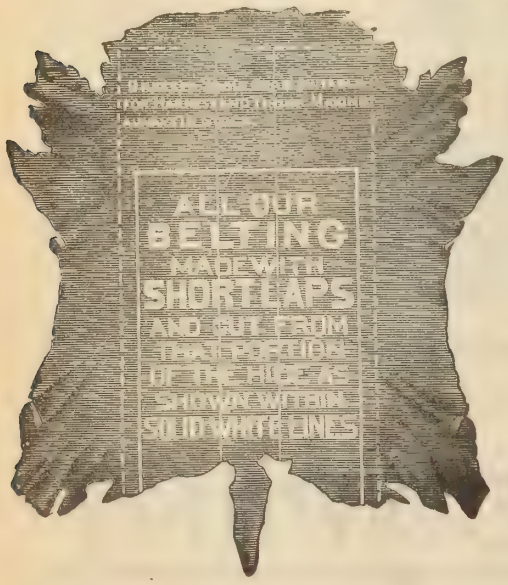

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BY STRAIGHT MEASURE OR INSPECTION.

THIS is just now a live question in the lumber trade, and especialty a certain portion of it whose operations are mainly carried on in the producing regions, and at the distributing markets, of the lower lakes. There it has become a declared issue between a majority of the buyers and a certain proportion of the sellers; and if present indications may be relied upon, there is likely to be a lively and interesting struggle between the two when the season is fairly opened.

Concerning the merits of the controversy, there ought to be less dispute than as to its practical result. Presented merely as an abstract question, the answer to it is easy, simple, and measurably conclusive. The buyer of lumber, in common with the buyer of any other bulk commodity, the quality and value of which is uncertain and impossible of accurate determination by a mere casual examination, is entitled to some other and adequate means of knowing what he is to get for his money. The basis of any wholesale trade in lumber is the quality of the stock handled. It is this which establishes the price, and determines the sale, if a sale is made. Without knowledge of this factor of the transaction, no man can buy intelligently. It is an essential feature of a purchase from both sides. If the owner of stock should fail to acquaint himself with its actual merits or defects before he went into market with it, how long could he expect to do business successfully? It is beyond question equally necessary for the other party to a trade to know what he is buying.

Granting that this knowledge is a thing the purchaser is entitled to, it becomes merely a question of how he is to obtain it. Obviously the simplest, and perhaps the best way, is for him to examine what he proposes to buy himself. This is the method of small transactions, the first crude plan of determining values that suggested itself when trading between men began. So long as the business done is confined to transactions of a small magnitude, it is satisfactory, because the buyer only invests in what his judgment approves, and even if he fails to get the worth of his money, may not realize the fact. But it will be admitted without argument that the same plan cannot be applied to business done on a larger scale, and give equally satisfactory results. A man buying a wagon-load, or even a car-load, of lumber may examine it for himself and decide upon the evidence of his own eyesight and judgment as to what it is worth; when he buys a million feet, this becomes to all intents and purposes physically impossible. What can he do? Clearly he must be allowed some way of ascertaining what the stuff is, and practically but two remain open to him: he may accept the representations of the seller, or he may buy it subject to an examination by a competent, disinterested man—that is, inspection.

The necessity for inspection arose just as soon as men began to deal upon a large scale in bulk commodities, and in the process of commercial development it has come to be a part of the machinery of business in every line in which the nature of the merchandise handled makes expert examination necessary.

Lumber is certainly such an article. It is handled in bulk, and it is subject to wide variations in quality and worth. Any average lot of log run lumber will range in quality from mill culls to first clear, and hardly any two piles will show precisely the same proportion of the respective kinds and grades into which it is ordinarily assorted. One board furnishes no definite guide as to what the next one in the pile will prove to be; indeed, one cannot tell from it what will be the quality of the succeeding cut from the same log. As a matter of absolute fact, no two piles of lumber, or two logs, or even two boards, are exactly alike. The difference may be so slight as to be of no commercial account, or they may be so great as to make one piece of lumber valueless, and the other worth the highest price the market shows; between the two extremes the variations are infinite in number. An average of these differences may be obtained by assorting the lumber into grades: according to a definite system, and from such an average it is easy to determine the value of the whole. This is merely what inspection is for, and what, honestly made, it does.

Inspection, pure and simple, means nothing more or less than an examination of the stock to see what it really is. It is or should be, within the right of the buyer to have this knowledge, without which he must be compelled to take all the chances in a trade, while the seller takes none. It is to be presumed, in all cases, that the seller knows what he is offering. If he does not, it is his own fault. But the buyer cannot know unless he is allowed to ascertain, and this privilege the straight measure advocates seem disposed to deny him. Men may prefer to buy on their own judgment of lumber, because they think their own judgment may be better than any inspector's, which very likely it is; but this does not furnish a reason why another buyer should not have his lumber inspected Fairness would dictate that manufacturers should give their customers the same opportunity to test the value of what they sell, as they require in buying the raw material they manufacture. They, or some of them—insist that a buyer shall judge of the quality of a pile of lumber by looking at the top and sides, with no chance to plunge into the middle of it, and to find out of what stuff it is really made; but where is the maker of boards who would think of buying his timber in the same uncertain, haphazard way? Would one of the Saginaw mill men, for example, consent to skirt around the edges of a thousand-acre tract of pine, and then buy it 'straight measure'? No; when he buys timber, he must have it inspected, and inspected, not by a disinterested man, but by a land-looker of his own selection and employment, who is instructed to carefully examine every acre, to scale the trees, and to ascertain beyond a doubt just what the timber is that he is asked to purchase. If there is any good and sufficient reason why a principle that is obviously just when applied to timber standing in the tree, is not similarly fair and righteous when applied to the same timber after it is cut into lumber, the discussion of inspection and straight measure has so far failed to bring it out.

The exceptions of the manufacturers to a one sided and unfair inspection by interested parties are well taken. Equally with the buyers, are they entitled to a competent and unbiased judgment of their stock; and it is manifestly to the interest of buyers that they should have it. But there should be a remedy for an evil of this kind short of abolishing inspection altogether. It is not to be assumed that buyers will insist upon inspectors of their own choosing. Indeed, they have distinctly expressed the desire that manufacturers should "organize and appoint a corps of qualified and reliable inspectors," and should themselves establish a just and fair system of inspection. This places the matter wholly in the seller's hands, and affords them the opportunity of giving inspection a trial upon an equitable basis, if they are disposed to do so.

The actual outcome of the inspection dispute, depends of course, upon other circumstances than the mere principle involved. For the time being, the condition of the market will probably have more to do with it than abstract right or wrong. With a strong, active demand and firm prices, the manufacturers will be likely to dictate the manner in which they will sell their lumber; with a sluggish, weak market, probably buyers can have all the inspection they want. This is not right, but perhaps it is "business.—*Chicago Timberman.*

THE LUMBER TARIFF.

WE have been shown a copy of the C.P.R. special lumber tariff from Rogers' Pass to all points east as far as Winnipeg. The following are some samples of the rates:—

MILES	TO	RATE per 100 lbs.	RATE per car
136	Banff	32c	$ 96
216	Calgary	39c	1 17
270	Gleichen	40c	1 20
657	Moose Jaw	40c	1 20
699	Regina	42c	1 26
923	Brandon	44c	1 32
1055	Winnipeg	45c	1 35

The first fact that will be recognized in scanning these figures is that the rates are a practical preventative of any business in lumber between the prairie towns and the mountain saw mills. It is therefore useless to go into an analysis of the unfairness of the figures as between one point and another, because the tariff is evidently not intended to foster freights but to check and prohibit them for the time being altogether. To say that a railway is seeking to discourage business over its own line appears on the face of it to be absurd, but a little scrutiny of the situation will show that there are reasons. Under the comparatively low tariff allowed last year the lumber mills in the mountains west of Rogers' Pass were able to do a prosperous business, and in view of a continuation of that tariff, they greatly increased their capacity for manufacturing. The railway was fostering their enterprise, but, as the sequel shows, they were fostering it with a view to make food for their own capacity. The company foresaw that they would require vast quantities of lumber and sawn timber for their snow sheds and other works in the mountains. The mills have been put in, the railway puts on a freight tariff that prevents them entering the markets, and at once the C.P.R. is master of the situation. They can dictate to the mill owners in the mountains the price and terms on which they must supply the lumber and timber the railway needs, and that price and those terms will just squeeze the mill owners hard enough to get all that can be got out of them without actually killing them.

The practical shutting out of these mountain mills from competition with Maj. Walker, at Kananaskis, and the Calgary Lumber company, at Cochrane, will be a good thing for those mills temporarily, but what assurance is there that the C.P.R. will not some time require to use them just as the mountain mills are now being used? The effect is to demoralize business, to destroy confidence, and check and prostrate enterprise.—*Calgary Tribune.*

CHARCOAL.

AN exchange desires to know why charcoal is not more largely used for fuel in Ontario. In France it is in general use for cooking and even, in some cases, for warming, though wood is very much dearer than in Canada. But in some other European countries, every scrap of waste wood is converted into charcoal.

In Canada we have hardly begun to realize the value of our forests. A few years only have passed since the finest forest trees were regarded as cumberers of the ground, and the one object was to cut them down and burn them. Now we realize the value of most trees fit for lumber; but even with these the waste is enormous. The limbs are worse than lost they are left to dry upon the ground where the trees are cut, and when fire gets among them it spreads rapidly and works incalculable damage. Most industrial operations are conducted with such economy that the waste products constitute in themselves a large source of profit. It might be so in lumbering camps. The waste wood might be turned into charcoal for fuel, and in the process the pyroligneous acid and other products might be saved, so that the charcoal would be had for nothing. Mineral coal is raised from great depths, and is carried great distances. Charcoal might be had in almost inexhaustible quantities much nearer the Canadian cities, and would prove a source of great wealth. A pound of charcoal will produce more heat than a pound of the best mineral coal. A table which we found in the Encyclopedia Britannica says that one pound of mineral coal will evaporate water as follows:

COAL.	WATER, LBS.
South Wales (average)	9.05
North of England	8.37
Lancashire	7.94
Scotland	7.70
Derbyshire	7.58

One pound of charcoal will evaporate 12.75 pounds of water. In all cases the evaporation is that of water already raised to the boiling point. It will be seen that charcoal has one-third more heating power than the best Welsh coal, and 65 per cent. more than Scotch coal.

Doubtless difficulty would be experienced in using charcoal for heating; but we cannot doubt that Canadian ingenuity would soon find means to employ it with comfort and safety. For cooking, especially in summer time, charcoal has many advantages.

The sawdust, which not only goes to waste at saw mills, but which gives so much trouble, is to be used for a good purpose. The *Journal of Commerce* says:

It is understood that a company is about to be formed in Ottawa with a large capital for the purpose of purchasing a water power on the Chaudiere and erecting extensive mills for the manufacture of pulp from the sawdust, which has for so long been a nuisance to both lumbermen and forwarders in the Ottawa river. Mr. Bronson, M.P.P., is one of the principal promoters of the scheme.

If the sawdust can be made of economic value, surely the limbs of trees should not be permitted to go wholly to waste, and that at a time when mineral coal is getting more and more expensive. At present Ontario is wholly dependent upon foreign countries for coal. If her own forests were turned to the best account, employment would be found for many laborers, freights would be supplied to Canadian railways, and large sums of money now sent abroad would be retained at home.—*Exchange.*

TIMBER AND LUMBER NOTES.

At Beaverston, on the north shore of the Georgian Bay, Burton Bros. are getting out some seventy-five or eighty thousand feet of board timber and five or six million feet in saw logs. At Collins Inlet the Collins Inlet Lumbering Company will have out five and a half million feet in saw logs. All along the North Shore there will be an unusually large out-put of logs this year, so says the *Expositor.*

The Port Perry *Standard* says:—Last Tuesday we beheld one of the largest saw logs that has ever been seen in this part of the country. The tree from which it was taken grew on Mr. John T. Pound's farm just north of this village, and was blown down about three years ago during a heavy wind storm. The first two logs cut from the tree measured fifteen feet each in circumference and were composed of good, sound, clean, timber. They were taken to Utica to be cut into shingles.

According to a despatch from Ottawa, the lumbermen of that neighborhood have met to discuss the bill introduced by Mr. Murray, M.P.P., before the Ontario Legislature. They almost all pronounce against the clause providing that in case of a jam of timber or logs on any stream where a number of lumbermen's logs are congregated, the firm or individual who breaks the jam may take a lien on the logs so liberated until paid for the expense of freeing them. The lumbermen object that this provision, if adopted, would result in endless litigation.

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Manufactured by
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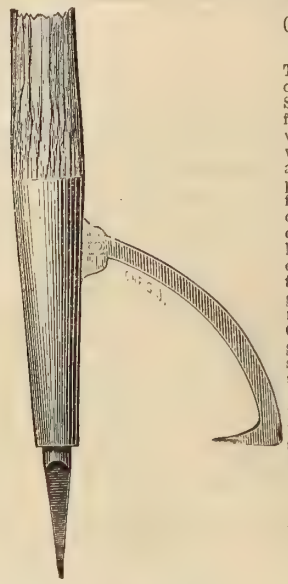

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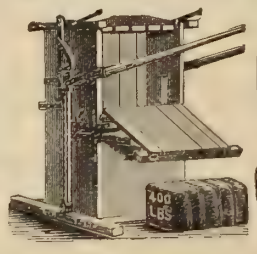

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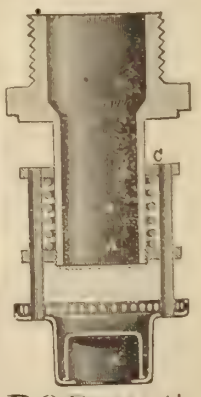

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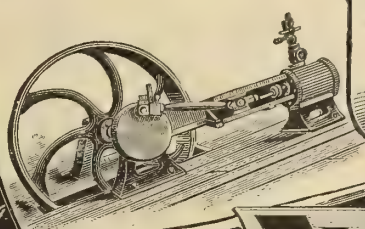

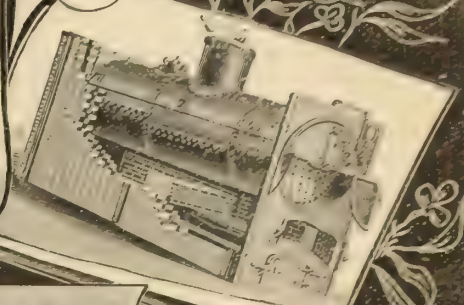

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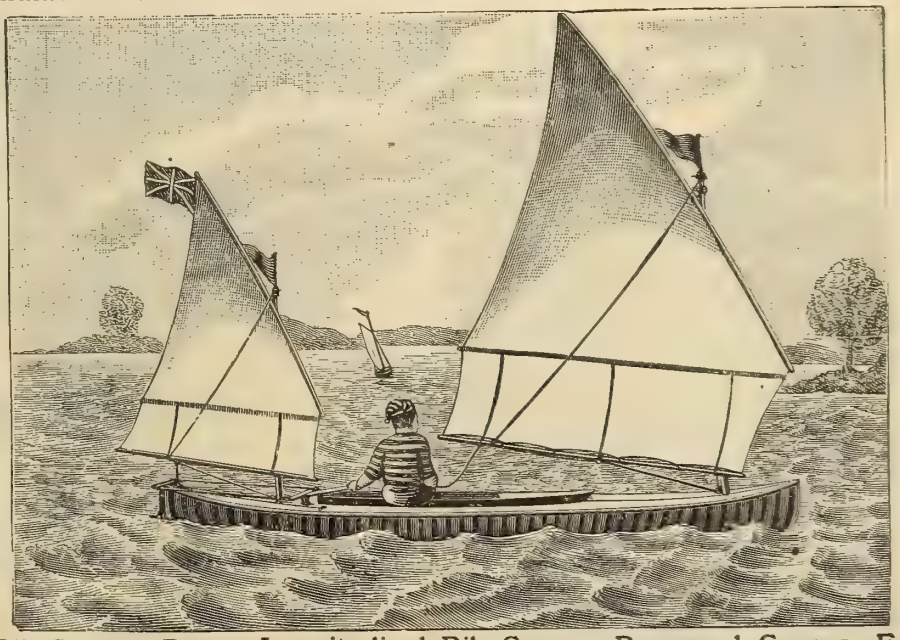

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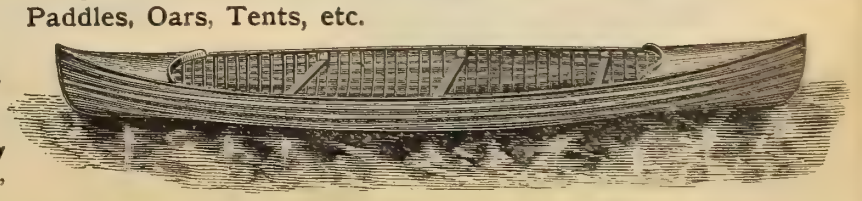

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THE SAW LOGS DRIVING ACT 1887.

THE Bill introduced in the Ontario Legislature during the last session, being an Act respecting the driving of saw logs and other timber on lakes, rivers, creeks and streams, was, after its first reading, published in full in THE LUMBERMAN of April last. As this Bill has since been considerably amended and become law, and as no doubt many of our readers have yet been unable to peruse it, we devote considerable space this month to the publication of the same in full.

The Bill reads as follows :—

2. Any person putting, or causing to be put, into any water in this Province, logs, for the purpose of floating the same in, upon or down such water, shall make adequate provisions and put on a sufficient force of men to break, and shall make all reasonable endeavors to break jams of such logs and clear the same from the banks and shores of such water with reasonable despatch, and run and drive the same so as not to unnecessarily delay or hinder the removal, floating, running or driving of other logs, or unnecessarily obstruct the floating or navigation of such water.

3. In case of the neglect of any person to comply with the provisions of the preceding section, it shall be lawful for any other person or persons desiring to float, run or drive logs in, upon or down such water, and whose logs would be thereby obstructed, to cause such jams to be broken and such logs to be cleared from the banks and shores of such water, and to be floated, run and driven in, upon and down such water.

4. The person or persons causing such jams to be broken or such logs to be cleared, floated, run or driven, pursuant to the last preceding section, shall do the same with reasonable economy and despatch, and shall take reasonable care not to leave logs on the banks or shores, and shall have a lien upon the logs in the jam or so cleared, floated, run or driven for the reasonable charges and expenses of breaking the jams and the clearing, floating, running, driving, booming and keeping possession of such logs, and may take and keep possession of such logs, or so much thereof as may be reasonably necessary to satisfy the amount of such charges and expenses pending the decision by arbitration as hereinafter provided for. The person taking possession of logs under this section shall use all reasonable care not to take such logs beyond the place of their original destination, if known, but may securely boom and keep possession of the same at or above such place. The owner or person controlling such logs, if known shall be forthwith notified of their whereabouts, and if satisfactory security be given for the amount of such charges and expenses, possession of the logs shall be given up.

5. When logs of any person upon or in any water in this Province, or the banks or shores of such water, are so intermixed with the logs of another person or persons, that the same cannot be conveniently separated for the purpose of being floated in, upon or down such water, then the several persons owning or controlling the intermixed logs, shall respectively make adequate provisions, and put on a fair proportion of the men required to break jams of such intermixed logs, and to clear the same from the banks and shores of such water with reasonable despatch, and to float, run and drive the same in, upon and down such water, and the costs and expenses thereof shall be borne by the parties in such proportions as they may agree upon, and in default of agreement as may be determined by arbitration as hereinafter provided for.

6. In case of neglect of any person to comply with the provisions of the last preceding section, it shall be lawful for any other person or persons whose logs are intermixed, to put on a sufficient number of men to supply the deficiency and break jams of such intermixed logs, and to clear the same from the banks and shores of such water, and to float, run and drive all such intermixed logs in, upon and down such water.

7. The person or persons supplying such deficiency and causing such jams to be broken, or such intermixed logs to be cleared, floated run or driven pursuant to the last preceding section, shall do the same with reasonable economy and despatch, and shall take reasonable care not to leave logs on the banks or shores, and shall have a lien upon the logs owned or controlled by the person guilty of such neglect, for a fair proportion of the charges and expenses of breaking the jams, and the clearing, floating, running, driving, booming and keeping possession of such intermixed logs; and may take and keep possession of such logs, or so much thereof, as may be reasonably necessary to satisfy the amount of such fair proportion of charges and expenses pending the decision by arbitration as hereinafter provided for. The person taking possession of logs under this section shall use all reasonable care not to take such logs beyond the place of their original destination, if known, but may securely boom and keep possession of the same at or above such place. The owner or person controlling such logs, if known, shall be forthwith notified of their whereabouts, and if satisfactory security be given for the amount of such proportion of charges and expenses, possession of the logs shall be given up.

8. When logs of any person, upon or in any water in this Province, or the banks or shores of such water, are intermixed with logs of another person or persons, then any of the persons whose logs are intermixed, may at any time during the drive, require his logs to be separated from the other logs at some suitable and convenient place, and after such separation he shall secure the same at his own cost and expense, in such manner as to allow free passage for such other logs; provided that when any logs so intermixed reach their place of original destination, if known, the same shall be separated from the other logs, and after such separation the owner shall secure the same at his own cost and expense.

9. The several persons owning or controlling the intermixed logs shall respectively make adequate provisions and put on a fair proportion of the men required to make the separation; the cost and expense of such separation shall be borne by the parties in such proportions as they may agree upon, and in default of agreement, as may be determined by arbitration as hereinafter provided.

10. In case of neglect of any person to comply with the provisions of the last preceding section, it shall be lawful for any other person or persons, whose logs are intermixed, to put on a sufficient number of men to supply the deficiency, and the logs owned by or controlled by the person guilty of such neglect shall be subject to a lien in favor of the person or persons supplying the deficiency, for a fair proportion of the charges and expenses of making the separation, and for the reasonable charges and expenses of booming and keeping possession, and such person or persous may take and keep possession of such logs or so much thereof as may be reasonably necessary to satisfy the amount of such fair proportion of charges and expenses pending the decision by arbitration as hereinafter provided for. The person taking possession of logs under this section shall use all reasonable care not to take such logs beyond the place of their original destination, if known, but may securely boom and keep possession of the same at or above such place. The owner or person controling such logs, if known, shall be forthwith notified of their whereabouts and if satisfactory security be given for the amount of such proportion of charges and expenses, possession of the logs shall be given up.

11. The security referred to in sections 4, 7 and 10 may be by bond in form A in the schedule hereto, or by deposit of money, or in such other way as the parties may agree upon.

12. If it be determined by arbitration, as hereinafter provided for, that any person acting under the assumed authority of this Act, has without just cause taken possession of or detained or caused to be taken possession of or detained, logs of another person, or has after offer of security which the arbitrators may think should have been accepted, detained such logs, or has through want of reasonable care left logs of another person on the banks or shores or has taken logs of another person beyond the place of their original destination contrary to the provisions of sections 4, 7 or 10, then such first mentioned person shall pay to such last mentioned person such damages as the arbitrators may determine.

13. The lien given by sections 4, 7 and 10 of this Act shall be subject to the lien (if any) of any person or corporation for tolls or dues for the use of any works or improvements made use of in running or driving such logs.

14. Nothing in this Act shall affect the liens or rights of the Crown upon or in respect of any logs.

15. All claims, disputes and differences arising under this Act shall be determined by arbitration as hereinafter provided and not by action or suit at law or in equity.

16. The person claiming that another person has not complied with the provisions of this Act, or claiming payment of any charges or expenses under this Act, or claiming a lein upon any logs, or claiming damages under section 12, shall give to such other person notice in writing stating the substance of the claims made, and appointing an arbitrator, and calling upon such other person to appoint an arbitrator within ten days after the service of such notice; if such other person does not within such ten days appoint an arbitrator the Judge of the County or District Court of the county or district, or the Stipendiary Magistrate of the provincial county or the district, as the case may be, in which the logs in connection with which the claim or part of the claim is made, or the major portion of such logs are situate at the time of the service of such notice, shall, on the application of the person giving such notice, appoint a second arbitrator; the two arbitrators so appointed shall within ten days after the appointment of the said second arbitrator appoint a third; if such two arbitrators do not within such ten days appoint a third, the said Stipendiary Magistrate shall on the application of either party appoint such third arbitrator.

17. If any arbitrator refuses to act or becomes incapable of acting, or dies, and the parties does not concur in appointing a new arbitrator, the said Judge or Stipendiary Magistrate shall, on the application of either party, appoint such new arbitrator.

18. The parties may agree that the arbitration shall be by one arbitrator instead of by three, and they may either agree upon the arbitrator or may apply to the said Judge or Stipendiary Magistrate to appoint one.

19. The person on whom a claim is made and notice of arbitration served may at any time before the arbitration is entered upon or with leave of the arbitrators during the arbitration, give the claimant notice in writing by way of counterclaim stating the substance of any claim arising under this Act which such person may have against the claimant, and such counterclaim, unless barred under section 26, shall be determined in the arbitration and an award made with respect thereto.

20. The three arbitrators or the sole arbitrator, as the case may be, shall proceed with the arbitration with due despatch, and shall make their or his award in writing, under their or his hand within thirty days from the date of the appointment of such arbitrator, or the last of such three arbitrators, as the case may be. The parties may, by consent in writing, from time to time enlarge the time for making said award, or the said Judge or Stipendiary Magistrate may from time to time, either before or after the expiration of said time, enlarge the time for making said award.

21. The arbitrators or arbitrator may require the personal attendance and examination upon oath of the parties and their witnesses and the production of all books and documents relating to the matters in question, and may determine by whom the expense of the arbitration, and the costs of the parties shall be paid, and the amount thereof; any costs or expenses payable to a person having a lien upon logs, by virtue of this Act shall be added to the amount of such lein.

22. Chapter 64 of the Revised Statutes of Ontario intitled *An Act respecting the costs of Arbitrations* applies to arbitrations under this Act.

23. The person or persons having a lien upon logs by virtue of this Act, may sell the same in order to realize the amount of such lien, and of the costs, charges and expenses connected with the sale. The arbitrators, or arbitrator, shall determine

either by their award or by separate document the time, place and manner of such sale, and may, from time to time, give directions, in writing, respecting such sale, and the realization of such lien, and of the costs, charges and expenses connected therewith.

24. The award and directions, in writing, of any two of the three arbitrators, or of the sole arbitrator, as the case may be, shall be final and binding upon and shall be obeyed by the parties, and shall be valid notwithstanding any want or defect of form or other technical objection.

25. The said Judge or Stipendiary Magistrate, as the case may be, may, on the application of either party, grant an order to compel any person or persons to attend and give evidence upon the arbitration and to produce all books and documents relating to the matters in dispute, and obedience to such order may be enforced in the same way as obedience to any order of such Judge or Stipendiary Magistrate made in a cause or matter pending before him in court may be enforced, and the person neglecting or refusing, without lawful excuse, to obey such order shall be liable to an action by any person aggrieved by such neglect or refusal for the damages sustained by him thereby.

26. All claims arising under this Act shall be made by notice in writing under section 16, within one year after the same have arisen, otherwise they shall be barred.

27. The Lieutenant-Governor in Council may from time to time by proclamation published in the *Ontario Gazette* declare that any portion or portions of this Province or any water therein shall, until further proclamation, be exempt from the operation of this Act, and thereupon the same shall be exempt accordingly.

28. Any portion or portions of the Province, or any water therein exempted by proclamation from the operation of this Act, may by proclamation published in the *Ontario Gazette*, be again brought within its operation until further proclamation, and so on from time to time.

UNITED STATES CHIPS.

—Chicago expects to receive a greater quantity of lumber from Lake Superior this season.

—Frank Close, at Moravia, N. Y., fell on a circular saw, and was split open from head to base.

—Lumber to the amount of 138,680,000 feet passed through the Sault Ste. Marie canal during 1886.

—Reports from the Tonawanda district state that the lumber trade is in a very healthy condition this spring.

—It is feared that the inter-state commerce law will shut out redwood from the eastern and middle state markets.

—The demand for lumber at Buffalo, especially box and assorted lots for the eastern trade, is improving daily.

—Twenty-eight vessels cleared from Alpena, Mich., during a recent week, carrying away 8,427,000 feet of lumber.

—Within a month $5,000,000 will be invested in new enterprises and manufacturing establishments in Louisville, Ky.

—Milwaukee, which a few years ago was a distributing point of some importance, is now almost wholly a retail market.

—Logs to the amount of 17,000,000 feet were put into Grasse river, St. Lawrence county, N.Y., during the past winter.

—It is estimated that the amount of old and new logs in the Menominee river and tributaries amounts to at least 650,000,000 feet.

—It is stated that the average Michigan pine shingle maker is touching cedar shingles very lightly, being afraid that they will not sell.

—A good authority states that in Michigan Norway logs are selling now for as much as could be obtained for bill stuff two years ago.

—The wood-working firms in Sheboygan, Wis., have contracted for 34,000,000 feet of lumber to be used up in their establishments.

—The Wolf river, Wis., log cut for the past winter is estimated at about 95,000,000 feet, of which 16,000,000 went into Post lake by rail.

—The largest drive ever run down Pine creek, Susquehanna district, Pa., was that of this spring, and consisted of about 50,000,000 feet of logs.

—Reports of forest fires are coming in unusually early this year from nearly every State. The cause is attributed to the peculiar dryness of the season.

—The hardwood dealers of Chicago are taking action upon the invitation of the New York trade to join in an effort to frame some national inspection rules.

—It is stated that 148,000,000 feet of logs were banked the past winter on streams tributary to Little and Big Bay de Noque and Ford rivers, upper Michigan.

—At Muskegon, Mich., the other day, there was a sale to a Chicago lumber company of 50,000,000 feet of lumber and 50,000,000 shingles. The sum paid was $800,000.

—An American paper mentions that Michigan lumbermen have offered the Pacific Lumber Company, of Eureka, Humbolt county, $1,500,000 for 10,000 acres of timber, mill, railroad, etc.

—The Oscoda Salt & Lumber Company last winter put in 6,000,000 feet of logs on Georgian bay, Canada, which will be rafted across Lake Huron to Oscoda for sawing, or sold to outside parties.

—It is stated that 60,000,000 or 70,000,000 feet of logs are hung up on the main streams in the Saginaw Valley, and will remain so until a freshet occurs. The owners are nervous over the situation.

—A statistical correspondent of the Saginaw *Courier* has figured out that 100,000,000 feet of Michigan pine will fetch in eold hard cash $1,700,000 ; and that it would take 7,000 cars to transport the boards.

—The large steam dry-kiln of E. B. Newton & Co., Grand Rapids, Mich., was totally destroyed by fire, May 12, with 770,000 shingles. It had a capacity of 100,000 shingles a day. It will probably be rebuilt.

—At Tonawanda there are 32 new boats ready to be launched, and more which were uncompleted. It was estimated that the canal fleet will be increased by 175 boats this year. Much of this tonnage will be employed in the lumber trade.

—The various lumber manufacturers on the Menominee river, Michigan, manufactured last season 217,132,678 feet of lumber and 62,689,150 shingles. On January 1st there were on hand 72,356,024 feet of lumber and 15,145,000 shingles.

—Mr. A. G. Van Schaick, a heavy lumberman of Chicago, in a recently published letter, estimates the entire amount of standing pine in Michigan, Wisconsin, and Minnesota at one hundred and seventy billion feet. Other well known authorities state that the estimate is altogether too high.

—The statement is made by the *Chicago Journal of Commerce* that fresh railway construction to the extent of 21,347 miles is projected in the United States, and that 15,000 miles will be laid down this year. New rails are required for existing lines to the extent of 9,000 miles, and altogether 3,250,000 tons of steel rails are needed this year.

—A very prominent lumberman in Bay City expresses the opinion that not over 75 per cent. of the expected log crop has been harvested in the upper peninsula. He says he knows one firm which will get one-third less than they expected, and another 25 per cent. less. The latter party contracted for 12,000,000 feet, and has only got about 9,000,000 feet. The timber does not hold out as represented, and the results will be, he predicts, a very heavy shortage.

—There were carried over on the Menominee 75,000,000 feet of logs. It is estimated that the past season's input amounted to 450,000,000 feet, making 525,000,000 as the total on that stream and its tributaries. The mill capacity at the mouth of the Menominee is said to be equal to cutting up 425,000,000 feet of logs during the sawing season. It is safe to say that the mills will be crowded to the top of their speed, and that there will be logs enough to keep them at it through the season.

—T. H. McGraw & Co., of Bay City, have just sold their lumbering property, located between the Millekokin and Black river, Upper Michigan, 55 miles west of St. Ignace, to J. T. Turst, of Wyandotte. The consideration was $450,000, of which $125,000 was cash in hand. This property is estimated by lumbermen to contain 100,000,000 feet of white pine, 25,000,000 feet of Norway, 10,000,000 feet of black birch, 10,000,000 feet of Hemlock and a large quantity of maple, ash and other hardwoods.

—What is doubtless the largest single transaction in manufactured lumber ever made in Chicago, and probably the largest made anywhere, was closed in that city a few days ago. Fifty million feet of lumber and seventy-five million shingles were purchased by the Chicago Lumber Company of H. C. Akeley, acting for the Roscommon Lumber Company, Muskegon, Mich., of which concern he is one of the officers, to be manufactured and delivered during the sawing season of 1887. The amount involved in the purchase is about $800,000, a sum which regarded as the measure of one purchase of stock by a single firm, in the ordinary course of business, affords some idea of the scale upon which the lumber business is carried on.

EUROPEAN NOTES.

The timber trade in Glasgow continues quiet.

Business has been somewhat more active in Glasgow during the past month.

Reports from Liverpool state that the only business doing there seems to be in pitch pine.

In the pitch pine trade buyers have no confidence in any rise in prices, notwithstanding the shortness of stocks.

Steamers are pushing themselves into every branch of the wood trade in England, and it is said that they will largely pervade the pitch pine trade this year, with a consequent reduction in freights.

Mr. John Simson, sr., member of the well-known firm of wood brokers, Simson & Son., of London, died on April 11th, aged 89 years.

Timber, of March 25th, publishes an excellent lithographic portrait of Mr. Edward H. Wade, of the Quebec timber shipping house of Smith, Wade & Co.

Late advices from Quebec merchants now in Europe report that very few sales have been effected during the past winter. Judging from present appearances, the spring fleet of sailing vessels will be a very small one.

London trade, according to *Timber* of May 14th, continues in a very quiet and undecided condition. No one has any inclination to purchase beyond absolute requirements and the whole tone is listless and inanimate. Although stocks are small no anxiety is shown to secure goods, the prevailing impression being that all requirements can be obtained as and when desired at the public auctions or other channels.

From Denny, Mott & Dickson's English trade circular for April we note the following remarks : The spring shipments of Canadian timber are badly wanted, as the market is bare of Oak and Yellow Pine of good quality. Shippers have placed the new season's timber coming forward at good prices, and consumers must be prepared for higher rates for both Oak and Yellow Pine, although Elm should be cheaper owing to the insignificent demand.

Farnworth and Jardine, in their last timber circular report there has been little enquiry for yellow pine timber from Canada and the deliveries, chiefly of Waney, have been very moderate. Waney maintains its value, but square pine is quite neglected, and prices are lower ; stocks are light. Red pine is very light in stock, but is very seldom inquired for. Oak has been in dull demand, and there is no change in value ; the stock is moderate. Oak planks continue in active demand, and prices are steady ; recent arrivals have gone direct into consumption, and the stock is now very light. Elm has been quite neglected, but the stock is moderate. Ash is seldom inquired for, and none has gone into consumption. Pine deals have moved off slowly and the stock remaining over is too heavy for this season of the year ; prices are easier, but sales are difficult to effect, buyers preferring to await the new import. Quebec staves are seldom inquired for. From New Brunswick there have been no arrivals, and the deliveries continuing fair, stocks are now reduced to a lower point than for many years past ; notwithstanding this, and a probable moderate import, it is difficult to maintain even present low prices. Pine deals are quite neglected, and the stock, though light, is sufficient. Birch has moved off slowly ; the stock is moderate, but prices are easier. Birch planks have not been imported.

DISAPPEARANCE OF TIMBER.

It is stated that oak timber especially is rapidly disappearing from Europe, although half of the area of Sweden, one-fourth of Norway, one-sixth that of Switzerland, and 780,000 square miles in Russia are said to be yet in forest. The consumption of oak in France has doubled during the last fifty years, she requires 15,000,000 cubic feet yearly for wine casks alone, 75,000 for building purposes, 600,000 cubic feet for her fleet, and 150,000 cubic feet for railway carriages ; £800,000 worth of staves were imported in 1852 ; £5,000,000 worth are now needed. Since losing Alsace and Loraine, France contains 150,000,000 acres ; about 20,000,000 acres of this surface is covered with forest. Holland and Belgium are nearly denuded of timber, and are large importers. North Germany is rich in forest, but within half a century has commenced to cut down young trees. Australia has sold her forests since railroads have been introduced. In Italy no forests remain. Spain and Greece are almost woodless. The southern coast of the Mediteranean is almost forestless.

—His worship Mayor Stewart and Messrs. W. G. Perley, Hector Cameron and Charles J. Pusey, of Ottawa, waited on the Minister of Railways and Canals recently, asking him to grant a subsidy for the unfinished portion of the Irondale, Bankroft & Ottawa Railway. The proposed road is an air line between Ottawa and Orillia, at which latter point it connects with the northern and Pacific railway and at Ottawa with the Canada Atlantic. The total length of the line is about one hundred and twenty-five miles, fifty of which has already been subsidized at the rate of $3,200 per mile, that is the portion between Bancroft and Irondale. It is for the balance that the deputation asked assistance in building. Ten miles of the line between Irondale and Kinsmouth have already been built. The country through which this line will run is an entirely new one and abounds in mineral and timber wealth. The line will traverse a portion of the County of Carleton, Lanark and Renfrew striking Georgian Bay at Orillia. Already iron mines are being worked at Kinsmouth and others will follow directly the road is opened. The Minister promises to give the matter his consideration.

OTTAWA LETTER.

MAY 23rd, 1887.

From Our Own Correspondent.

ALL fears of damage from the high water in the Ottawa river has now completely subsided. The water rose to a very high pitch but reached the highest about a week ago. Since then the water has fallen very fast. It was at one time feared that the mills at the Chaudiere would be shut down but nothing of that kind occurred. Since I last wrote you Messrs. Perley & Pattee's lath mill at the Chaudiere was completely destroyed by fire with a loss of probably $6000. As there was a heavy wind blowing at the time it was feared that the fire would extend to the other mills and the lumber piles but the prompt energy and discipline of the city fire brigade speedily dissipated all fears and the fire was confined to the lath mill. The firm are now getting everything in preparation for the erection of a new lath mill on the old site.

The movements in lumber from this point are fairly active although no material change has yet taken place in prices. All the deliveries so far are on last year's contracts. Nearly all the shipments are taking place to the United States and the barge traffic on the Redeau Canal is kept well employed in this particular. None of last winters cut of logs has yet reached the mills here from the Upper Ottawa but a good many are now out of the tributaries and are in the Ottawa, being in charge of the Upper Ottawa Towing Company. Speaking of the Towing Company, I may mention that they have placed a new iron boat on the Lower Allumette lake this season and have called her after one of the best known lumbermen of the Ottawa, G. B. Pattee. This addition to the company's fleet was much required as the boat used last season in the territory assigned to the "G. B. Pattee" was very old and not of sufficient capacity to handle all the logs assigned.

There is considerable discussion in lumber circles here with regard to the recent action of the Quebec government in raising the ground rent on limits, and of the Ontario Government in putting up the dues 25 per cent. This latter action makes the lumber dealers who operate in Ontario pay $1 per thousand feet instead of 75 cents formerly.

The Chaudiere lumbermen and others in the Province who work their limits year after year do not object to the increase of ground rents by the Quebec Government nearly so much as those lumbermen who merely hold the limits for speculation, and these latter class are not a few. There are men in the province of Quebec who never cut a log or a stick of timber, but who, when a limit is for sale are most eager and active buyers, and gain hold of the limit either to hold it themselves for an advance or simply act the part of middleman or agent for another, who for purposes but known to themselves do not care to enter into public competition. The amount of rise in the ground rents do not amount to much for men who work their limits, but it does amount to a good deal to men who are simply holding the limits for speculative purposes, for then the rise is just so much more to pay without any return. The result of this will be to make it much easier for those lumbermen working their limits to purchase those held on speculation, as it will no longer pay for speculators to hold limits for any considerable time. In the matter of the rise in the ground rent the Chaudiere men do not make any strong objections, but they are a unit on one point, the Ontario Crown dues are excessive, three quarters of a cent on square timber and 25 cents per thousand put on sawlog board measure. This increase looks trifling at first appearance but it is anything but trifling. With J. R. Booth, Perley & Pattee, Bronson & Weston it means $20,000 a year each. As a result of the increase of ground rent some of the lumbermen say that they will relinquish possession of some claims on the Gatineau and in case they do this land will be thrown open for settlement. On the whole, although the Crown dues are a little excessive, the rise in the ground rent will have one good effect. It will banish the dog in the manger, lumbermen who only hold what might otherwise be profitably worked that he might make a haul out of the exigencies of the trade.

One thing is now forcing its attention upon men engaged in the trade and that is there is not sufficient officials to prevent forest fires, and fires will be destructive until this adequate protection is extended. For the whole Upper Ottawa forests, which is thousands of miles in extent, there are only about half a dozen men employed, whose duty it is to look after the setting out of fires. How in the name of common sense is this handful of men going to prevent the putting out of forest fires? Now as I write, extensive fires are raging on the Dumoine river, on Black river and on the Schyan, and tens of thousands of dollars worth of valuable lumber is being destroyed. It is an old saying, but its truth is not spoiled by age, that the fire has destroyed more than the axe, and this truth is repeating itself every day. This spring has been remarkable for having no rain so far and the waste material in the bush is in a very inflammable state. Hunters, drivers and others who perambulate through the woods have to eat, and in order to eat they must cook, and in order to cook they must make a fire. When the repast is over they go about their business but leave behind them the neuclus of a devastation. The governments of both Ontario and Quebec make a big blunder when they do not increase their staff of bush rangers and see to it that they do their duty. Enough of valuable timber has been destroyed in the Upper Ottawa region this spring to pay the salaries of a thousand men. One man cannot cover hundreds of miles of territory. He cannot be ubiquitous. Therefore I say it is false economy having only a few men to do the work of a hundred. They cannot do it and the country suffers in one of its chief wealth producing resources. Wise administrations would look after a matter of such importance. Fortunately, the weather has been calm and that in itself confined the fires, but should a heavy wind set in now and no rain come, hundreds of miles of valuable timber will be laid waste. Last week a jobber on Black River for J. R. Booth had a shanty burned and all the rigging and stores that it contained for next winter's use burned with it.

The water in several of the lesser streams has gone down within the last week very rapidly and fears are some of the log drives on these lesser streams will be stuck unless rain comes to replenish the fast diminishing water. On the larger streams, however, their has been high water and it still maintains a good pitch, and no fears are entertained but that logs drawn on such will come out all right.

Messrs. Klock Bros., of Klock's Mills, are shipping by rail 65 cribs of square lumber to the Quebec market. It will be railed to Papineauville, there dumped into the Ottawa, rafted and floated to Quebec.

NEW BRUNSWICK.

From our own Correspondent.

THE Maritime Bank failure has ceased to cause so much excitement as in the first days of the disclosures of the means by which the shareholders and depositors were defrauded of their money, and as permanent liquidators have been appointed the winding up of this unfortunate institution will now be proceeded with in proper and legal form.

The Messrs. Stewart's have succeeded in earning for themselves an unenviable notoriety, and certainly the senior member of this prominent concern must be remarkably thin skinned, for I hear of his having entered suits for libel against this and that newspaper, that has dared to lift up its voice, and voice the popular idea as to the strange methods of business adopted by the gentleman mentioned. I sincerely hope the CANADA LUMBERMAN will not fall under the ban, or excite the ire of this timber king.

We have had a very strange season, so far, in our section. No rains in the upland district, and in the low-lying sections of the St. John river there has been a regular flood. The telegraph has doubtless informed your readers of the vast extent of this unprecedented freshet, and of the enormous amount of damage occasioned by the overflowing waters. Other sections of the country are very much in need of rain, although it is certainly a great mercy that we have had none lately, for, had we been visited by our usual spring rains, the damage caused by the waters of the St. John and its tributaries would have been almost incalculable.

Lumber remains very quiet, indeed as far as the English market is concerned, it is dull to the extreme. The latest reports from London and Liverpool are to the effect that while the consumption since the first of the year has been fair, the stock is lighter than for many years, and the import much less than for a long time, still there is no life in the market. Prices still remain at a very low figure, and dealers will not put in stock but simply buy from hand to mouth. All this is very discouraging to manufacturers and shippers on this side of the water, who were in hopes that this season would open with something near remunerative prices for our great staple.

The American market on the other hand seems to present a brighter and more buoyant appearance, and prices there opened well and still maintain a good position. Laths are selling well in New York at this writing, bringing $2.50 per thousand, and in the Boston market and at the Sound ports, clear boards and good random cargoes command paying prices. It is to be hoped for the sake of the coasting trade of these lower Provinces that no friction will occur between the Dominion Government and that of the United States, causing the enforcement of the Non-Intercourse Bill; for there is no denying the fact that were this bill to come into operation very serious fanancial trouble would follow in this and other maritime localities; perhaps I may be somewhat pessimistic in my views on this matter, but I know what a large industry our coasting trade with the United States is, and I would be sorry indeed to have any action on the part of our own government place this industry in any jeopardy. I trust that no trouble may arise, and I am inclined to think from recent action on the part of the Government that calmer counsels have prevailed and that peace and good will between neighbors will be maintained.

MADAWASKA, N.B., May 25th, 1887.

To the Editor of the Canada Lumberman.

DEAR SIR,—Your valuable journal deserves the greatest of credit for the interest taken to stir up and show the fraud practised by allowing Americans to slaughter our forests and use it as if it were their own.

At the eleventh hour Dame Rumor says that the export duty on raw lumber is about to be exacted on the head waters of the River St. John, whereas if it had been put in force years ago Brother Jonathan and New Brunswick capitalists never would have laid out a hundred thousand dollars on the American side to manufacture the lumber they have taken out of our forests for years back.

The American duty saved by floating our lumber on their side, and there manufactured, was equal to allowing Americans a premium of $3 per M. superficial feet on all the cedar they have robbed our forest out of, besides reaping the benefit of manufacturing the same.

Our politicians pay too little attention to protect the small channels of our resources, which swell up the large ones, and the sooner they learn to protect all the small feeders leading to our Treasury the sooner our revenue will be able to stand the heavy drain public demand makes on it daily.

Some say it s only a make believe, and others say its the intention to make American's pay all back export duty on lumber they have robbed and stole away. No doubt the latter would be harsh and not doing as we would wish be done by, as we failed in our duty to enforce the tariff in time, before New Brunswick and American capital built mills on the American side to manufacture our lumber, but, on the other hand, they had to run their own risk of getting clear of paying.

We can blame our local Parliament more than the Dominion for it's the former's duty to see that our Province resources are not tampered with by Americans. But capitalists and monopolist carry the N. B. House of Assembly in one pocket, and the Legislative Council in the other, and if I am called on to show it, I shall do so with pleasure, by referring to acts they endorsed, now disgracing our statutes.

It is already rumoured that by the enforcement of the export duty new shingle mills will be in operation this summer. All we want is a fair deal with foreigners to manufacture our lumber. Place us on an equal footing with them, to manufacture our own lumber, by exacting an export equal to their import, and we ask no favours, but to do as we have been doing, giving Americans $3 per M. feet of a premium over us to slaughter and manufacture our lumber, no wonder us New Brunswickers have to leave the country daily to seek a living abroad.

Next month we will know more about the new energy the export duty will create.

Respectfuly yours,

O. P. BYRAM.

THE QUEBEC TIMBER COMPANY, LIMITED.

The report of the Quebec Timber Company, Limited, to be submitted to the annual meeting on the 4th inst., is as under:—

The balance-sheet and revenue account for the year ending 31st December, 1886, with the auditor's report, are herewith submitted.

The Quebec accounts have been audited and certified as correct by Mr. William Walker, the Canadian auditor.

The revenue accounts for the year 1885 showed a profit of £2,232 18s 1d., and it was expected that the profit for 1886 would have largely exceeded that sum.

A large quantity of logs had been got out, and a sale had been arranged at remunerative prices. Owing, however, to an exceptionally dry season, and conscquent scarcity of water in the rivers, comparatively few of the logs reached the mills.

In the annexed revenue account credit has been taken for a sum of £11,700 8s. 2d., as the cost of the logs got out and in the rivers at 31st December, 1886, and the same sum appears in the balance-sheet as an asset. The logs are all so situated that it is confidently expected they will reach the mills shortly after the rivers open this spring. There is every reason to believe that a considerable profit will be realized by their sale.

The directors have arranged for remittances from Canada to meet the interest due to the company's creditors at Whitsunday, and they hope, at or prior to the term of Martinmas, to receive remittances from Canada which will enable them considerably to reduce the indebtedness of the company, and to meet the interest due at Martinmas.

The manager of the company has been in this country for a few weeks, but he has returned to Quebec, in order to have everything ready at the mills for the arrival of the logs in April.

One of the directors Mr. James Tait, retires by rotation. Mr. Moncrieff and Mr. Walker, the auditors, also retire, and their reappointment is recommended.

THE NEWS.

ONTARIO.

—A steam saw mill has lately been fitted up in Owen Sound.

—Mr. A. Oetzel is building a new planing mill at Waterloo, Ontario.

—Mr. R. B. Armstrong is talking about erecting a large shingle mill at Parry Sound.

—One of A. Caldwell & Co.'s men was drowned in the first drive of lumber on the Clyde.

—The fires in the pineries along the Central Ontario Railway are still burning furiously.

—The Cedar Mill at Deseronto is now in full blast and everything points to a busy season.

—The Longford Lumber Company's new shingle mill near Orillia, is now running at full capacity.

—Park's new planing mill at Stouffville, Ont., is in operation and employs a large gang of men.

—The L'Original saw mills have already closed down, having sawed up all the logs and timber on hand.

—The firm of Waft & Carr, planing mill proprietors, Wingham, has been succeeded by Watt & Little.

—James Bemrock has been admitted as a partner to the firm of Scrimgeour Bros., sash and door manufacturers, Stratford.

—Mr. John Knight's mill at Hobart has commenced operations, and will cut about 3½ million feet of logs this season.

—Mr. Joseph Maunder has placed a new twenty-five horse power boiler in his planing and shingle mill at Little Britton, Ontario.

—Some of the drives on the creeks and smaller streams of the Upper Ottawa have commenced and high water is anticipated.

—A meeting of creditors has been called to consider the affairs of Wm. Latch, wholesale lumber merchant of Toronto, who is in difficulties.

—The lumbermen at the Chaudiere have now begun running full blast night and day, and if the logs hold out will continue to do so from now out.

—Mr. A. Wing is running the Lynden, Ont., saw mill full blast on custom and bill lumber. He intends shipping principally to Brantford this summer.

—The Rathbun Company's mill at Campbellford has resumed work. New coal and lumber sheds will be built on their property in that town.

—The different saw mills on the Penetanguishene bay are being put in trim for an early start. A big cut will be made here during the ensuing season.

—Booth and Gordon's saw log drive on Indian river has been in progress for some time. The first of the drive reached Pembroke about the tenth of May.

—Mr. O. J. Phelps, lumberman, member for West Simcoe in the Local Legislature, is, it is said, likely to be made sheriff of Lincoln. He formerly lived in Merritton.

—The steam barge Kincardine has been bought by P. C. & J. J. Pearson, and will be used with the schooner Phœbe Catharine in the Georgian Bay lumber trade.

—No definite approximate idea can yet be obtained of the total log cut of the Ottawa river and its tributaries, but 600,000,000 feet is the figure generally put down.

—Mr. George Smith, contractor, with a large gang of men is busy at the foundation of the new building for the Terra Cotta Lumber Company's works at Deseronto.

—Amongst others who will use the railway to facilitate shipment will be Timmins and Gorman, who have this season made a large timber cut on the Whanapitee river.

—Shipments of square timber by the C.P.R. to Papineauville will shortly begin. The timber will be dumped off at Papineauville, and there rafted for he Quebec market.

—A new tug has been built by the Owen Sound Dry Dock Company for the Michael's Bay Lumber Co. She is strongly built, well fitted up, and will be known by the name of *Rover*.

—Bronson & Weston's saw log drive on the Schyan is in full blast. The number of logs made by the firm on this stream this year will about equal last season, but the quality will be superior.

—The Manotick mills are again running, after being closed for some time on account of the spring floods, during which time the mill hands were busily engaged in fitting up for a good summer work.

—Large quantities of saw logs are now being shipped over Mr. J. R. Booth's Nosbousing Railway between Nipissing and Norbousing lake. Thence they go by water to the mouth of the Mattawa River.

—Messrs. Bronson & Weston, of Ottawa, have engaged a gang of men employed at their lumber yards at the Deep Cut, completing the lines of tramway over the entire yard which were commenced last summer.

—The saw mill belonging to the estate of Henry Bros., Randwick, Ont., was recently sold for $1,800 to Mr. J. B. Smith, of Toronto, who will remove the machinery to North Bay where he has timber limits.

—A correspondent writing from Wickham says that the mills thereabouts are now nearly all running, but the usual cut will be reduced about one-quarter owing to the deep snow of last winter and the prevailing low prices.

—Messrs. McArthur & Thompson, of Fenelon Falls, who have been heavy buyers of timber of various descriptions in the back country during the past winter, have already got their drive of logs under way of their mills at Fenelon.

—Stratford *Beacon*: Mr. Peter Megan has taken the contract to cut logs for Mr. Corcoran at Beaver Creek, about 90 miles northeast of Selkirk, on Lake Winnipeg. He expects the contract—about five million feet—will occupy about two years.

—The new iron steam boat built at Pembroke last winter for the Upper Ottawa Towing Co. has been launched. The steamer has been christened the "G. B. Pattee," which does not look quite so handy as the boat herself, but we suppose will do.

—Fifteen doors, fine specimens of workmanship, were shipped from the Rathbun Company's door factory recently for Manchester, England, where they will be placed on view at the great Queen's Jubilee Exhibition to be held in that city during the coming summer.

—The Upper Ottawa Improvement Co. have submitted to the Government their tariff of rates for the ensuing year. It is understood that the rates this season for towing and passing timber through the company's works on the Upper Ottawa River will be considerably lower than last year.

—The great mill of Gilmour & Co., Trenton, Ont., is capable of cutting 350,000 feet of lumber in ten hours. The mill turns out 50,000 feet of ordered stuff for builders every day. The shingle mill attached cuts 125,000 daily. The planing mill has a daily capacity for 80,000 feet of lumber.

—The ice in going out of the lake broke the boom at Thistle & Co.'s mill, Pembroke, and some three or four thousand logs escaped. The logs were carried over the rapids but were caught by a boom lower down. They will be disposed of by Thistle & Co. to other lumbermen farther down the river.

—"The Longford Relief Association" is the name of a society lately organized by the employes of the Longford Lumber Co. Its object is to extend a helping hand and relieve all members, who from sickness or other misfortune may require pecuniary or medical aid. The idea is a good one and should be adopted elsewhere.

—The mill of the Conger Lumber Co., at Parry Sound, commenced the season's operations the same date as last year. The mill of the Parry Sound Lumber Co. has also commenced cutting. The Midland and North Shore Lumber Co's mill will commence about the first of June. Prospects for the season are reported as encouraging.

—The Fawkham correspondent of the Orillia *Packet* says: This place has at last settled down to the usual bustle of its milling activity, and by the appearance of the large stock which Trenouth Bros. have boomed in the river it promises to be a busy season for them at least. They have started their shingle mill and are doing good work for the outset.

—A serious accident occurred a few days since to the workmen employed building the Ontario Lumber Company's new mill at Midland. The scaffold fell, throwing Thos. Gowan, Baker, and a young man named Hawkins to the ground. The former two fell on their heads and Gowan is dangerously injured. Baker is also seriously hurt, but will recover. Gowan's recovery is doubtful.

—Bush fires have been raging in the timber limits along the Mississippi and Clyde rivers. The hands at A. Caldwell & Son's mill, Clyde Forks, had to remain up all night to prevent the building from being destroyed. The fire swept over the trees to the river's edge, and only the water intervening saved the property. This is a bad season for fires, as the leaves have not appeared, and every wood is dry and partially dead. It is said that Edwards & Co. will be severe losers.

—Mr. O. E. Comstock, of Arnprior, is reported as saying that the past season has been very unprofitable to the lumbermen. The snow has been so deep that it was impossible to get the logs out and many thousand feet of valuable timber will lie in the woods all the summer, simply because it could not be moved. Many of the lumbermen who had engaged their men by the week sent them home early in the season. The loss will amount to a good round figure, and many of the lumbermen will be almost stranded.

—Within the corporate limits of the town of Trenton a substantial dam has lately been built at a cost of $70,000, Gilmour & Co., lumbermen, and the town, each expending half that sum. The dam gives a head of 17 feet. The corporation intends to utilize a portion of the power for water works, and will offer the rest to manufacturers on advantageous terms to locate there and establish various industries.

—The estimate of square timber made in the Nipissing and Ottawa districts during the past season is, white pine 530,000 feet, waney white pine 355,000 feet, red pine 485,000 feet; total 1,370,000 feet. The export of Canadian timber to Michigan is expected to be heavy this year. From the Nipissing district it is computed that about 75,000 standards of logs will go into Michigan. The district lumbermen unite in protesting against the increase made by the Quebec Government in the ground rents of timber lands. They claim the new rents to be exorbitant. It is said to be their intention to strip the timber from the areas in Quebec in as brief a space as possible in order that they may thus cease to pay the increase.

—In the afternoon of May 11th, a serious fire broke out in the lath mill of Perley & Pattee, at Ottawa, which at one time threatened to be a very serious conflagration. By the timely arrival of the city fire brigade, however, and a favorable wind, the flames were confined to the building in which the fire originated, which was in a very short space of time reduced to ashes. The fire raged with great fury and the large mill belonging to Perley & Pattee as well as Mr. J. R. Booth's mill was at one time in great danger. The fire originated amongst some tar rope in the store room. The loss is estimated at about $15.000. The burned mill was nearly new, being only erected a few years ago. It was insured.

—The improvements going on at Messrs. Train & Son's saw mill at Burk's Falls, are advancing towards completion. The two Leffel Wheels have been set in the bulkhead which is compact and strongly built. The change of location of the Leffel's to the middle of the building and directly under the saw, gives an increased power and a saving of time in the work. The flume has been extended to accommodate the new order of things and also adds to the motive power of the mill. They are getting in the timbers and preparing for the machinery which is now here and on the way. A large number of logs are already at the mill awaiting the starting up, among them are a fine lot of hardwood logs for Messrs. Knight Bros.

—During the winter Mr. James Agret and Geo. Campbell have had a quantity of white pine timber take out in the vicinity of Ragged Chute, on the Quyon river. In the cut was one tree which is certainly deserving of note, says the *Equity*. It stood on the property of U. Keeler, near the bank of the stream, and was a well-known monarch of the forest. Mr. Wm. Somerville, of Shawville, having been sent off 20 years ago to purchase it. Unfortunately when cut down last winter, the tree broke off 37 feet from the stump, and again at 55 feet; this middle section (18 feet) of the tree was shattered to atoms, and rendered useless, but the remaining sections were manufactured into blocks of timber of the following dimensions: Butt—37x37 inches, feet long. Top—20x30 inches, 22 feet long. This tree is said to have been the largest on the Ottawa.

With the breaking up of the in Deschennes Lake, one of the large cakes struck the reserve boom at Thompson's Bay and broke it. The ice passed out again and went on towards the falls near the Chaudiere. It again took a swerve and struck the boom where some 40,000 reserve logs belonging to the Upper Ottawa Improvement Company were stored and broke it in two places. The boom immediately opened and some 5,000 logs at the outside calculation, escaped and passed over the falls. The logs which escaped will be collected by men all along the river and handed over to the Lower Ottawa Boom Co., and stored at their reserve boom near Carillon. Mr. Green of the Upper Ottawa Improvement Company states that the ice on the Deschennes lake this spring was the heaviest and firmest since the year 1876, when the whole of the Chaudiere was flooded.

—The steamer Kincardine, which arrived in the port of Owen Sound, recently, lumber laden from Dyer's Bay, brings the news of a terrible ride a young fellow had at Lymburne's mill. The mill is built on the shore of the Georgian Bay, at the base of a hill which rises perpendicularly at its back to a height of some 300 feet. Down this hill runs a chute connecting the waters of a spring lake on the top of the hill with those of the Georgian Bay. This shute is used for running logs from the mountain lake to the bay below, and down which they plunge with terrible swiftness, the angle of descension being fully 45 degrees. The young fellow at the time of the accident was stationed at the mouth of the chute starting logs on their mad race, when he slipped, and, falling into the swift-running water was carried with a mass of logs down the fearful course of the chute to the lake below, where he was picked up almost dead. His injuries are so severe that he cannot recover.

—McDonald's planing mill at Oakville, Ont., was burned on May 18th. Loss, $3000 ; partly insured.

—Mr. J. H. Bowman, of Dundas, is erecting an addition to his planing factory, in which to manufacture furniture.

—The Dominion Terra Cotta Lumber Co., Deseronto, have applied for incorporation. The capital of this company will be $200,000.

—The large planing mill belonging to W. H. Baldwin & Co., Ottawa, had a narrow escape from destruction by fire on May 13th. The bursting of a coal oil lamp was the cause. Damage very slight.

—Mr. Harvey Francis, of the firm of Francis, Carswell & Co., lumbermen of Calabogie, Ont., has severed his connection with that firm. His successor in business is Mr. E. McKay, of Renfrew.

—Extensive repairs have taken place on the upper reaches of the Madawaska and the dams repaired between the High Falls and Arnprior. The slide at Arnprior has also been attended to.

—The slides, piers and boom at Des Joachim have been carefully looked after, considerable improvements have been put on the South Chaudiere slides and also to the piers. The aprons of the slides have been replaced.

—The river improvements this year have been extensive. At the Roche Captaine the slides have been repaired as well as the slide piers and the same done to the mountain slide at Portage du Fort. The long slide on the Coulonge has also received attention as well as the booms at the mouth of Black River. The slides near the mouth of the Pettewawa have been repaired and the aprons replaced and the boom at the mouth strengthened.

—The men engaged at Chew Bros. mill at Midland having made up their minds that ten hours was sufficient to constitute a day's work, asked that they be allowed to go on at seven instead of six o'clock. Not getting a satisfactory answer immediately they went out on strike, resulting in the shutting down of the mill for a few hours only, as enough of the men went back to work to allow of the mill running as usual. The proprietors say that if the other mills are willing to adopt the ten hour system they will do the same.

—The lumbermen and the City of Belleville, through the Harbor Committee, have arrived at an amicable understanding as to the terms of the new agreement, re harbor tolls. The Harbor Committee have reported the following as the text of the agreement entered into for the next five years, and recommend that the Solicitor be authorized to draw an agreement as follows :—That $100 be allowed the lumbermen annually for swinging the booms. That a reduction of 1-16 of a cent be made on saw logs. That up to 12½ per cent. be allowed for repairs and renewals. That the city put in piers.

—The Upper Ottawa Towing Company are making active preparations for the season's work. Tugs Hirman Robinson and Bronson, and the Str. C. O'Keley will manage the "pull" between Pembroke and Des Joachim. The two former will ply between the Des Joachim boom and Fort William boom, while the latter will handle the logs between Fort William and the head of Allumette rapids. In the lower Allumette lake the company will place a new iron boat which is now being finished at Pembroke. The boats will ply night and day during the towing season. Operations in this line will, it is expected, be later this season than it has been since 1884.

—A large number of lumbermen were present at Coate & Co's auction rooms in the city of Toronto, on April 28th, when the executors of the estate of the late R. C. Smith, of Port Hope, offered for sale the timber limits and saw mills owned by the deceased. Parcel 1—On the White Fish River, Georgian Bay, area 36 square miles. Parcel 2—situate on the White Fish River, Georgian Bay, area 27 square miles, were disposed of by private sale to a gentleman representing a syndicate of Michigan lumbermen. Parcel 3—Dominion Government Indian Reserve, No. 8, situated at the mouth of White Fish river, Georgian Bay, area 14 square miles, was withdrawn at $3,900. Four lots in the township of Sherbourne, estimated to produce 7,000,000 of merchantable timber went to Joseph Adams for $19,000. Six lots in the township of Stanhope, watered by streams tributary to the Gull river waters, all of which are navigable for saw logs and timber, and within 30 to 35 miles of stations on the Victoria Railway, with an area of 25¼ sq. miles, were not sold, the highest bid, which was $57,100, falling short of the reserve. Bidding on this lot started at $5,000. Messrs. M. Boyd & Co., Bobcaygeon, by private sale secured 16 lots in the township of Glamorgan. The price paid was not made public. Three parcels in the township of Lutterworth were offered but withdrawn at $2,500. A bid of $2,100 secured the transfer of two lots in Monmouth township to Sadler, Dundas & Co., of Lindsay. Nine sections in Sherbourne and Digby townships were withdrawn at $26,500, re-offered and again withdrawn at $27,500.

QUEBEC.

—Large bush fires are in progress northeast of Quebec.

—W. J. Brown's large lumber yard, at Quebec, was destroyed by fire on the 14th May.

—The offices being erected at the Chaudiere by Messrs. Hurdman & Co. are fast approaching completion.

—The saw mill at Island Brook, belonging to G. W. French, was burned recently. Loss, $2,200 ; insurance, $1,000.

—Messrs. W. J. Hunt and John B. Paddon, have purchased the Wilson farm and saw mill at Milby, Que., for $4,000.

Messrs. McNevin & Co's saw mill was completely inundated during the recent Montreal floods, and $2,000 worth of timber floated away.

—The Quebec *Chronicle* notes that large quantities of square timber, round maple, firewood and other lumber are now coming into the city daily over the Lake St. John Railway.

—Messrs. Gilmour & Co. have given Father Paradis permission to cut on their limits 600 pine logs, to be used in the construction of a new church at Ste. Philomene de Montcerf.

—It is stated that pine deals in the province of Quebec and elsewhere are likely to be much under last years, heavy sales having been made for the United States markets at high prices, and there are prospects of still further considerable sales for the latter market, which is in exceptionally good condition.

—The principal timber on which crown dues were paid during the last fiscal year, in the Province of Quebec, was as follows :—Saw logs, 861,339 white pine 17 in. and over ; do. 1,325,759 under 17 inches. Spruce, 1,038,957 ; hardwood, 491 ; ash, hemlock and tamarac, 9,190—all logs ; boom timber, 9,037 pieces ; firewood, about 8,000 cords ; shingles, 6,833 M. ; railway ties and sleepers, 123,946 ; and some smaller items. The dues paid by timber men amounted to $411,220, ground rents $100,548. The timber manufactured in the province in 1884-5 was ; saw logs, pine, 2,187,098 ; Spruce, 1,038,957 ; square timber, white and red pine, 6,148, pcs., 222,552 ft., (a vast shrinkage from 111,529 pcs. and 5,453,890 ft. in 1875-6 ;) birch elm and maples, 5,784 pcs. or 148,526 ft., (a shrinkage from 36,595 pcs. or 913,713 ft. in 1874-5) ; small tamarac, pine, spruce, boom timber and flat timber, 14,650 pcs. or 603,012 lineal feet, (a shrinkage from 25,952 pcs, or 4,849,402 lineal feet in 1882-3); knees, buttocks, ties, pickets, etc., 155,587 pieces, or less than one third of 1881-2 ; firewood, lathwood, bark, etc., 12,699 cords, or less than half of 1883-4. The totals of dues, ground rents, bonus, interest and fines collected since Confederation are as follows :—

1866-67	$ 95,115	1876-77	$351,323
1867-68	331,751	1877-78	314,880
1868-69	362,868	1878-79	342,881
1869-70	406,480	1879-80	543,518
1870-71	444,752	1880-81	668,596
1871-72	518,682	1881-82	684,743
1872-73	527,976	1882-83	660,757
1873-74	532,734	1883-84	530,115
1874-75	386,774	1884-85	528,574
1875-76	391,618.		

NEW BRUNSWICK.

—Business men in Sackville, N. B., are consulting as to the establishment of a wood-working factory at that point.

—Ritchie's mill and the Hickson mill at Newcastle have commenced operations. Both have undergone extensive improvements this spring.

—Messrs. B. Toombs & Co., Moncton, N. B., have six ship loads of pulp wood and 30,000 railroad cross-ties ready for shipment, the most of which will go to Philadelphia.

—Upwards of six million feet of lumber is reported to have floated through the Fredericton Bridge one day recently. Some of the logs came all the way from Madawaska.

—Last winter's crop of logs at Sackville, N. B., is numbered by the *Chignecto Post* at 437,500. At Joggin's store the quantity got out was 23,000,000 feet, 36,500 pieces piling and 500 cords of pulp wood. The latter will be shipped to Providence, R. I., for paper making. The *Post* says that a greater amount of logging was done last season than in any previous year.

MANITOBA AND THE NORTH-WEST.

—The Selkirk Lumber Company, of Manitoba, have the largest cut of any on the lake, about 60,000 logs.

—Wyatt & Co. are thinking of establishing a sash and door factory in connection with their lumber yard at Virden, Man.

—Major Walker, of Calgary, will open a branch lumber yard at Banff, which will be supplied from his mill at Kananaskis.

—Howell & Scarry have about finished a contract for cutting 50,000 ties, at Black Island, in Lake Winnipeg, for the Hudson Bay railway.

The Eau Clair Milling Co. are building an immense saw mill on the Bow River, and are anticipating a healthy business as soon as it gets in operation

R. & J. Watson have purchased the planing mill property at Portage la Prairie, which has been idle for some time, and will put it in shape for beginning operations.

The Keewatin Lumber Company intend opening up a yard at Winnipeg, under the management of Mr. R. E. Souter. That gentleman will be succeeded at Keewatin by Andrew McNeil, of Vermillion Bay.

—At Chatham, N.B., on May 12th, J. B. Snowball's locomotive shops, blacksmith shop and 50,000 feet of lumber was destroyed by fire. Loss, partly covered in Greenwich Insurance Co., of New York, and Sun, of London.

—A deputation of the Calgary Board of Trade waited on Supt. Whyte of the Canadian Pacific Railway the other day in regard to freight rates on lumber, and asked for a reduction of the now practically prohibitory rates from the west. An exchange says that he agreed with the deputation and said that he would endeavour to have the rates reduced.

—Application is made by the Moore & Macdowall Lumbering Company (limited) for an act of incorporation empowering them to purchase and hold timber limits and to transact a general lumber business. The capital stock is $200,000. The chief place of business is Prince Albert settlement, and the incorporators are Messrs. H. S. Moore, Prince Albert ; Day Hoyt McDonald, Prince Albert ; A. Lewden, Prince Albert ; R. Blanchard, Winnipeg ; A. Waldo and F. Newby, Ottawa, Ont.

—The Winnipeg *Free Press* says:—British Columbia lumber is taking quite a hold in the city and is becoming a prime favorite with carpenters and cabinet makers for certain classes of work. Large quantities of pine and cedar are being imported and the trade gives promise of developing into quite a business. Its advantage over our local timber is that much larger boards can be obtained. For instance a consignment to hand the other day contained a board three feet broad and sixteen long without a flaw or knot in it.

—The saw mill owners at Keewatin, believing that they were paying more taxes than they should, got up a petition to the Government, asking that Keewatin be declared a separate municipality. The Rat Portage people objected strongly to the withdrawal of the mill men from the municipality, and a deputation was sent to Toronto to look after the interests of the council. The matter has been compromised by the Rat Portage council agreeing to exempt logs and lumber from taxation ; remit one-half of taxes on mill building, plant, etc., except school rates ; and exempt all mill property from any debenture by-laws which may in future be passed by the majority of the people in the western part of the municipality. The arrangement will apply to all mill property in the township of Rat Portage.

—Application has been made to the Dominion Parliament for incorporation of a company under the name of "Moore & Macdowall, (Limited)." Incorporation is sought for the purposes of purchasing and holding and selling timber lands and other lands, in fee or otherwise, and also timber and timber limits by lease, license or otherwise, and for the manufacture and purchase and sale of saw logs, timber and lumber, and the carrying on of the business of lumbering in all its branches, including the building of dams, piers, docks and timber slides, and the making of improvements in the channels of rivers ; also the erecting or acquiring by purchase, lease or otherwise of sawmills, planing mills and other mills for the manufacture of doors sashes and any other articles of which wood shall form a component part ; also the building and opening of grist mills and flour mills and the carrying on of all business incident thereto or usually connected therewith, with power to purchase and sell and deal in grain and flour and breadstuffs generally. Also the building, acquiring, owning, chartering, navigating and using steam and other vessels and craft and other works and means of transport necessary or convenient for carrying on the operations of the company generally, all within the Dominion of Canada. The chief place of business of the company is to be situated in Prince Albert Settlement in the District of Saskatchewan. The capital stock of the company is to be $200,000, divided into 4,000 shares of fifty dollars each. The names in full of the applicants and their addresses and calling are as follows :—Henry Stewart Moore, of Prince Albert, Lumberman ; Day Hort Macdowall, of the same place, Lumberman ; Alexander Loudoun, of the same place, Lumberman ; Robert Blanchard, of the City of Winnipeg, in the Province of Manitoba, Doctor of Medicine ; Edward Waldo, of the City of Ottawa, in the Province of Ontario, Insurance Agent, and Frank Newby, of the said City of Ottawa, clerk in the Civil Service of Canada, who will be the first or provisional directors of said company, and all of whom are resident in Canada.

The Canada Lumberman

DEVOTED TO THE LUMBER AND WOOD WORKING INTERESTS OF THE DOMINION.

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PETERBOROUGH, ONT., JUNE, 1887.

EDITORIAL COMMENT.

WE are indebted to the courtesy of the New York *Lumber Trade Journal* for a copy of the New York Inspection Rules for the inspection of hardwoods adopted by the Lumber Trade Association of that city on April 12th last. It is gotten up in pamphlet form, and will prove handy for reference.

* * *

THE CANADA LUMBERMAN published monthly by A. G. Mortimer, Peterborough, Ont., and the only paper devoted to the trade in the Dominion, has issued its first annual special edition in new type and on fine paper. The LUMBERMAN is full of interesting and valuable information and must be read with extreme satisfaction by Canadian dealers in the products of the forest. Moreover, it is well printed. We wish it continued prosperity.—*Kingston News.*

* * *

THE request of manufacturers of barrels and staves that an export duty should be imposed upon elm logs should receive the favorable consideration of the Finance Minister, as no doubt it will. It is but carrying out the principle of the increased duty upon saw logs last year and the duty placed upon shingle bolts in the present season. There is no reason why manufacturers in the United States should be privileged to obtain elm logs from Canada free of duty, while they have the benefit of a protective duty. Countervailing protection is due to our own manufacturers and mechanics in order to do them justice. Such is the policy we have adopted, and there is no good reason why an exception should be made in this case.

* * *

NOTWITHSTANDING the present export duty on logs entering the United States, it is computed that fully 75,000 standards will leave the Nipissing District this season to be manufactured across the border. Instead of the export decreasing under the lately imposed duty, a considerable increase is perceptible, which is being brought about principally by the depletion of the Michigan forests. THE LUMBERMAN agrees with the many Canadian lumbermen who are advocating a further increase in the duty, in order to prevent our native woods being slaughtered for the benefit of foreign manufacturers. If Americans refuse to build mills in this country and employ Canadian labor, they should be made to pay handsomely for the privilege of manufacturing our logs on the other side. It is hoped that the Dominion Government will take further action in this matter before the close of the present session.

* * *

THE newly announced tariff changes include the following : "Export duty on shingle bolts of pine or cedar and cedar logs capable of being made into shingle bolts, $1.50 per cord of 128 cubic feet," This is not as important a provision as those of last year increasing the export duties on pine and spruce saw logs, but it is a further step in the same right direction. It is also satisfactory as showing that the attention of the administration is still directed to this matter, and steps will be taken to enforce the law. It would manifestly be an absurdity to extend this principle unless it were determined to carry out its application more thoroughly than in the past, when the small amount received from these duties showed that payment must have been evaded in some cases. The protection of our own industries, instead of letting our forests be stript for the profit of foreign mill-owners, is certainly a salutary principle, and one that should be vigorously enforced.

NOW that the Parliament of Canada is sitting, we would again urge upon the Dominion authorities the propriety of making adequate provision for the enforcement of the export duty on saw logs, which was wisely augmented last session. Our friends in the United States are evidently preparing to supply their saw mills more largely with saw logs from the forests on the waters of Lakes Huron and Superior. If they meet with any success in their operations they are certain to increase them in the future. This we cannot prevent, but we may discourage it, in favour of our own lumbermen and if they are to compete with us in our own forests they should at all events be made to contribute to our revenue. They should not be allowed to escape payment of the dues on any saw logs they may convey across the line and the necessary provision should be made to ensure this. Otherwise the Act will remain a dead letter and it might just as well not have been passed.

* * *

APPENDED to Mr. J. T. Wylde's report on trade relations between Canada and the West Indies are some useful tables from which we take the following suggestive figures. Among the chief articles of import into Jamaica there appear under the head of wood, white pine $95,000, pitch pine $60,000, cypress shingles $26,400, cedar shingles $5,500. The United States exports for the year to the British West Indian Islands contained : Boards, deals, &c., $239,488, shingles $37,685, shooks $169,682, staves and headings $80,483, other lumber $11,883, timber $1,468, manufactures of wood $115,322 : To Cuba the United States sent lumber $229,850, hoops and hop poles $286, 929, shooks $897,307, staves and headings $83,000, empty hogsheads and barrels $263,265, furniture $38,985, other manufactures of wood, $37,000. To Porto Rico they sent : boards, deals &c., $44,661, hoops and hop poles, $27,727, shooks, $157,740, staves and headings $29,693, other lumber $9,893, timber $102, manufactures of wood $12,674. Why should not Canada do a large share of this trade ?

* * *

THE Chicago *Northwestern Lumberman* says :—"It looks as if the Dominion Government had taken an unfair advantage of American stumpage owners in selling them extensive limits, and afterwards putting an export duty on logs, that deprive them of realizing on their investment." We are not aware of the Dominion Government having sold *any* limits to "Americans," and certainly it has not sold *extensive* limits to them. The limits in the Georgian Bay region are the property of the Province of Ontario or of those holding from it, and any purchases must have been made from them. The Dominion Government alone has the right to demand export duties. We are glad to learn from our Chicago contemporary that the export duty has had the desired effect of checking the movement "that had begun to assume important proportions" of Canadian logs to mills in the United States. The wisdom of our policy may seem doubtful to our neighbors, who are not disinterested judges, but our own people are fully convinced of the wisdom of using our natural resources so that the profit of manufacturing them may accrue to Canadians rather than to foreigners.

* * *

PRESIDENT CLEVELAND seems so far to be anything but eager to avail himself of the power given to him by Congress of retaliating against our commerce, for our maintenance of our rights in regard to our fisheries. Neither do the people of the United States seem very anxious to press upon him to take immediate action in the matter. It looks indeed very much as though the Representatives and Senators had been influenced in their course by a spirit of brag combined with political wire-pulling, and that they were more eager to make the threat than to see it carried out. Our lumbermen however should not allow themselves to be lulled into a feeling of security that may prove fallacious. Should any collision occur through our protection of our fisheries, as may well happen, public feeling in the States may be aroused and such pressure may be put upon the President as to force him to act, even though it may be with reluctance. This possibility should therefore be faced, and our lumbermen should prepare themselves to open new channels for disposing of the produce of their mills. The necessity may not arise, but it is well to be ready for it. It may appear to be unlikely ; but we know that some shrewd business men in the United States have prepared for this eventuality, and we may therefore conclude that there is some risk.

* * *

ON another page will be found the report of a meeting held in Montreal during the past month, at which the question of increased timber dues and ground rents was discussed by the leading lumber operators of the country. It was resolved, that the timber trade as recently as the year 1880 assented to a large increase in dues, and for this reason the further increase was considered a gross injustice. It was also resolved by the bankers present that any considerable increase of charges on the trade would so deteriorate the security in timber licenses as to deter the banks from making the necessary advances for the carrying on of the trade. The deputation appointed at the meeting referred to waited on Mr. Mercier and Mr. Garveau, Minister of Crown Lands, urging that the Government re-consider their action. Mr. Mereier in reply stated that it was the fixed policy of the Government to increase the timber rents, as the financial condition of the province demanded it, and for this reasou he could not accede to their request. This decision on the part of the Quebec Legislature will, without doubt, be a crushing blow to the greatest industry of that province. In Quebec at present large areas are unmarketed because it costs too much already to get the timber out. It has been stated by one of the leading operators that lumbermen have not been making money for some years past ; that they have not cut more than a third of their ordinary stock, and this increase will prove disastrous and likely result in bankruptcy to many engaged in large operations. Mr. Mercier's argument that the necessities of the revenue are great is doubtless correct, but if by his present action the leading industry of the province is crippled, we fear he will realize when too late how unwise his present course has been.

* * *

OF very great importance to lumbermen is a measure passed in the last session of the Ontario Legislature to be known as the Saw Logs Driving Act, 1887, which we republish at length for the information of our readers. No doubt it was framed and enacted with a desire to benefit the trade, to prevent inconvenient delays, to obviate disputes and to afford a means of adjusting them fairly and equitably should they arise. Whether it will have the intended result is far less certain. It cannot be denied that there have been many disputes arising from the unintentional or wilful obstruction of drives by others ahead of them, or from the accidental or deliberate mingling of drives belonging to different owners. It was therefore obviously to be desired that there should be means readily available to remove such evils as far as possible, and to give redress in case of damage being inflicted, But we cannot help fearing that this measure may be found to conduce to disputes, ill-will and litigation. It seems to offer inducements to the reckless, the over-zealous or the litigious to exercise little care in avoiding causes of disagreement, or to show little concilliation in the case of any difficulty. The very fact that hitherto the settlement of such questions was difficult and costly, has had a restraining influence, causing a reluctance to give occasion for dispute and a willingness to adopt any reasonable compromise. The very increase of facilities for trying such questions and for taking action if incommoded, may have a tendency to aggravate the very evil the Act was intended to remedy. We hope however that it may not be so. At all events, now that this Act is the law of the land it should have a fair trial, so that if it is not found to work well in any respect it may be amended next year, or as any weak points may be discovered by practical experience. It would be useless now that the Act is passed to criticise any of the details, which may be left to the test of time and experience of its operation.

* * *

A NUMBER of important changes have taken place among the lumber journals in the United States during the month of May. The Chicago *Lumber Trade Journal* has been sold by Mr. S. D. Morgan, the late proprietor and founder, to a company which is now seeking incorporation. The names of those interested are : Messrs. Geo. W. Hotchkiss, Walter C. Wright, E. S. Hotchkiss, and W. W. Hogle, all of whom are already well known in lumber circles. Following this change comes the suspension of the oldest lumber journal in the United States, the *Lumberman's Gazette*, of Bay City, Mich., which closes its career after an existence of thirty-two years. The subscription list and good-will have been purchased by the proprietors of the progressive and ably conducted *Timberman*, Chicago, which undertakes to supply the news of the Saginaw Valley in a crispy and entertaining style. The *Timberman* has thrown off its baby clothes and become aged so quick that we hardly expect to know it hereafter. However, if it continues to prosper as it has during the past year, we will soon expect to see it standing on the top rail looking down upon its contemporaries, not in the same spirit as does its big city contemporary to-day, but in the happy knowledge of superior skill and enterprise. We wish it all the success possible in its extended field. The last, but not least, of the changes referred to is in the Mississippi Valley *Lumberman and Manufacturer*, the publication of which has been transferred from Mr. Platt B. Walker, to Messrs. J. Newton Nind, Platt B. Walker, jr. Wm. R. Gregory and W. C. Edgar, who are seeking incorporation under the name of the "Lumberman Publishing Company." This journal has been established for about eleven years and has won for itself the good will of the trade and a liberal support. The new proprietors are said to be first-class journalists and thoroughly conversant with the needs of the trade. THE LUMBERMAN extends to the new management its best wishes for the future success of this already valuable publication.

THE AUSTRALIAN TRADE.

THERE has appeared in the *Canada Gazette* since our last issue a despatch from Downing Street regarding the proposed Jubilee International Exhibition to be held this year in Adelaide, the capital of South Australia, which is celebrating its fiftieth year as a colony.

After the Royal Commission, the Colonial proclamation and the list of officers there comes a full detailed classification of the exhibits. Those that are of most special interest for our readers we give as follows :—

DEPARTMENT II.

Section D.—Furniture and Objects of General Use in Constructions and in Dwellings.

Class 217.—Heavy Furniture—Chairs, Tables &c., Suites for Drawing, Dining, aed other Rooms, Chamber Suites, Bedsteads, Office and Library Furniture, Vestibule Furniture, Church Furniture and Decoration.

Class 228.—Manufactured Parts of Buildings—Sash, Blinds, Mantels, Metalwork, &c.

DEPARTMENT V.

Section B.—Machines and Tools for Working Metal, Wood and Stone.

Class 510.—Machines and Tools for Working Wood :—Planing, Sawing, Turning, Veneering, Grooving, Mortising, Tongueing, Cutting, Moulding, Stamping, Carving, Cask-making and Cork-cutting, &c.

" 511.—Machines for direct-acting Steam-sawing, &c.

" 519.—Tools, Implemenss, &c., for working Metal, Wood and Stone, not before enumerated.

DEPARTMENT VI.

Section A.—Arboriculture and Forest Products.

Class 600.—Timber and Trunks of Trees, entire or in transverse Sections, with specimens of Barks, Leaves, Flowers, Seed Vessels, and Seeds, Masts, Spars, Knees, Longitudinal Sections of Trees, Railway Ties, Ship Timber, Lumber roughly sawed as Planks.
Shingles, Laths and Staves, split or sawn.

" 601.—Timber and Lumber prepared in various ways to resist Decay and Combustion, as by injectlon of salts of copper and zinc, &c.

" 602.—Ornamental Woods used in Decorating and for Furniture, as Veneers of Mahogany, Rosewood, Ebony, Walnut, Maple and Madrona, Cedar Huon Pine, Blackwood (*Acacia Melanoxylon*),&c.

" 603.—Dyewoods, Barks, Galls and other Vegetable Substances for Coloring and Tanning.

In the long list there are other classes which might be of some interest to our readers, but we have given the more important. Appended to the classification is the following :—

MEMO.—Should any proposed exhibit be unprovided for in the foregoing classification, entries may be made under the head of "Unenumerated."

As the dates for making applications for space and for receiving articles for exhibition are both now passed, the exhibition being opened on June 20th, to last for six months, this information comes too late for Canadians to avail themselves of it. We publish it, however, because it forcibly draws attention to the existence of a too much neglected market in Australia, and throws some light upon the articles that are there considered of importance.

The advantages of this market for the products of our forest are not sufficiently known, and most certainly are not utilized as they might be. The mainland of Australia possesses a great variety and quantity of hardwoods (very hard indeed most of them are) but of pine and woods of that nature in which Canadian forests are so rich, Australian forests may be said for all practical purposes to be destitute. Consequently for their supply of such material they have to rely upon New Zealand, "Oregon" and "Norway." New Zealand pine is excellent but the supply is not unlimited and there is a large home demand. "Oregon" may be looked upon as a general trade term applicable to importations from the Pacific Coast of North America, including British Columbia, which should be fully as well able to supply the demand as our neighbors in the States. The same remark may partially apply to "Norway," which includes other countries of Northern Europe, and even transhipments from Canada as being of much the same class. There seems no sufficient reason why Eastern Canada should not now do a portion of this trade direct. This is the more feasible as Australia does not require so much rough timber as more highly manufactured goods, and therefor of greater value in proportion to bulk or weight and better able to stand freight charges. As an instance of this the Australian Colonies besides largely consuming sashes, doors, &c., have imported wooden houses ready framed and fitted for erection without the employment of skilled labour upon them. As to their demand for smaller wooden wares, they must be obvious under their peculiar circumstances and we will not now particularize them though they are well worth the attention of the Canadian trade.

There is a great market for Canadian forests products in Australia, and steps should be taken to develop this trade which has hardly been touched hitherto.

HARD ON THE LUMBERMEN.

THE following letter received from the Department of Crown Lands for Ontario explains itself :—

TORONTO, 4th May, 1887.

Editor CANADA LUMBERMAN.

SIR,—An order in Council was passed 27th ulto., increasing the rate of ground rent on land under timber license in Ontario from $2 to $3 per square mile per annum, and also increasing the rate of dues on pine timber, square or waney, and on pine saw logs, from 1¼ cents to 2 cents per cubic foot on the timber, and from 75 cents to $1 per thousand feet board measure on logs. The increase on ground rent to take place on and after the first day of May, 1887, and the increased dues on pine timber and saw logs to be payable on all such timber cut under license on and after the date last mentioned.

As many of your readers take an interest in matters connected with the above, the information is sent to you for your use as an item for your paper.

Your obedient servant,
AUBREY WHITE.
Assistant Commissioner.

The feeling of the lumbermen, so far as we are able to learn, regarding the order in Council referred to above, is one of universal disappointment and alarm. It was not to be wondered at that the Ontario Government, after learning of the action taken by Mr. Mercier in the Quebec Legislature, in raising the ground rents on timber limits, should take a similar stand. With this, however, they were not satisfied, but have dealt a far more serious blow by increasing the Crown dues on all lumber cut in the Province of Ontario from 1¼ to 2 cents per cubic foot on timber, and 25 cents per M. feet board measure on logs. From a casual look at these figures one would imagine that the increase was so small that little harm would result from the change. But instead of this the matter is of momentous concern to all engaged in the trade, and we are safe in saying that no greater injustice has ever before been perpetrated on the lumber operators of this Province. The statement is authoritively made by our Ottawa correspondent that the larger operators, such as Mr. J. R. Booth, Messrs. Perley & Pattee and others, will, under this increased tax, lose annually in the neighborhood of $20,000. It is therefore not to be wondered at that the lumbermen are seriously alarmed and chagrined at this quite unexpected legislation on the part of the Ontario Government, and are combining together with the object of bettering their condition.

The Government, of course, defends its action in this matter by claiming the necessity of increased revenue. Evidently the manner in which additional revenue is secured, or whether the obtaining of the same is calculated to demoralize any branch of trade, are matters, the consideration of which has had but little weight. We doubt very much if the financial condition of the Province is in such an unsatisfactory condition as to make this step necessary. From the Provincial Treasurer's last annual report we learn that the finances of the Province are in an unusually satisfactory condition, and that it has a large balance to its credit. As to the exact amount of that balance there is considerable difference of opinion, but a fair estimate would place it at about four million dollars. This certainly does not look as if the exigencies of the case demanded this unjust treatment of the lumbermen. There is probably no other government which is in so comfortable a pecuniary condition. About one-sixth of the whole revenue of this Province is already derived from the sale of the Crown timber, and by present indications it would seem that a sufficient additional tax is to be levied to cause a stagnation, and make it almost impossible for any timber operator to do a successful business.

The lumbermen seem disinclined to make any serious protest against the slight increase in ground rents, but will oppose the increase of Crown dues to the utmost. It is their desire to make some kind of an arrangement, if possible, similar to the twenty years' agreement which has just elapsed, and it is to be hoped that sufficient influence can be brought to bear on the Mowat Government as to influence them in withdrawing, or at least amending, the order issued during the past month.

WEST INDIAN TRADE.

THERE appears to be every prospect that the Dominion Authorities will take steps to promote the increase of direct trade with the West Indies, both the British Islands and those under a foreign flag. The proposed lines of steamships if established, as seems likely, cannot fail to have a good effect in this direction. The valuable report of Mr. J. J. Wylde, the agent of the Dominion in the West Indies throws additional light upon this subject, which had already attracted considerable attention. He shows the magnitude of the trade that can thus be thrown open, the ease with which it may be augmented, and the adaptability of Canadian produce for the requirements of the West Indian Islands.

The timber trades of the Dominion have an interest second to none in this question. These Islands require a large quantity of just such material as our forests are calculated to supply. Indeed they already import largely through the ports of the United States of lumber and wooden goods of various kinds that come either from Canada or from the Northwestern States having similar forests. Why should we not establish a direct trade with them in these articles that would give us at least a share in the profit of supplying them? There is the advantage of their requiring not only such lumber as we can produce but much of it in a further manufactured conditions, so that our planing mills and kindred industries would feel the benefit as well as the saw mills.

The trade as a body should use any influence it can bring to bear upon the Dominion Authorities to induce them to grant a subsidy to the proposed lines of steamers. And when this is accomplished they should as individuals prepare to avail themselves as far as possible of this virtually new opening, which is capable of being so largely developed if the requirements of the market are duly considered and steps are taken to suit it.

THE INCREASE IN GROUND RENTS.

Since our last issue owners of Quebec timber limits have not been slow in condemning the action of the Mercier Government in increasing the ground rents from $2 to $5 per square mile. A meeting of lumbermen and those interested in the lumber trade, held in Montreal during the month, was very largely attended.

Mr. James McLaren occupied the chair, Mr. H. E. Bronson acting as secretary. Among those present were Messrs. Andrew Thomson, president of the Union Bank ; James King, J. R. Booth, H. Atkinson, R. R. Grindley, general manager Bank of British North America ; Jos. Kavanagh, Wm. Mackay, George Grinnell, F. Wolferstan Thomas, general manager Molson's bank ; Geo. Hague, general manager Merchants' bank ; W. J. Buchanan, of the Bank of Montreal ; A. Thomson, Jacques Grenier, president Banque du Peuple ; E. S. Clouston, local manager Bank of Montreal ; H. A. Price, T. Nash, manager Union bank ; C. A. Vallee, manager Banque Nationale ; W. Weir, president, Banque Ville Marie ; J. O. Lafreniere, W. W. L. Chipman, manager Ontario bank ; Montreal ; E. H. Grandbois, J. Charlton, M. P., James King, H. A. Coulston, J. S. Murphy, John Walker, G. B. Hall, W. C. Edwards, M.P., George Bryson, H. Robinson, O. Latour, James Gillies, E. D. Moore, the Hon. John Hamilton, A. Gilmour, R. R. Ross, J. G. Johnston, T. E. Kelley, R. White, William Little, John Roache, W. G. Perley, W. R. Thistle, W. E. Thompson, E. B. Eddy, Robt. Gill, manager Bank of Commerce, Ottawa ; Thos. Murray, M.P.P., John Bryson, M.P., Robert Hurdman, W. H. Hurdman, Robert Reford, J. Murray Smith, manager Bank of Toronto, Montreal ; Alex. Baptist, Jas. Dean, E. H. Bronson, G. A. Grier and Mr. Girouard, Quebec.

After considerable discussion the following resolutions were passed. Moved by Mr. John Charlton, M.P., seconded by Mr. J. R. Booth,

That this meeting desires to give expression to the following considerations in connection with the recent advance made by the Government of the Province of Quebec on the ground rent upon timber limits.

That the lumber industry is the leading industry in the Province, inasmuch as it is the principal source of Provincial revenue apart from the Dominion subsidy, and touches directly or indirectly every commercial interest in the community ; that the lumber trade as recently as in the year 1880, having in view the then financial position of the Quebec Government, assented to a large increase in dues ; that at the present price of timber lands, the profits arising from the prosecution of lumber manufacture are not commensurate with the risk involved, and the large amount of capital required.

That this meeting, representing the lumber industry of the Province, would deprecate any increase in charges, which will be so burdensome as to cripple the trade and thereby in the same degree injure the laboring, farming, banking and general commercial interests of the Province.

Moved by Mr. W. J. Buchanan, Bank of Montreal, seconded by Mr. George Hague, Merchants' Bank :

That the banking interests of the Province of Quebec, being largely interested directly and indirectly in the lumber industry, in common with all the other commercial interests in the Province, and being fully conversant with the fact that the profits derived from the lumber trade are small in comparison with the risks involved and the capital employed, believe that any considerable increase in charges upon the trade would so impair the security in timber licenses as to deter the banks from making the advances from time to time necessary for the efficient carrying on of the trade, and that any serious curtailment of such advances would reduce the output of lumber and thereby diminish the Provincial revenue.

As this might further result in impairing the credit of the province they venture to express the hope that the Government of Quebec will be induced to reconsider their recent action in increasing to so serious an extent the charges upon timber limits.

Moved by Mr. W. G. Perley, M.P., seconded by Mr. H. Atkinson :—

That Messrs. Ward, Thompson, McLaren, Roache, Latour, Charlton, Booth, King, Edwards, Powell, Robinson and Bronson be a deputation appointed to wait upon the Quebec Government to urge upon it the opinions of this meeting upon the question of Crown timber charges.

THE HAMILTON LUMBER TRADE.

THE Hamilton *Spectator* of a recent date contains the following information regarding the recent changes in the lumber trade at that port. The other day a *Spectator* reporter called on Mr. John Bradley, of the firm of Flatt & Bradley, to find out something about the lumber trade and the business prospects for the coming season. In former years the reporter noticed large quantities of square timber floating in the bay off the Grand Trunk railway docks, enclosed by large floating booms to keep the logs from drifting away, and generally about the end of April an old black steam barge with a high forecastle and poop something like the pictures you see of the ships of Sir Walter Raleigh, only not half so much style about her, used to puff importantly up the bay towing a line of chuckle-headed, stumpy-masted barges much larger than herself. Another fleet used to come from Kingston towed by a fine steam barge called the D. D. Calvin, and as they all anchored in a cluster off the old emigrant wharf near the Grand Trunk station they presented a very picturesque appearance. The fleets were manned by descendants of the old French Canadian voyageurs with bristly black moustaches and wearing red tuques, blue shirts, corduroy pants and big rubber boots coming up to their thighs. The barges were anchored with their sterns towards the booms, two large trap doors on either side of the rudder down near the surface of the water were pulled open by a pulley and ropes from above, and the logs were coaxed up to these apertures by some of the bristly whiskered brigands, who balanced themselves on the rolling logs with marvelous dexterity as a rule—and occasionally went souse into the iced water as an exception—until the heads of the logs were tilted up with a block and tackle, then a chain was brought from the interior of the vessel's hold and grappled on to them. A direct descendant of Jacques Cartier stood at the port hole and when he yelled something in Frenc and jabbed his long pike pole fiercely tbe big log was yanked bodily into the bowels of the barge, if the vessels happened to have a pony engine on board, or boosed slowly in by the power afforded by a couple of angular mules that promenaded sleepily around the big capstan away up forward on the forecastle, and waved their big ears with graceful langour as if to impress the beholder with the fact that they cou'd understand the voluminous and gaudy article of French talked by their sailor Jehu with one hand behind their backs. When all the fleet had filled their intestinal parts with squared timber, the little black steam barge marshalled them in line and the tow looked even a trifle majestic as it started off and the sinuous procession swept round in a graceful curve and headed for the canal.

This year, however, their does not appear to be any square timber in the docks at all, and the reporter dropped round to see Mr. Bradley and inquire the whyness thereof.

"Well," said Mr. Bradley in answer to the inquiry, "before he amalgamation of the Grand Trunk and Great Western large quantities of square timber and logs used to come down on the latter road and then be rafted or shipped on timber barges to Montreal and Quebec for shipment to the old country. After the building of the Canadian Pacific railway and the amalgamation of the other two roads this mode of shipment became ess popular or was to a great extent diverted to Toronto and Brockville. The shipment of square timber by water from this harbor has almost entirely ceased this year (though I understand there is a small lot at the N. & N. W. elevator) and the reason is that that the consignees on the other side of the Atantic prefer now to receive it in the shape of sawed lumber, as in that way they pay freight simply on what they can use while when importing the square timber they had to pay for the carriage of a lot of waste material. As a matter of fact they find it cheaper and better to get their lumber cut here instead of importing the timber or logs and cutting it over there. Before long English buyers will send their orders with instructions to have the material cut to the proper sizes for which they require to use it. Another reason is that the demand for rock elm lumber has fallen off in England owing to the depression in the ship building trade, and this used to be the chief variety exported from points on the line of the Wellington, Grey and Bruce via Hamilton. The timber is nearly all cut out up that way, anyhow.

"The source from which the lumber comes which is used here, or shipped from this city, is the Muskoka district, though there is also quite a quantity rafted down from the north shore to Collingwood and Meaford. That is about all the trade that is tributary to Hamilton to any extent, and a good deal of that goes to Toronto and Brockville. The Ottawa river and the district about Lake Nipissing is the great timber producing region of Canada.

"The prospects for trade this year are very good. We are shipping quite a lot to England and the eastern states. The eastern states are depending more upon us for the lumber they use every day, and in the course of a few years when the remainder of their timber is cut out they will be almost entirely dependent upon Canadian lumbermen because the lumbering regions of Michigan and Wisconsin are so much farther away that they cannot successfully compete with us owing to the difference in freight rates. It would be necessary for the Yankees to take such points as that into their serious consideration before putting any retaliation bill into force."

A GREAT FLOOD IN NEW BRUNSWICK.

THE floods along the valley of the St. John River in New Brunswick, which are stated as being the greatest since 1834, indicates that an immense section of the finest part of the province is threatened with a terrible disaster. The water reached a height all along the river from St. John to the Grand Falls, a distance of nearly 250 miles, unequaled in the history of the province. The damage done is incalculable, 10,000,000 of lumber having been swept out of the booms in the vicinity of Frederickton, and much of it has gone out to sea. The booms have been swept away like straws, and before they could be replaced nearly all the lumber cut on the St. John and its tributaries had been carried down or spread over the immense tracts of flooded country below Frederickton, or passing through the falls at St. John and driven to sea. This loss coming upon the lumbermen after the Maritime Bank crash, which fell particularly heavy upon them, will tax their resourcesto the utmost.

Bad as matters now are, worse is feared. The snow all over the upper country —the sources of the St. John is from two to five feet deep in the woods, while in nearly all the lake expansions of the river the ice is still firm. The weather is getting hot, and should a heavy rain come on a disaster unparalleled in the history of the country will overtake the valley of the St. John. In 1854 there was the greatest flood on record, but in height of water and extent of country submerged the present flood exceeds even that. That flood was followed by the cholera, and the connection of the two made 1854 a marked year in New Brunswick. The present great flood, coupled with the fact that cholera is abroad, has caused already the discussion of the effect on the health of the people in the flooded country. The water has backed up the Oromocto river, a distance of nearly 50 miles, covering the track of the N. B. railway for miles, and blocking traffic. At Westfield, 15 miles from St. John, the Nerepis bridge, erected in 1874 at a cost of $200,000, was carried away on Wednesday. The railway track here is under water, and at Rothesay the Intercolonial has been undermined, and transfer of passengers and mails is necessary.

Owing to the narrow outlet at St. John, it will be weeks yet before the water drains off to its usual level. In the meantime the loss and suffering will be incalculable.

RAT PORTAGE MILLS.

THE mills around the head of the lake have completed their preparations for the summer's work and some of them have commenced cutting. At this time a look at the mills, their capacity for work, and the expected cut of the season might be interesting.

The Rainy Lake Lumber Co.'s mill is situated immediately in the town, and when fully equipped has the greatest cutting capacity of all. It is in liquidation at the present time, and last season was not working until the fall. This season the liquidator has instructed the manager, Mr. Hall, to run the mill and cut up the logs on hand. To do this the mills, which contain two rotary saws, will be run to its utmost capacity until September. The output will be about 100,000 feet long timber, 30,000 lath, and about the same of shingles per day, making for the season about 12,000,000 feet of lumber besides lath and shingles.

About a mile west from the village is the settlement around Norman Mills. Here are three large mills. The first owned by Henry Bulwer was not run last season, but will this season, we understand, be run to its full capacity and with its one circular will turn out about 50,000 feet per day.

Next to this is the mill and plant owned by the Minnesota and Ontario Lumber Co. This is a one rotary and one gang saw mill, and will turn out about 125,000 feet per day, and will run the full season, making for the summer about 16,000,000 feet of lumber.

Occupying almost the same yard is the mill owned by Cameron & Kennedy. It is a one circular mill and runs night and day, turning out about 80,000 feet per day.

These are all steam mills, but at Keewatin about one and a half miles farther west along the C. P. R. are two water mills, one owned by Dick & Banning, and the other by the Keewatin Lumber Company. The former is a small mill with only one circular. They having a drying kiln attached for seasoning lumber and do a good business. The prospects for this season are good and the mill will be taxed to its utmost, but what will be the amount we cannot say.

The Mather mill is one of the most prosperous mills on the lake, and is managed by the Mathers, who have a controlling interest in the company. There are two circulars and one gang saw in the mill, and when running to its full extent, cuts about 150,000 per day. Owing to the lowness of the water in the lake they will not be able to keep all the saws going. The government has commenced the construction of a dam at the second outlet of the late, with the intention of raising it to give sufficient water for this mill. In that case their cut for this season will be large. All these mills have planing mills attached which are kept running most of the time. There are in the yards at the present time about 25,000,000 feet of lumber.

The anticipated cut for the sawing season from all the mills from 65 to 75 million feet, making a total amount of lumber in the yards this season of nearly 100 million feet. To do this work an array of men is employed, and a great amount of money put in circulation. The town is now full of men, some from the camps and some from the outside, and all to be employed in making the lumber to supply the prairie section of our Dominion, for it is from here that the principal supply comes. The logs to supply these mills are cut during the winter season in the Rainy Lake and Rainy River district, floated down these waters and their tributaries to the Lake of the Woods, and thence towed by a fleet of tugs to their destination.—*Winnipeg Free Press.*

THE YUKAN TERRITORY.

An exploring expedition is on foot under the Dominion Government auspices, from which there seems every reason to believe many important discoveries will result regarding the mineral resources of the Dominion. The object of this enterprise organized by the Hon. Thos. White, Minister of the Interior, is for the exploration of the Yukan River, undoubtedly one of the finest streams on the continent. The river is computed to be over 2,000 miles in length and for 783 miles passes through the northwestern part of British Columbia. There is every indication that the region abounds in gold, silver, coal, lead, cinnabar and other precious metals and surface gold mines have already been worked with great success nearly 2,000 men having been employed in this work during the past season. The Government have deemed the discoveries thus far of sufficient importance to warrant an official investigation, and a joint topographical and geological expedition has been organized, which will be under the direction of Dr. Dawson. The expedition starts early in May, and the result of its operations will be awaited with general interest in mining circles in British Columbia, Alaska and the Pacific States having already become much agitated over the prospective disclosures.

RAFTING LOGS.

The attempt to float logs from Nova Scotia to New York, which so signally failed in the case of the famous "cigar" raft of Amherst, even before the structure had been launched, was considered a remarkable enterprise. That method of transporting raw forest product may yet become a success, though it is considered doubtful. The rafting of logs on the great lakes, though from the earlier periods of lumbering in Michigan practiced to some extent, has been a hazardous undertaking. Of late years raftsmen have learned by experience, so that they are now able to guard against the danger of breaking up in turbulent seas, by the use of heavy boom sticks, etc., and losses from such cause are less frequent than formerly. A large amount of logs have, within the past two years, been floated from Lake Superior to Lake Huron and Saginaw river mills. Other large quantities have been floated to Alpena and Bay City from the Canadian shores of Georgian bay. But probably few Michigan, or even Canadian lumbermen are aware that an attempt was ever made to float a raft across the Atlantic ocean; yet such was the fact. In its issue of February 19, the *Timber Trades' Journal*, of London, England, contained a letter from a gentleman, who stated that a so-called raft of timber made a voyage from British North America to Great Britain about the year 1812. The structure was in the form of a ship, and was named the Baron of Renfrew, was jury rigged and crossed the ocean under sale. She contained 5,000 English loads of timber. Unfortunately, just as the voyage was being completed the mast was caught by a gale in the Irish channel became unmanageable, and went ashore somewhere between Liverpool and Glasgow, and broke up. It is thought that the experiment has never been repeated. At the time, the timbermen of Great Britain were somewhat uneasy for fear that the attempt would be a success, which naturally would have had the effect to change the order of existing business, and reduce values and profits. Now the scheme of rafting pine from the southern states to ports in Great Britain is being discussed. It is thought by some that the powerful steam tugs of later times should be sufficient to handle such a float as the Baron of Renfrew in a gale, and that thus the hazard that attended the voyage in that instance would not pertain to a similar experiment now. But the doubters as yet are in the vast majority.

ADVERTISEMENTS.

THOSE wishing to **BUY** or **SELL TIMBER LANDS, LUMBER** or **SECOND HAND MACHINERY** will find THE CANADA LUMBERMAN an excellent medium in which to make known their wants. Advertisements of this character will be inserted at the low rate of **ONE CENT A WORD**, cash to accompany the order in every case.

Address A. G. MORTIMER, Publisher,

Peterborough, Ont.

TRADE REVIEW.

TORONTO.

From Our Own Correspondent.

During the former part of the month of May trade was good. A steadily increasing demand for lumber of all grades gave evidence that we might expect a more than ordinary summer's work. Toward the latter part of the month a falling off, true a slight one, was noticed, owing doubtless to the nearness of June.

Long joists are beginning to arrive in quantity, but still the supply is not equal to the demand. Hemlock, much abused hemlock, is coming more and more into use. Quantities of scantling and joists are finding ready sale and enquiries are numerous. Mill run boards, as well as dressing and better, dry, are disposed of quickly, and at very good figues. Pine bill stuff is very scarce and a shade firmer at the yards, prices being from $13 in some yards to $14 in others.

A quantity of elm and ash square timber for export is now being rafted. Some of the sticks are remarkably fine.

Since the G.T.R. is charging storage the quantity of lumber piled in R.R. yards has greatly diminished, very little fresh taking the place of the old piles.

Excepting the changes rated above, the quotations remain about the same.

From conversation with builders, planing mill men, &c., we learn that all expect a strike, after which the usual miserable consequences will follow. Judging from what we hear the strike will be fought out by both sides, to the bitter end, each party employing the customary tactics to enlist public sympathy, &c.

The stone masons being on strike for some time, has to a certain extent retarded buliding operations, as no work of any consequence could be begun previous to the laying of the foundation. At present writing there are no indications that a speedy settlement will be had. If boycotting is to be the order, we need not look for a peaceable solution of the annual difficulty.

It is not necessary to add to grievances, real or supposed. The least said and done the better, and the more easy to unite parties apparently discordant. Neither masters nor men are in a position to prolong any dispute. The former have their bills for material purchase maturing, as well as in some cases, notes for new machinery falling due, to say nothing about the hundred and one other expenses to be met. Nor can the latter stand idle for any time. The past winter was long, and many good mechanics were out of work, glad to take any job, even that very unpleasant one of cutting ice.

In view of a busy season, beneficial to all, masters and men should try and prevent a strike. Some concessions must be made by both sides, and the sooner this is done the better. It is worse than childish for either or both sides to stand out for some fancied grievance, and after weeks, perhaps months, of strife and mutual recrimination, and enforced idleness, agree on some scale of wages and hours which could have been assented to at the beginning.

The following are the ruling quotations in this city at present:—

Mill cull boards & scantling	$10 00
Shipping cull boards, promiscuous widths	12 00
" stocks	13 00
Scantling and joist, up to 16 ft	13 0
" " " 18 ft	14 0
" " " 20 ft	15 00
" " " 22 ft	16 00
" " " 24 ft	17 00
" " " 26 ft	18 00
" " " 28 ft	19 0
" " " 30 ft	20 00
" " " 32 ft	21 00
" " " 34 ft	
	22 50@22 50
" " " 36 ft	24 00
" " " 38 ft	27 00
" " 40 to 44 ft	30 00
Cutting up planks 1¼ and thicker, dry	20 00@25 00
" boards "	20 00
Dressing stocks	16 00@18 00
Picks Am. inspection	30 00
Three uppers, Am. inspection	40 00
B. M.	
1½-in flooring, dressed	25 00@30 00
1½ " " rough	14 00@15 00
1¼ " " dressed	23 00@25 00
" " undressed	14 00
" " dressed	16 00@20 00
" " undres'd	12 00@14 00
½ Beaded Sheeting, dressed	18 00@20 00
Clapboarding, dressed	12 50
XXX sawn shingles, ₱M	2 75@2 90
Sawn Lath	2 25
Red oak	20 00@25 00
White "	25 00@30 00
Basswood, No. 1 & 2	18 00@20 00
Cherry, No. 1 & 2	50 00@60 00
Whitcash 1 & 2	25 00@30 00
Black ash 1 & 2	20 00@25 00

HAMILTON.

According to the Dundas *Banner*, Hamilton will not be the scene of very extensive lumbering operations this year. The cut of timber in the Muskoka district has fallen off about 25 per cent. The chief reason for the light cut is the great depth of snow all winter. In some places roads three miles ong have been made through the snow to get out the timber. English orders, Mr. Flatt says, are running more largely to boards and deals, and the result will be that more timber will be sawed in Canada and less exported in the log. Flatt & Bradley are filling an order the like of which has not been given in Canada for many years. It is a shipment of pine masts for the English Navy, which has been in other years supplied from the forests of Norway. The masts are cut in Beverly township in this County, and in the neighborhood of Weston, Woodbridge and Saginaw, Mich. They are magnificent sticks, some of them 110 feet long. Those cut in Canada will be rafted at Toronto and go to England from Halifax.

The following are the ruling prices in the retail yards:

Mill cull boards and scantlings	$8 9 00 to $10 00
Shipping cull boards, promiscuous widths	10 00 to 12 00
Shipping cull stocks	13 00
Scantling and joist up to 6ft	13 00
Scantling and joist up to 18ft	13 50
Scantling and joist up to 20ft	14 00
Scantling and joist up to 22ft	15 00
Scantling and joist up to 24ft	16 00
Scantling and joist up to 26ft	17 00
Scantling and joist up to 28ft	18 00
Scantling and joist up to 30ft	10 00
Cutting up plank 1¼ and thicker, dry	20 00 to 25 00
Cutting up boards	20 00
Dressing stocks	16 00 to 18 00
1½ flooring, rough	16 00 to 18 60
1½ flooring, rough	16 00 to 18 00
1½ flooring, dressed face measure	32 00
1½ flooring dressed face measure	25 00
1 flooring dressed face measnre	23 00
Beed sheeting 1	28 00 to 30 00
Picks A M. Inspection	30 00
Three Uppers A. M. Inspection	40 00
XXX sawn shingles per M	2 60 to 2 70
Sawn Lath	2 25
Red oak	20 00 to 25 00
White oak	25 00 to 30 00
Basswood No. 1 and 2	18 00 to 20 00
Cherry No. 1 and 2	50 00 to 60 00
White Ash No. 1 and 2	25 00 to 30 00
Black Ash No. 1 and 2	20 00 to 25 00

MONTREAL LUMBER MARKET.

MONTREAL, May 25th.

Activity has characterized the lumber trade in Montreal during the past month, and a brisk business both in city and country orders has been transacted at the yards; and in car loads a large business has also been done. Although there is a large amount of building under way here, and the prospects for the future still bright, dealers do not anticipate any radical change in prices.

There have been large arrivals per barges via. the Lachine Canal, and a good number are reported to be also on the way.

Shipments to Europe have now begun, and the first cargoes for South America will be despatched about the beginning of June.

The Grand Trunk Railway have issued a circular to those concerned in the shipment of timber, telegraph poles, masts &c., in regard to the manner of loading on flat cars, of which the following is a synopsis:—

"When the material is so long, that two cars are required, one good sound bearing piece or saddle of sufficient thickness to keep the timber clear of the car floor must be placed on each car near the trucks next the end of the load; but if the timbers are too short for the saddles to be so placed, they may be brought to any point between the trucks sufficiently near to each other to prevent the shortest from working out between stakes; two good stakes being fixed on both sides of each car in pockets near to saddle or bearing piece, and tied across with telegraph wire to keep the load from spreading; one wire being over the top of the load and another about one-third down so as to prevent the stakes working out.

When a few long poles have to be loaded on the top of two cars of short ones, a bearing piece must be securely fixed across each car on the top of the short poles to keep the long ones clear. Only two of the stakes on each side of such cars must run up so as to allow them to curve freely.

When the timbers are too long to be safely carried on two cars, a third must in all cases be used, the load to be kept entirely clear of the centre car by one bearing piece being placed on end cars and the whole tied and staked as before described.

Should there be sufficient timber for two loads, either of which would require a third car, but the total length of which will not be equal to more than five cars, each load may be placed upon two cars with bearing pieces or saddles of sufficient thickness to keep the timber clear of the car floor throughout, at a point between the trucks of each car, and near to those next to the end of the load, the fifth car being placed between the two loads so as to cover the projecting ends. The timber in this as in all other cases must be tied with wire in the manner before described.

The cars must be so loaded as to leave the breaks easily accessible and operative.

When the load occupies more than one car, the weight carried should not be allowed to exceed two-thirds of the capacity of the cars on which the load rests, and particular care must be taken to prevent overloading.

No cars must be used for such traffic unless they are in good repair, have good iron trucks, not less than six inch journals and are of equal height, and when for points in the United States the wheels must stand the limit gauge.

The following are the quotations of the yards here:

Pine, 1st quality, ₱ M	800 00@40 00
Pine 2nd " "	00 00@30 00
Pine, shipping culls, ₱ M	14 00@16 00
Pine 4th quality deals ₱ M	10 00@12 00
Pine, mill culls, ₱ M	8 00@10 00
Spruce, ₱ M	10 00@13 00
Hemlock, ₱ M	9 00@10 00
Ash, run of log culls out, ₱ M	20 00@25 00
Basswood, run of log culls out, ₱ M	$18 00@20 00
Oak, ₱ M	40 00@50 00
Walnut ₱ M	60 00 100 00
Cherry, ₱ M	80 00 100 00
Butternut, ₱ M	35 00@40 00
Birch, ₱ M	20 00@25 00
Hard Maple, ₱ M	
Lath, ₱ M	
Shingles, 1st, ₱ M	2 00@
Shingles, 2nd, ₱ M	2 50@

ALBANY.

The lumber business here is reported good, while a scarcity of stock exists in several yards. Prices are inclined slightly downwards, although the opinion seems to be that there really no necessity for any break. The season in all probability will be a short one. Manufacturers were three weeks late in starting their mills, logs being scarce owing to scarcity of water and forest fires. The following are the ruling prices:

Pine, clear, ₱ M	$55 00@60 00
Pine, fourths	50 00@57 00
Pine, selects	42 00@44 00
Pine, good box	22 00@33 00
Pine, common box	13 00@15 00
Pine 10-in. plank, each	00 45@00 47
Pine, 10-in. plank, culls, each	00 24@00 27
Pine boards, 10-in	00 30@00 32
Pine, 10in. boards, culls	00 16@00 20
Pine, 10-in. boards, 16 ft., ₱ M	28 00@32 00
Pine, 12-in. boards, 16ft	28 00@32 00
Pine, 12-in. boards, 13ft	28 00@32 00
Pine, 1¼in. siding, select	40 00@43 00
Pine, 1½-in. siding, common	15 00@18 00
Pine, 1-in. siding, select	40 00@42 00
Pine, inch siding, common	13 00@15 00
Spruce, boards, each	00 00@00 16
Spruce, plank, 1¼-in., each	00 00@00 20
Spruce, plank, 2-in., each	00 00@00 30
Spruce, wall strips, each	00 00@00 12
Hemlock, boards, each	00 00@00 14
Hemlock, joist, 4x6, each	00 00@00 32
Hemlock, joist, 2½x4, each	00 00@00 14
Hemlock, wall strips, 2x4, each	00 00@00 11
Black walnut, good, ₱ M	$100 @120 00
Black waluut, ½ inch.	50 00@60 00
Black walnut, ¼ inch.	00 00@55 00
Scaymore, 1-inch	28 00@30 00
Scaymore, ½-inch	21 00@23 00
White wood, 1-inch and thicker	35 00@40 00
White wood, ½-inch	28 00@30 00
Ash, good, ₱ M	40 00@43 00
Ash, second quality, ₱ M	25 00@30 00
Cherry, good, ₱ M	60 00@65 00
Cherry, common, ₱ M	25 00@30 00
Oak, good, ₱ M	40 00@43 00
Oak, second quality, ₱ M	20 00@25 00
Basswood, ₱ M	25 00@30 00
Hickory, ₱ M	00 00@40 00
Maple, Canada, ₱ M	28 00@30 00
Maple American, per M	26 00@28 00
Chestnut, ₱ M	38 00@40 00
Shingles, shaved, pine, ₱ M	0 00@ 6 50
shingles 2nd quality	0 00@
" extra, sawed, pine	4 30@ 4 00
shingles clear, sawed	0 00@ 3 00
" cedar, mixed	0 00@ 2 13
" hemlock	2 25@ 2 37
Lath, hemlock	0 00@ 2 55
Lath, spruce	0 00@ 2 30

SAGINAW VALLEY.

The market here is fairly active. Prices are somewhat firmer and lumbermen are cheerful. The call is for the coarser grades chiefly. The correspondent of the *N. W. Lumberman* furnishes the following information: Buyers have been here from Rochester, Brocklyn, Albany, Cleveland, Buffalo, Akron, and Cincinnati, and they have taken large blocks of lumber. I note sales of 2,000,000 feet at $10, $20, and $38; 600,000 at $11, $22, and $40; 700,000 feet at $10, $20, and $38; 400,000 feet at $9.50, $19 and $38; 2,300,000 feet at $10, $20 and $38; 600,000 straight, and it is said this lot sold better than $10, $20 and $38 under inspection. E. Hall, of Bay City, has closed out all of his dry white pine and reports Norway in good demand. Rust Bros. & Co. have sold all on their South Saginaw dock but 500,000 feet. Sibley & Bearinger sold 4,000,000 Norway piece stuff and stripes, cut at Cheboygan, to Chicago parties. The price was not reported. A number of sales have been made, the details regarding which are not obtainable being purposely suppressed. Fully 25,000,000 feet have changed hands during the week. Nearly all that has been sold straight during the week has gone at $14.50 to $16. Box lumber meets a ready sale at $10 to $10.50.

There is very active demand for shingles, and stocks are scarce. River brands are quoted strong at $2.25 to $3.25, and interior mills at $2.10, $3 and $3.10.

The yard trade is active and healthy, although occassional complaints are made of discriminating rates to some points.

CARGO QUOTATIONS.

Shipping culls	$8 8 00@11 00
Common	15 00@22 00
3-uppers	36 00@38 00
Bill stuff	8 50@10 00
Norway bill stuff	8 50@10 00
Under straight Measure	16 00@25 00
Shingles, XXX	2 85@ 3 00
Shingles clear butts	1 85@ 2 00
White pine ath	1 75

YARD TRADE.

3 uppers wide and thick	45 00@45 00
Do. 1 in	40 00@42 00
Selects	35 00@38 00
Fine common	27 00@32 00
1, 1¼, 1½, 2 in. cut ups	20 00@25 00
No. 1 base, 7, 8 and 9 in selects	35 00
No. 2 do. (fine common)	27 00
No. 1 floor strips	40 00
No. 2 "	27 00
No. 3 "	17 00
Fencing	12 00@15 00
Fencing, coarse common	8 00
Fencing, mill culls	4 00@ 6 00
No. 1 stock 12 in	14 00@15 00
No. 2 stocks	11 00@12 00
Wide common	12 00@15 00
Piece stuff and timber	9 00@10 00
12, 14, 16, 18 ft	9 00@12 00
Do. do. 20 ft	12 00
Lath	1 50@ 1 75
Lath No. 2 (cul)	1 00
Shingles XXX	3 15@ 3 25
Clear butts	1 90@ 2 15

DRESSING.

Surfacing	1 00
Dressing and matching	2 00
Making drop siding	2 25
Making bevel siding and ceiling	3 00

NEW YORK CITY.

The wholesale market is only fairly active. The water transport facilities being now fully available considerable lumber is arriving to fill up and complete stocks. The new Inter-State Law is being felt here to a considerable extent, and the opinion seems to prevail that it is calculated to do the lumber trade much injury. The handlers of certain classes of wood, pitch pine for instance, are, however, it is said, in a fair way to benefit by the new law. Dealers in white pine are doing a good business. Spruce is in active demand and firm in tone, but receivers are positive that there will be a shortage in the receipts and are rather anxious to work off everything that comes forward. Hemlock is in good demand, with the supply principally Pennsylvannia. Laths are coming in sparingly. Shingles are moving slowly except cedars which are active. Hardwood dealers are reporting trade dull, but a fair distribution takes place. Poplar is still in active demand and prices weak. Ash is in active demand, and all thickness are wanted. Plain oak, when well seasoned, is easily disposed of. Quartered oak is in active demand. Cherry is in demand, as are hazlewood and mahogany.

SPECIAL CONTRACTS.

Pine, very choice and ex. dry	$65 00@70 00	Pine, strip plank, dr clear	0 32@00 35
Pine, good	55 00@60 00	Spruce boards dressed	00 25@00 25
Pine, shipping box	21 00@22 50	Spruce, plank, 1½ inch each	00 28@00 30
Pine, common box	18 00@20 00	Spruce, plank 2in each	00 38@00 48
Pine common box §	16 00@18 00	Spruce plank 1¼ inch dressed	00 28@00 30
Pine, tally plank 1¼ 10 in	00 44@00 50	Spruce plank 2 inch dressed	0 43@00 45
Pine, tally plank 1¼ 2nd quality	00 35@00 40	Spruce wall strips	00 15@00 18
Pine, tally plank 1¼ culls	00 30@00 32	Spruce timber	20 00@22 00
Pine, tally boards dr's'd good	00 32@00 35	Hemlock boards each	00 18@00 20
Pine, tally boards dressed common	00 28@00 30	Hemlock joist, 2½x4	00 16@00 18
Pine, strip boards culls	0 18@00 20	Hemlock joist 3x4	00 18@00 20
Pine, strip boards merc'table	0 20@00 22	Hemlock joist 4x6	00 40@00 44
Pine, strip boards clear	00 25@00 26	Ash, good	45 00@53 00
		Oak	50 00@60 00
		Maple cull	20 00@25 00
		Cargo rates 10 per cent. off.	

EXTRA SELECTIONS.

Maple good	40 00@48 00	Whitewood § in	35 00@40 00
Chestnut	40 00@50 00	Whitewood § panel	45 00@50 00
Cyprus, 1, 1½, 2 and 2½ in	35 00@40 00	Shingles ex, shaved pine 18 in	8 00@ 9 50
Black Walnut good to choice	140 00@160 00	Shingles ex. sawed pine 18 in	5 75@ 6 00
Black Walnut §	85 00@100 00	Shingles clear sawed pine 16 in	4 50@ 5 00
Black Walnut selected and seasoned	150 00@175 00	Shingles cypres 24x7	22 00@24 00
Black Walnut count'rs	00 22@00 28	Shingles cypress 20x6	00 00@14 00
Black Walnut 5x5	150 00@160 00	Yellow pine dressed flooring	30 00@40 00
Black Walnut 6x6	160 00@170 00	Yellow pine girder	26 00@35 00
Black Walnut 7x7	175 00@180 00	Locust posts, 8 ft	00 18@00 20
Black Walnut 8x8	175 00@180 00	do 10ft	00 24@00 25
Cherry wide	100 00@120 00	do 12ft	00 29@00 34
Cherry, ordinary	70 00@80 00	Chestnut posts	00 03@00 3½
Whitewood inch	45 00@50 00		

OSWEGO, N.Y.

Three uppers	$46 00@47 00	No. 2,5-4	$ 1 80
Pickings	36 00@37 00	No. 1, 4-4	1 50
Cutting up, No. 1	26 00@27 00	Cedar, 4-4	1 70
Cutting up, No. 2	18 00@20 00	Pickets, 5-4 x 5-4x4, No. 1	14 00@15 00
Dressing	19 00@21 00	1x3x4, No 1	18 00@20 00
No. 1 Culls	16 00@17 00	1x3x4, No 2	10 00
No. 2 Culls	13 00@14 00	1st and 2nd black ash, 1 in	23 00@25 00
Sidings, selected, 1 in	30 00@38 00	5-4 and thicker	24 00@26 00
" 1¼ in	33 00@41 00	Culls	10 00
Mill run, 1x10, 13 to 16 ft	19 00@22 00	Basswood, selected 4-4 and 5-4	20 00@22 00
Dressing and better	25 00@27 00	Strips, selected 4-4 and 5-4	16 00@18 00
1 x 10 shipping cul's	16 00@17 00	Culls, 4-4 and 5-4	11 00@12 00
Mill run, 1¼ in. strips	15 00@18 00	Birch and maple 1st and 2d	23 00@25 00
Selected	32 00@34 00	M ulding strips, $6 per M. pieces	⅝x1¼ P4;
1x6 selected for clapboards	32 00@34 00	Door panels, 6 in., 15c per door 7 inch do 16c	
Clear butt cedar shingles, 18 in	2 70@ 2 80	Blind slats, ½x2x4, 6c per M. piece	
Shingles, XXX, 18 in pine	3 00@ 3 20		
XXX 18 in Cedar	3 60@ 3 75		
XX 18 in cedar	2 30@ 2 40		
Lath No 1, 5-4	2 60		

DETROIT, MICH.

Uppers, 4x4	$48 00	Siding, clear	23 00
5 " 6x4 & 8x4	50 00	A	21 00
3 & 4in	50 00	B	18 50
Selects, 4x4	42 00	C	16 50
5x4, 6x4 & 8x4	45 00	Bill stuff ordinary sizes :	
Shop, 44	22 00	12 to 6 ft	11 00
5x4x 6x4 & 8x4	25 00	18 to 20 ft	12 00
Fine common, 4x4	35 00	22 to 24 ft	13 00
5x4, 6x4 & 8x4	38 00	26 to 28 ft	14 00
Stocks, 1x12 & 1x10, No 1	19 00	30 to 34 ft	16 00
1x12 & 1x10, No. 2	16 00	Ship culls	12 00
1x12 & 1x10, No. 3	13 00	Mill Culls	10 00
Flooring, select c mmon	19 00	Shingles clear, 18 in	3 30
No, 1 common	18 00	10 in. clear, 18 in Ex	2 30
No. 1 fencing	16 50	6 in. clear, 18 in	2 25
Ceiling, select common	25 00	6 in stocks clear, Ex	4 00
Ceiling, No. 1 common	22 00	5 in. " "	4 80
No. 1 fencing	20 00	Lath, per M pcs	2 50
Roofing, D. & M	16 00	Add for S. 1 or 2.	$1 ₱ M

TONAWANDA.

Trade is excellent and rates satisfactory. Orders for large lots are coming in rapidly, while orders for white pine are in demand, the greatest enquiry is for box, but the supply is limitcd. Norway is reported active, dressing and better and common selling well. Shingles are scarce. Laths are in demand, but the stock is limited.

CARGO LOTS—MICHIGAN INSPECTION.

Three uppers	$46 00@47 00	Culls	12 00@13 00
Common	20 00@25 00		

YARD PRICES—CAR LOTS.

3 uppers, inch	$44 00@46 00	Dressing stocks	18 00@22 00
3 uppers, plank	45 00@46 00	Dressing sidings	19 00@22 00
Pickings, inch	38 00@40 00	Common stocks	12 50@13 00
Pickings, 1¼ in. to 1 inch	39 00@40 00	Common, sidings	15 00@17 00
Fine Common	32 00@34 00	Common box	12 00@13 00
Fine Common, thicker	34 00@40 00	Shingles, XXX, 18 in. sawed	3 40@ 3 50
Cutting up	25 00@28 00	Do. clear butts, sawed	2 40@ 2 45
Shelving, 12 in. and up	27 00@30 00	Shingles, XXX 16 in. cut ₱ sq	@ 3 10
Coffin boards, 12 in. and up	16 00@18 00	Do. XX do	@ 2 75
		Lath	1 90

CHICAGO.

From Our Own Correspondent.

Business in the lumber trade here still continues to be good but of course shipments are not so large as they were in March for the reason that western buyers took advantage of the Railway rates, prior to April 1st, which was considerably lower than now, and laid in a good stock. Still yard men here have had no reason to complain of this months trade, and in fact there would have been a good deal more lumber sold if the stocks on hand had not been broken up so badly, as a good many orders have been declined on that account. Common and cull lumber is very scarce, and although navigation is well opened, there has been very little if any low grade lumber received as yet, and as there is not much on hand at the mills we may expect to be short of that kind of stock until this year's cut becomes seasoned. There are six firms going out of the yard business here, and one new firm going in; several yards will change locations, my firm among the number. Speaking of yards changing locations brings to mind the fact that there is to-day a good many thousand feet of vacant dock property suitable for lumber business, "to let" in this city and at reduced rates from former years. This is quite a change from 10 years ago when it was almost impossible to get dock property at any price. The cause, is quite apparent to men in the business, which is the very small margin on which lumber is handled here. The carpenters have been on a strike here for some time, which has hurt city trade somewhat, but they have settled down again and the world still moves. This is a "striking" city and some one of the numerous unions here are on a strike all the time. The newest and latest strike talked of now is the brick layers, laborers and hod carriers union strike. Of course all these strikes have a bad effect on trade generally, and I venture to predict that if this state of things continues a few more years Chicago will have to "step down and out" in one of her greatest industries, viz., the Cattle and Hog Packing business. She will still have the Board of Trade though, which is without a doubt the most extensive "gambling house" in the world, as they rake in the sheckles from every nation and every clime, and strikes have no direct effect and the good work still goes on.

The following are the ruling quotations at present :—

RECEIPTS FOR WEEK ENDING MAY 19.

	Lumber.	*Shingles.*
1887	48,759,000	17,866,000
1886	26,057,000	15,693,000

RECEIPTS FROM JAN. 1, TO MAY 19, INCLUSIVE.

	Lumber.	*Shingles.*
1887	302,480,000	74,916,000
1886	224,959,000	64,193,000

STOCK ON HAND APRIL 1, INCLUDING SOUTH CHICAGO.

	1887.	1886.	1885.
Lumber	229,730,303	344,430,064	454,053,007
Shingles	151,903,450	253,619,200	242,084,250
Lath	10,781,335	50,668,525	36,555,645
Pickets	824,402	3,397,468	1,977,411
Cedar posts	112,059	137,930	178,241

FINISHING LUMBER ROUGH.

1st and 2d clear, 1 inch	$47 00	A select, 2 inch	$41 00
1st and 2d clear, 1¼ and 1½ in	45 00	B select, 1½ in	31 00
1st and 2d clear, 2 inch	48 00	B select, 1 in	30 00
1st and 2d clear, 3 inch	48 00	Clear and select 2x4	26 00
3d clear, 1¼, and 2 inch	43 00	2x6	32 00
3d clear, 1½ inch	44 00	2x8	34 00
A se ect, 1 inch	38 00	All one length $1 ex'ra.	
A se.ect, 1½ inch	39 00		

STOCK BOARDS.

12 in. A, 12 to 16 ft	$42 00	12 in. 20 ft	23 00
12 in. B	35 00	10 in, A	37 00
12 in. C	32 00	10 in, B	33 00
12 in. D, 12, 14 and 16	20 00	10 in. C	26 00
12 in. D, 18 ft	23 00		

FLOORING—DRESSED AND MATCHED.

A flooring	$32 00	B flooring 4 in	29 00
B flooring	30 00	C flooring 4 in	25 00
C flooring	23 00	Norway clear and A	22 00
Fenci g flooring	15 00	B, 4 or 6 in	20 00
Clear and A, 4 in	31 00		

SIDING—TIED.

1st and 2d clear, 12 ft	$21 00	B siding	18 50
1st and 2d clear, 14 and 16 ft	22 00	C	13 50
A	20 50	Fencing	10 50

BEADED CEILING—TIED.

Clear, ⅜x4@6 in	$22 00	C celing, ⅜x6 in	14 50
A, ⅜x6 in	20 00	Clear and A, ⅜ or ¾x6	32 00
B, ⅜x6 in	19 00	B, ⅜ or ¾x6 in	29 00

COMMON BOARDS—ROUGH.

Com. boards, 12in. 18 to 20ft	$12 00	12, 14, 16 and 18 ft	14 50
10, 12 to 16 ft	15 00	1¼ and 1½ common	13 50

FENCING—DRY.

No. 1 all lengths	$14 50	4 in. common	12 50
No. 2, 12, 14, 16 & 18ft	11 50	Norway	14 00

TIMBER AND DIMENSION—DRY.

Joist and scantling, 2x4, 12, 14 and 16 ft	$12 00	12, 14 and 16 ft	$13 00
2x6, 2x8 2x10, 12, 14 and 16 ft	12 00	2x4, to 8x8, 18 ft	13 00
Timber, 4x4 to 8x8 inclusive,		2x4, 4x4, 20 ft	14 00

NEWS NOTES.

—Francis and Cassels' limits on the lower Madawaska have been considerably damaged during the past fortnight by forest fires.

—The Canadian Transportation Company has already sold tickets to 5,000 persons who are going to Sault Ste. Marie with the view of locating there.

—Emery Brothers, of Saginaw, will saw this year ten million feet board measure at Midland. They have leased the mills of the British American Lumber Company.

—An effect of the export duty on saw logs has been to put a stop, or very nearly so, to the rafting of logs from the Georgian Bay to Saginaw and Chicago, or the carrying of them in enormous barges to those points.

—A serious fire has occured at Mr. Sewill's mill, Jacques Cartier, near Quebec, during which about 40,000 Quebec standards of spruce deals were entirely destroyed. The amount of insurance has not been made known.

—Very heavy bush fires have been raging for some time past in the northern portion of Tiny, near Penetanguishene. They started at Methodist Point, and have swept nearly across Tiny Point, burning both sides of the road for several miles.

—United States Consul Hotchkiss reports $1,633,820 as the value of lumber exported from the Ottawa district to the United States during the three-quarters ending March 31.

—The first crib of square lumber for the season passed over the Chaudiere Slides May 25th. The timber was made near the Rocky farm and is the property of Klock Bros. Aylmer.

—The piles in the boom works of the Port Arthur Lumber Company, Port Arthur, Ont., 300 in number, were raised from six to 12 feet, last winter, by the action of the frost; in fact, the boom was nearly frozen out, and will have to be hammered back in place.

—A gentleman who has lately arrived from the Desert is reported as saying that in some places all the snow has not yet left the ground. The water in the creeks and the Desert and Gatineau rivers are very high and is somewhat impeding the lumber drives.

—Reports from Quebec state that the drives are progressing favorably. The American Markets are consuming large quantities of spruce, and the demand for spruce boards this spring is in excess of the supply. One of the Chaudiere Mills has sold largely to the United States—both good and common stuffs. This mill lately made a contract to cut 40,000 to 50,000 logs into boards for this market.

—Terrible bush fires have been raging on Allumette Island during the past fortnight, in many instances doing great damage. In some sections on the Quebec side whole districts have been devasted, barns burned and much valuable timber destroyed. Ashes and cinders fell in showers about Pembroke, and it was reported that limits on the Pettewawa were being consumed, but the report was found to be untrue.

—There is every present prospect of a large shipping trade being carried on at Whitby harbour this year. At present the wharves are filled high with lumber and cedar poles, and several carloads have had to stand this week until the barges would come and load their cargoes. The harbour people cannot at present form any definite estimate of how much stuff will be handled there. Of course a good deal of the lumber will be this season's cut, and may not come down until September.

—Many of the Chaudiere lumbermen are introducing a new and improved article of machinery called the slapper. It is a large iron wheel which is placed directly over the jack ladder and when the log is drawn up out of the water on the jack ladder, this wheel, which is covered with sharp spikes and attached to a heavy moving frame-work attached to beams above, catches the log on the upper side and runs along it after the fashion of a cog wheel until it is sawn, thus holding the log solid upon the saw carriage and preventing it from jumping while being sawn.

—Bryson *Equity*: Messrs. William Richards, Hiram Richards, Jesse Smith and Wm. Lothian stopped at the Forest House on Thursday night. They were on their way down the river, having completed the work of building improvements for this season. The last job disposed of was a rudder boom, built at Pembroke but intended to be floated down to Lapasse, when navigation opens. This boom is the second of the kind which has been built by the company, the first having been constructed at the Chats rapids a few years ago. These booms take the place of what was formerly known as glancing booms. They are made about four feet wide, of timber solidly bolted together. One end of the boom is held stationary by means of a pier or stout anchor; to this end so held is attached a heavy rudder upon which the current strikes with such great pressure, that the projecting end of the boom is held in an oblique position across the channel. The boom recently constructed is about 500 feet long.

THE NASSAU MILLS.

THE new mill just completed at Nassau, near Peterborough, was visited by a LUMBERMAN reporter a few days ago, in company with the proprietor, Mr. J. M. Irwin. This mill, the erection of which was commenced in December last, is designed and laid out quite different to the ordinary saw mill, being a combination of planing, saw and shingle mill. It is situated directly on the edge of the Otonabee river, while in the rear is a fairly large pond, in which the timber is floated and from thence conveyed to the saw. Running along both sides of the new building are railway switches connecting with the Grand Trunk. In this connection it is worthy of mention that Mr. Irwin has already constructed over two miles of switch, which connect the two mills and lumber yards. The latest edition to the "Red Mills" property is a heavy frame structure, 40 x 100 feet, three stories in height, the roof of which is covered with corrugated iron. To one side is erected the engine and boiler house, 35 feet square, in which is contained a 75-horse power "Beckett" engine and three boilers. The ground floor of the mill proper is used as a planing mill, in which is also located the main driving shafts for operating the machinery on the different floors. Here, among a number of other woodworking machines, is to be found what is known as the "Lightning" planer, which is indeed a magnificient machine. The board is conveyed into this machine in its rough state, carried through, planed and grooved, and by a simple device carried into a box car at the opposite side of the mill, where it is piled and ready for shipment.

The second floor is used exclusively for bill timber, which is manufactured up to 60 feet lengths. The third floor is utilized for the manufacture of shingles. The various departments have a capacity as follows:—Planing mill, 40,000 feet per day; bill timber mill, 25 to 30 thousand feet per day; shingle mill, 30,000 per day. The whole arrangement is unique, and a credit to the practical common sense of the owner, under whose personal supervision the work was carried out.

While referring to the improvements which are going on, it is not out of place to mention that the large water mill has also been undergoing considerable changes and cutting operations will soon be commenced. This mill, which has operated for the last thirty years, has a capacity of 100,000 feet per day. It is operated by two Leffel and eight central discharge water wheels, the estimated power being 500-horse power.

Mr. Irwin's limits are situated at the head waters of the Otonabee, and the logs are floated down that stream to the mills. Employment is given to about 250 men on an average, although that number is largely increased at certain seasons of the year. The cut of logs last winter is given as 14,000,000 feet.

Should any LUMBERMAN readers ever think of visiting these mills with the object of "painting the town red," they are strongly advised to stop away as every building in the village already bears that color, and it would be difficult for even a lumberman to make it brighter.

Mr. Adam, of Gatineau Point, and formerly of Cookstown, who has got out a new patent for a saw to manufacture bevel-edged shingles, has completed the construction of a large factory at Gatineau Point. Instead of manufacturing shingles out of blocks, Mr. Adam has purchased some 900 logs seized by Father Paradis on the Gilmour limits some time ago. The new style of shingles is represented to be far ahead of the ordinary shingle, and Mr. Adam has made several large sales already.

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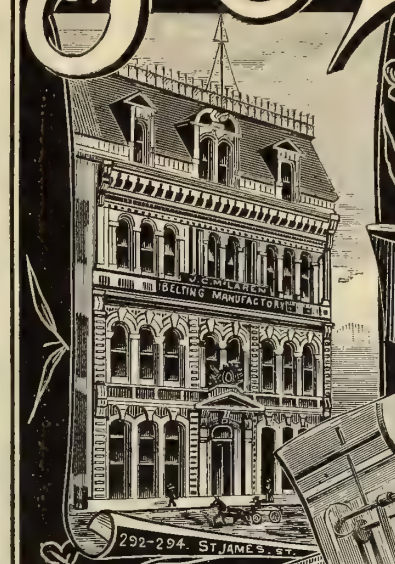

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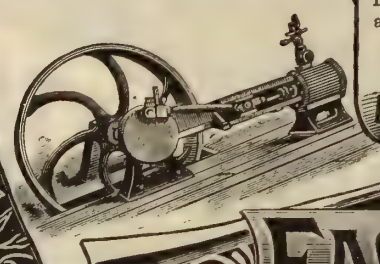

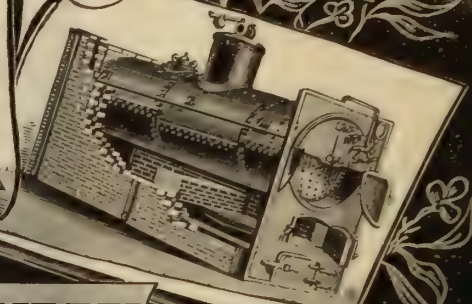

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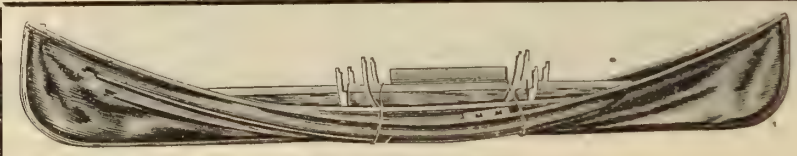

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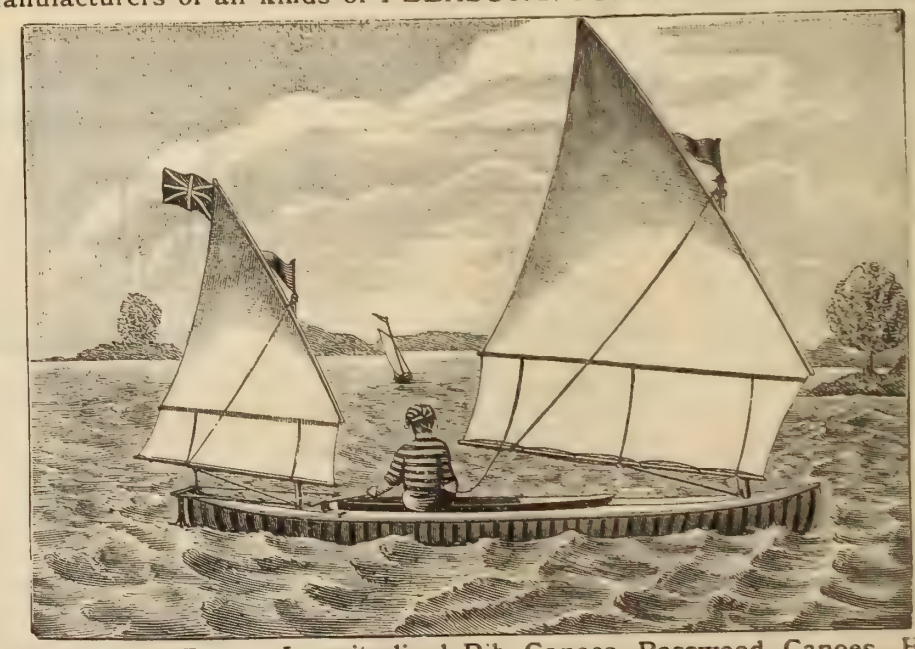

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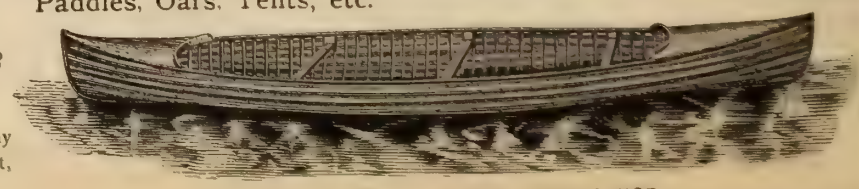

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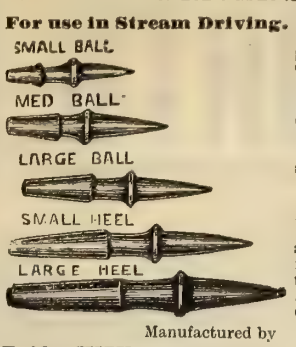

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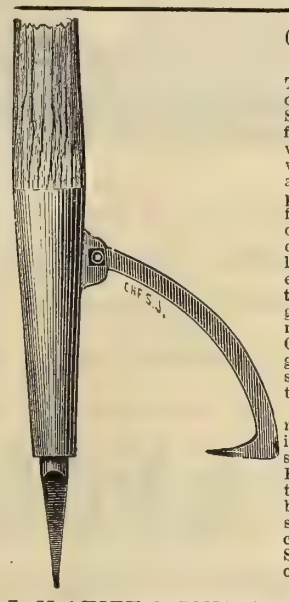

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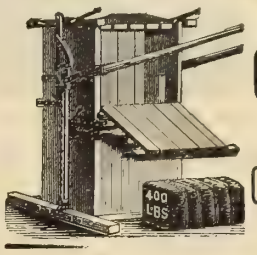

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Sample Pole sent on application. W. FORSYTH, Peterborough, Ont.

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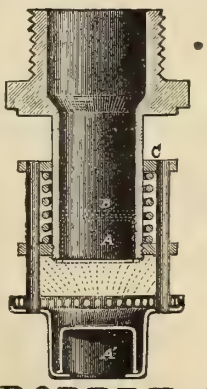

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1 do	do	do	do	do	44 in. with sun,
1 do	do	do	do	do	35 in. against sun,
1 do	do	do	do	do	35 in. with sun,
1 do	do	do	do	do	23 in. with sun,
2 do	do	do	do	do	20 in. against sun,
2 do	do	do	do	do	20 in. with sun,
1 do	do	do	do	do	17½ in. with sun,

1 do Champion Water Wheel Governor.
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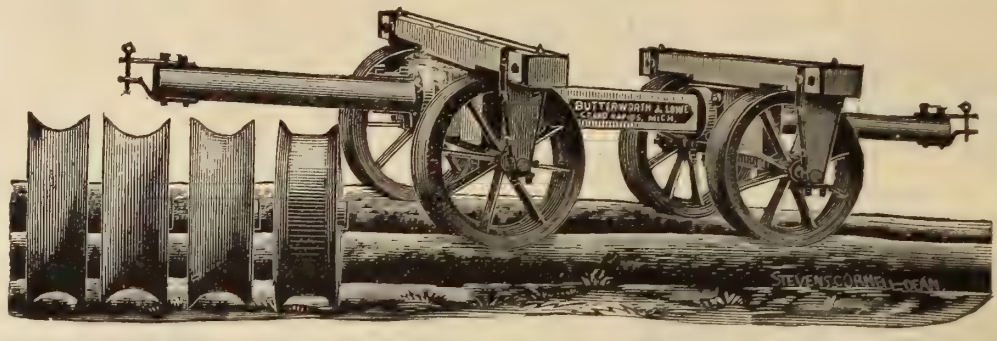

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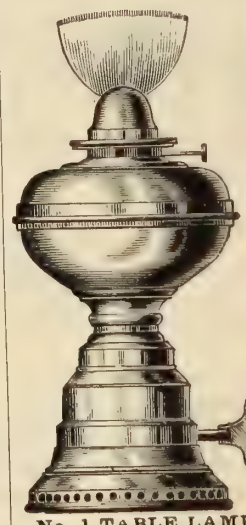

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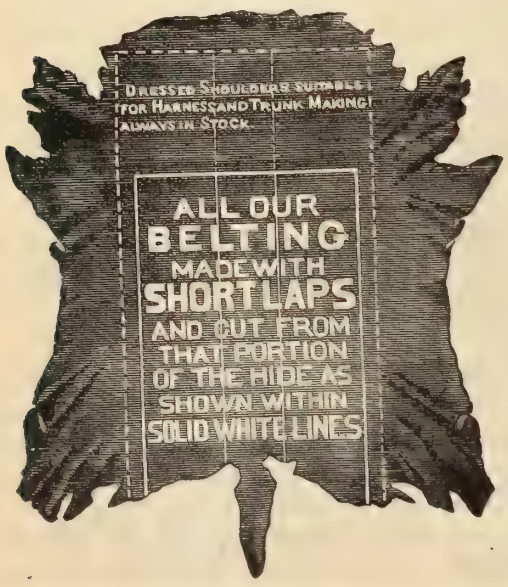

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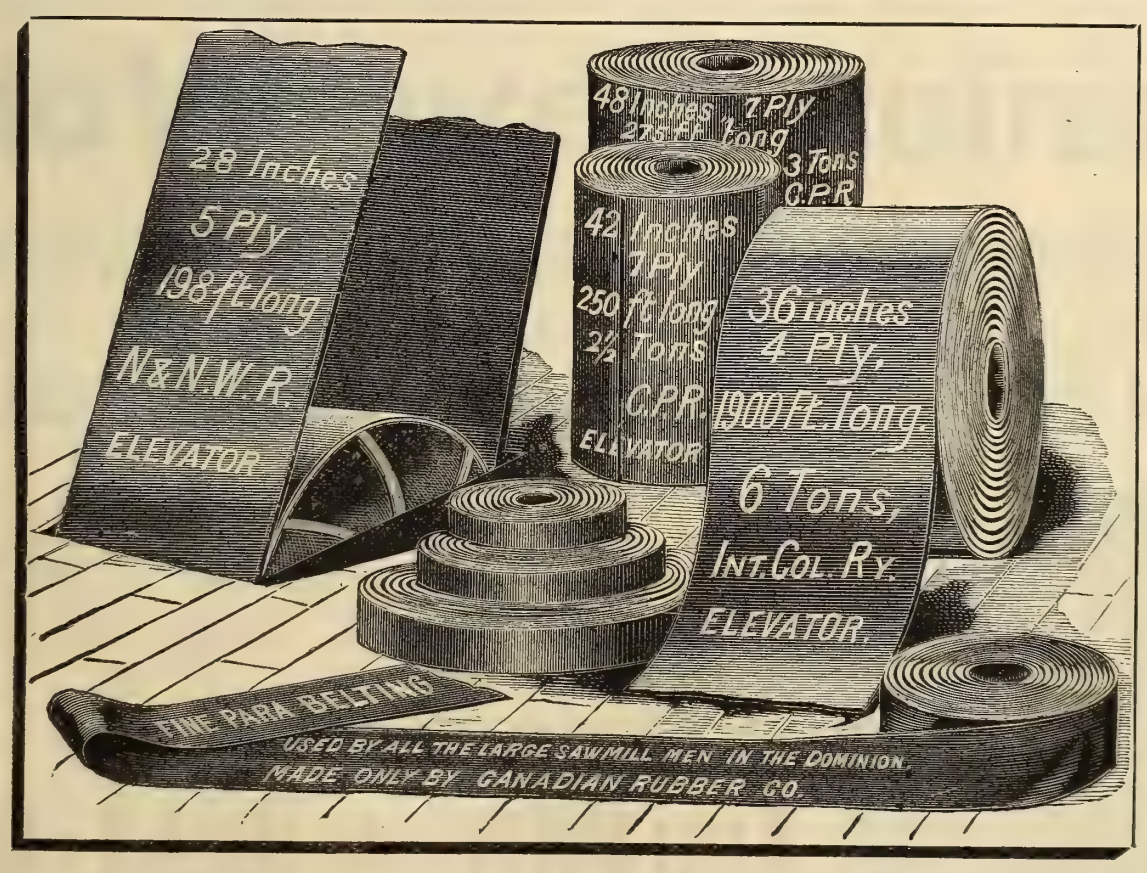

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PUBLISHED MONTHLY By A. G. MORTIMER.

The only Newspaper devoted to the Lumber and Woodworking Industries of the Dominion.

SUBSCRIPTION $1.00 PER ANNUM.

VOL. 7. PETERBOROUGH, ONT., JULY, 1887. NO. 7.

THE LUMBER INTEREST IN CANADA.

A RECENT printed report of U. S. Consul Hotchkiss at Ottawa, Ont., gives some interesting details as to the lumber interests of the Provinces of Ontario and Quebec. When Americans began to cut the pine and take it out in the log to saw it in Michigan, the export duty of $2 per thousand board measure was put on, with the expectation that it would be prohibitory of log exports. Had it been sawed in Canada, there would have been only the $2 per M United States tariff. The old rate was $1 per M; $2 is now the nominal rate, but the Provincial Governments have the right to increase to $3, and that soon will be the rate if the log export continues in any considerable volume.

The title to standing crown timber is in the Provincial (not he Dominion) Governments, and the right to cut it is sold by auction, a minimun price being fixed, and the highest bidder securing the privilege of cutting for a year all the timber in a "berth," or "limit," which usually is 640 acres, or a square mile. For the product he must pay according to a fixed tariff. Parties securing berths for one year have a prior right to annual renewals, subject to regulations. The license is in a form fixed by the Department of Crown Lands, and gives the holder the right to cut timber and saw logs within specified bounds, together with power to seize and recover anywhere in the Dominion whatever any trespasser may cut during the time off the berth. But any other party may cut trees under 10 inches in diameter for "floats, traverses, oars or wythes," for use in rafting timber cut in the province and being rafted near by. Also, timber may be cut for making roads and bridges. Any lands within the berth previously sold to settlers are excepting, and lands sold after date of lease are to be excluded from its operation and from that of renewal lease. But when sales to settlers are canceled, the land returns to area covered by the lease. All timber cut must be paid for according to a provincial tariff fixed by the province. The Dominion also levies an export duty on white and Norway pine saw logs, per 1,000 feet board measure of $2. On similar spruce and hemlock logs, $1 per 1,000 feet. On shingle bolts, $1.50 per cord, 128 feet. The Governor in council may increase the duty on $3 per 1,000 feet. The ground rent, per square mile, payable annually, is $2. Logs are cut 13½ feet long, six inches being allowed for brooming in rafting.

Renewals of license are conditioned upon full payment of all dues and rents for the previous year, according to sworn statement of number and description of timber and logs cut. Public officials have the right to test and verify these statements; if found incorrect there may be forfeitures of material and other penalties. Defaulted other dues constitute a first lien on any timber, cut under license, belonging to defaulter.

The tariff on saw logs will in all probability be raised till the prohibitory point is reached.

Much of the pine now being lumbered has been once condemned, or the choice timber has been taken from it, for the English market.

Mills in the Ottawa district are all "gangs," running from four to eight gangs of from 36 to 42 saws each. They are run night and day during the short season of seven months, using electric lights. Those at Ottawa use power from the Chaudiere Falls, which also operate the electric light system of Ottawa. The machinery used in the saw mills is much of it made in the United States, and is of the best quality. Eleven hours is the rule for a day's work, wages in the woods being about the following, including board:

Foremen, per month	$40 to $60
Choppers and skidders	15 to 20
Road cutters	12 to 15
Teamsters and loaders	16 to 18
Cooks	30 to 40
Log measurers	50
Horse or mule team, with teamster	35 to 40
Wages, in and around mills, always without board, are:	
Foreman	$100
Head sawyer for gangs	$40 to 45
Head sawyer for circular	50
Tail sawyer	30 to 40
Edger and trimmer	35 to 40
Filers	50 to 60
General help, teamsters and pilers	30 to 35

The mills being run by water, their location is arbitrary and prevents the use of natural or artificial means of avoiding handling the product so common in Michigan. All must be teamed to the drying ground, and afterwards to the rail or water delivery. This adds to the expense 50 to 75 cents per 1,000 feet.

Lath and pickets are of excellent quality, but the lath is 1 3 8 inch wide instead of the 1½ United States standard. The shingle business is not prosecuted to any great extent and the few produced being made "bastard" are classed as the lowest grade in United States markets. Much stuff that would make soap, hat, shoe, starch and packing boxes is sold for fuel at 10 per load. Here seems to be an opportunity for some one to build up a fine paying business.

HOW DO YOU KNOW YOUR ADVERTISEMENTS PAY?

The devices employed to ascertain what mediums are giving the best results are almost innumerable; some may be considered wise, but most of them otherwise. A number of years ago the Valley Machine Co. placed some of their business with me. The "V" commencing the name got crushed in the press, which made the address "Alley" Machine Co. The manager receiving a large number of letters addressed in this manner, "Alley Machine Co.," told me that he was convinced that I represented one of the best advertising mediums in the country; also that he should profit by the hint given, and, of course, promptly renewed his order. Taking the hint from this accident I have suggested from time to time to my patrons that a slight change may be made in addresses. My friend John Smith operated it in this way, giving his name to the first paper, John A. Smith; to the second, John B. etc., by which he has become to be known as Alphabet Smith. Others I have known in any one paper to ask their patrons to call for catalogue "A"; in the next one catalogue "B," etc. The result of this has been to show that live concerns take more than one paper, as several of my patrons have received from the same source a request for catalogues A and B. Others I have known to give different numbers to the streets, in cases where that can be done without confusion. I have had access to the correspondence of a considerable number of my friends who are large advertisers, and have found that the average is about one in ten of letters received that will mention the medium in which the advertisement was seen. Out of upwards of 300 letters sent to one business concern, all of which mentioned the paper, only five had a rating in the commercial registers, convincing me at least that it is not the best class who "mention this paper." The conclusion of all my investigations and comparisons is just this: advertisers should place their cards in papers having a circulation sufficient to insure that they are not paying too much for reaching that particular constituency. In placing the card make sure that the quality and character of the paper is such that it will be read for the information it contains. Take a card sufficiently large to be readily seen, and advertise your goods in season. Hold out no false inducements. Change the matter frequently, that it may look fresh, and if satisfied that the papers you patronize reach the people to whom you wish to sell, keep your name constantly before them.—*From XX., New York.*

RESTRICTING LUMBER EXPORTATION.

TO those who have considered the forest resources of Canada as of vast extent, it will be no news to learn that there is danger of the production not being more than equal to the home demand in a very few years, should exportation continue to increase. But how many are there among us who, without due consideration, are accustomed to rejoice in the fact that our lumber export is so great and is apparently in such a flourishing condition? They forget that every thousand feet of lumber taken away from the country leaves so much less behind it. Our forest trees cannot last forever, particularly since no organized steps are being taken to ensure a new growth, after the original trees have been felled. The growth of a forest tree is not that of one or two years. Many of them take a lifetime and even more to reach their growth. Nevertheless we are cutting and cutting, wasting and wasting, and conveying from the country as fast as we can what, had it been properly husbanded, would have been an important source of national wealth for generations. The question under all the circumstances of "what are we going to do about it?" is a most important one and ought to have more attention from the authorities, the trade and the public generally than it has as yet received. There are those who have been instant in season and out of season in pointing out the results to which we are drifting. Now or never is the time to consider them and put on the brakes. Already we have lost not a few of our national products in animated nature: and our forests are fast following them into the land of the "have been."

Is there no means of arresting the wilful waste that goes on in the woods and what we may term the proflicacy and extravagance connected with lumber exportation? Would not the imposition of a tolerably export duty have some effect, and could not the Provincial governments increase the restrictions which they have placed upon the lumbering interests? It has been stated than in view of the increased annual dues placed upon timber limits by the Governments of Ontario and Quebec it was seriously contemplated by limit holders to exhaust their holdings as fast as possible so that they should have but few more payments to make. Under the circumstances is it not their interest to hold on and make their properties last as long as possible, since with a judiciously restricted cut the lumber that is left would annually enhance in value.—*Canadian Trade Review.*

TRADE WITH GREAT BRITAIN.

IN a previous issue of this journal was published the report of Prof. Macoun's address on Canadian woods, delivered before the Carriage Builders' Association in London, Eng., which treated principally on a certain class of Canadian woods suitable for carriage building. Through the courtesy of Ira Cornwall, Esq., late Agent-General for New Brunswick in Great Britain, THE LUMBERMAN is enabled to give a synopsis of that gentleman's report, relating to Canadian woods and their utilization for various manufactured articles for export, furnished to the New Brunswick Government. The hints contained in the extracts which follow are practical and quite worthy the attention of Canadian lumbermen and manufacturers. The suggestions thrown out advocating the formation in this country of a company such as is referred to in this report have been made after careful and practical research of the wants of the British trade, and can be relied upon as authentic :

"The most important item of trade with Great Britain is in our woods and from the large number of inquiries which I had during the Colonial exhibition I am convinced that a great extension of that export can be made if properly handled. This more especially applies to our hardwoods. It is quite evident that our hardwoods will not find profitable sale there until they are carefully seasoned and properly manufactured. All of this must be done upon this side of the Atlantic and from all experiences up to the present, it is equally evident that the business has not been properly understood by our manufacturers, and that there is not sufficient capital accessible in the business to make it a success. A company or syndicate should be formed with a large capital capable of holding a large stock of wood for careful seasoning, to erect and operate large mills capable of turning out all classes of wood goods, and who could establish large warehouses in Liverpool and London, where an extensive stock could always be kept on hand for immediate delivery. That such a company in the hands of proper and experienced management, devoting their whole attention to this branch, would be a success, it is an easy matter to demonstrate from the figures I was enabled to glean at the exhibition. I also have the assurance that if the company were launched under proper auspices upon this side, the amount of stock necessary would be readily taken up in England. It would most unquestionably be of great advantage to the province to have the company operate there and it was admitted by all with whom I talked over the matter that New Brunswick is the most favorable place for its location.

Among the articles which I would suggest to the company as advantageous to manufacture are, cloth boards, slats for slate frames, broom handles, brush backs, mouldings, blind slats, blind pulleys, hardwood squares and dimension stuff for curtain rods, rings and ends, for mangle rollers, portions of furniture, &c.; in this last named line alone there is an almost limitless field. I was enabled through the excellent idea of Messrs. Howe, in showing the stains on the woods in the wood trophy, and also from some tests that I had made to convince English manufacturers of the adaptability of our birch for staining. It is being more largely used in that way now, and the following item taken from an American lumber journal of a recent date may be of service in arousing the interest of our people in this subject :

"The price of Black Birch of best quality has recently gone up from $7 to $95 per 1,000. The extraordinary advance is due to the discovery that boards cut out of the first logs are susceptible of a very high polish, and can be used for almost any purpose hitherto exclusively reserved for mahogany, which is worth $250 a thousand. The advance has been expedited by the discovery that the best black walnut is giving out. Black walnut from Arkansas and the south is so porous that it is of very little use in furniture making. The best black birch is found almost exclusively on the barren copper ore regions between Milwaukee and Ashland, where all other timber is stunted in growth and very poor. Here boards out of the butt cut quickly assume a beautiful red tint on being exposed to the atmosphere, and can be polished up to a great degree of fineness. The price will soon fall to $50 to $60 a thousand. A railroad is being laid right through the very inaccessible region where it grows, and the high prices have tempted several men to open out saw mills. Red beech has also advanced in price very rapidly. It could be bought up recently in Indiana and Ohio for the bare cost of sawing, but now it is worth $30 a thousand."

The industry of manufacturing spools and spool-wood for the thread-makers of the United Kingdom has been carried on for many years in the Province of New Brunswick, Nova Scotia, and Quebec ; and those versed in the subject say that when properly conducted there is big money in it for the manufacturer. Messrs. J. & P. Coats, of Paisley, Scotland, use very largely of spool stock, as do also Clark & Co., of the Anchor Mills of the same place ; and they are always anxious to secure first-class stock, even greatly in advance of their consumption, which is enormous. Delivered in Scotland, the prices paid are from £6 to £6 10s. per 1,000 superficial feet. Of course, many other firms use largely of this kind of wood ; in fact, since the introduction of the machine called the quadruple borer, the demand has been universal. This within the last five years or thereabouts. Previous to that time, the spool blocks were made from transverse sections of the birch log, the thickness of the desired length of the block, and were cut out of these sections by hollow cylindrical saws attached to vertical spindles running at a high rate of speed—some 3,500 revolutions per minute. In the centre of the saw was a boring bit that bored the holes in the spool blocks so manufactured. Owing to the growing scarcity of birchwood in Great Britain and Ireland, the Scotch blocker has been gradually abandoned, and the quadruple borer has taken its place on account of its ability to utilize spool stock, as described, which could be imported from Norway and America at a cost commensurate with the scheduled cost of production, whereas birch in the log would make the cost of the material very high.

The spools themselves, finished and ready for use, should be manufactured in this country, and I am assured that it only requires the careful selection of wood, proper seasoning, and above all great caution as to turning, to insure all of the orders being placed with our manufacturers. There is a large trade to be done in blocks, for shoe lasts, and in this care in the selection of blocks, cutting them into proper shapes for double and single last blocks, and dipping the ends in a composition to prevent them cracking while seasoning.

A large quantity of poplar of from four to eight inches in diameter, with the bark on, and in lengths of from six to twelve feet, is now imported into England from Brittany. These saplings are split down the centre, and they are then cut into proper lengths and used for brush backs for the coarse brooms or brushes used by the street sweepers. All that is required in these is that the mould should be free from knots, straight, and without twist. As the freight from Brittany is very high, and as this class of wood is so plentiful and easily got at in New Brunswick, there should not be any difficulty in competing for the trade. In addition to these large orders are now open and were constantly offered to me for fancy turning such as door knobs, chemists' boxes in great variety, menthol core boxes, fancy boxes for confectionery, door stops, deck plugs, wedges, &c. In these lines there were not any manufacturers in Canada, so far as I could find out, capable of entering into the large contracts that were offered. The same might be said of tool handles in endless variety. Hay rake handles, pitchfork handles, spade and shovel handles are in constant demand. Bobbins and ships' blocks can only be sold where stocks are kept on hand ready for delivery. Many of the hardwoods are used by musical instrument makers, but they find the woods taken over in bulk (square timber) practically useless. Birch and maple are now being introduced for flooring purposes by some of the best firms, and the day is not far distant when it will be admitted that they are far preferable to pitch pine, at double the cost. Medical men are now recommending their use for hospitals, &c., on sanitary considerations. Another branch which is capable of development is carriage and waggon stock, and the oak, elm and ash of New Brunswick, if cut under the same conditions as in England or provinces, is equally well adapted for this purpose. That is, it must be the second growth, or more properly, such as is grown on partly cleared land, and where it has been subject to full action of the sun and wind for some years.

Offers were made by a number of carriage builders to give a guarantee to place all their orders for stock with Canadian manufacturers in preference to purchasing in the United States, and also that they would pay the same prices now paid in that market. Offers were also made by carriage builders and dealers to place the requisite amount of capital in a manufacturing concern in this country to enable them to carry on the trade successfully.

This branch would require exceeding caution to make it a success. It must in all cases be remembered that as far as oak and elm are concerned we have to compete against the wood from trees grown on the large estates in Great Britain, where they are fully exposed to the action of the sun and atmosphere, and that our ordinary forest growth will not answer. Ash is in some demand, and our ground on pasture ash was carefully tested by some of the woodworkers in London and very highly recommended. The best quality of hickory can be obtained readily from Ontario, and could be manufactured here with the other woods. Basswood is now being more and more largely used for carriage bodies.

In other branches several of our woods are coming into prominence, largely through the specimens shown at the exhibition. Among these the most important will be the use of cedar for coopers' work, particularly for water tanks, also for use in breweries, &c. There were a very large number of inquiries regarding this wood, and I understand that some very considerable orders have been placed in New Brunswick already. Birch staves for barrels also drew considerable attention.

Excelsior (wood fibre) for packing and upholstering is gradually coming into use in England, could be readily sold were it possible to deliver it there at a reasonable freight. This item prevents any successful shipments at present. Although there were not any specimens of chemically prepared or other wood pulp, shown from New Brunswick, still a number of inquiries regarding this article found their way to me through my identification with the other wood trade.

There is a very large and growing market for this material, and provided it can be manufactured on a sufficiently cheap scale to meet that now produced on the European continent, a quick market could be found. The necessarily limited space allowed for this report prevents my going so fully as I wish into the details of the wood trade, which is quite capable of great extension.

THE ABUSE OF MACHINERY.

THERE is hardly any line of business in which machinery, and machinery of a high class, cuts a more prominent figure than in the manufacture and manipulation of lumber. No important part of the work that is put upon a piece of timber, from the time it leaves the water until it is delivered to the consumer ready for use, is accomplished without the use of machinery. There is little to a saw mill, or a planing mill, or a door, sash and blind factory, or, indeed, any wood working establishment, beyond an aggregation of machinery for performing the multitude of operations to which the raw material of the trade must be submitted to fit it for consumption. The purely manual labor expended on lumber in any stage of its progress is chiefly employed in its handling, and this is often accomplished through the aid of devices which make it unnecessary for the workman to lay his hand upon the wood.

It is possibly this very fact—that so much can be done by machinery—that has led to the employment of cheap and clumsy hands to partly do what it requires brains and skill to do thoroughly and well. Be this as it may, there is no one who has had much experience in saw mills and planing mills but knows that a large proportion of the machinery therein is every day subjected to more or less abuse. It is the abuse, not of intention, but of ignorance and incompetency, and for that very reason the hardest to deal with. It is difficult to convince an ignorant man that his knowledge is not as wide as the universe, and to demonstrate to an ignorant but conceited man that he has anything to learn is well nigh impossible. Such men are very often employed to run machinery, and to any one who will calmly and intelligently consider what the probable result must be, it cannot be a matter of wonder that they make a mess of the job. So much is this felt by machinery men, that they are frequently doubtful about introducing new devices, fearing that the careless and incompetent handling they will receive from the users will condemn them, and damage the reputation of the makers. The inventor and manufacturer of a very novel and useful device, which accomplishes rapidly and cheaply a part of the work of lumber making that now depends chiefly on the main strength and awkwardness of muscle, while in conversation recently, spoke of the slow progress he had made in getting his improvement into use. "Yes," he said, 'it's a good thing—there are plenty to admit that—but they are shy about using it ; it's machinery, you know, and it's pretty hard to get the best machine well used. It will do the work, and do it well and cheaply, and the machine is simple and not easily injured, but still it is a machine, and the cheap, ignorant laborers who are trusted with it, know more about getting such a thing out of order than all the mechanics in the United States can learn about getting it back again. I am not pushing my apparatus into the market, because my experience in this way has been so discouraging and unprofitable."

For this condition of affairs it is unquestionable that those who buy machinery, and who employ the men who run it, are most to blame. It is too frequently the case that they look more to the price a man asks for his labor, than to his ability as an operative. The saving of a dollar a day in the cost of labor is palpable and fully appreciated ; the loss in time and in damage to an expensive piece of machinery is obscure and less easily apprehended. More often than otherwise, if a machine runs badly, and is much of the time out of repair, the blame is put entirely upon the maker, when if the mill owner would get at the naked truth he would find that the machine is all right, but is so improperly handled that good work is out of the question. Said the manager of one of the largest planing machine establishments in the country, the other day, "there are few mills in which our machinery is running, that I can go into without fear and trembling. I know, in most cases, I shall find something wrong ; and the chances are, of course, that the blame will be put on the machines. I could name scores of mills that do not get within a large percentage of the work out of their equipments that they are capable of doing, just because the men in charge do not know their business."

It avails little for a machinery manufacturer to use the best materials, and have them put together with great care and skill, if some incompetent, twelve shilling a day laborer is

handle it. The best machine made will not show its worth, or do one-half the work it might under such conditions ; nor can it be expected to last nearly as long as it would if skillfully operated and properly cared for. The loss falls upon the user, of course, though the maker suffers, too, in the reputation of his work, which is damaged through no fault of his or of his machine. But it should be apparent to any mill owner that to employ unskilled labor to handle a mill equipment which represents an investment of thousands of dollars, is a piece of folly that is wholly without reasonable excuse. There is not only the liability that the machinery will be damaged, but the certainty that it will not do nearly the work of which it is capable. What does the difference of, say, a dollar a day, or three hundred dollars a year, amount to in the attendance for a machine representing an investment of ten to twenty times as much? One breakage saved would pay it all, and the gain in work performed would, in most cases, be more than the entire amount of a capable man's wages. The importance of the skillful operation of machinery is so manifest that it seems strange that it should be necessary to call attention to it ; but the experience of machinery men, and the admissions of machinery users, evidence the fact that the need of reform in his respect is widespread and urgent.—*Chicago Timberman.*

WEIGHTS OF BRITISH COLUMBIAN WOODS.

The following table shows the weights, specific gravities, deflections and breaking loads of nine different woods of the Province of British Columbia. The results have been obtained from experiments made by Mr. Edward Mohun, of Victoria. The pieces tested were 1 in. square, and had a span of 1 ft., being supported at both ends and loaded in the centre. The specimens selected were fair average specimens of building timber, partly seasoned, but free from knots and flaws. The results given by exceptionally good specimens were eliminated in preparing the Table. For instance, one piece of Douglas fir only broke under a load of 660 lb. :—

DESCRIPTION OF TIMBER.	MEAN DEFLECTION IN INCHES. 200 lb.	280 lb.	300 lb.	350 lb.	400 lb.	450 lb.	500 lb.	550 lb.	600 lb.	650 lb.	Highest Breaking Load.	Lowest Breaking Load.	Mean Breaking Load.	Specific Gravity.	Weight of on Cubic Feet in Pounds.
											lb.	lb.	lb.		
Yellow cypress (*Chamæcyparis Nutkaensis*)	.05	.087	.082	117	142		2		25	31	700	680	693	5005	31.21
Birch (*Betula papyracea*)	.05		.1	117			2	225	25	35	660	630	650	6025	37.57
Red or Douglas fir (*Pseudotsuga Douglasii*)		.075	.09	119	144		181	25	25		650	600	638	5462	34
Maple (*Acer macrophyllum*)	.063		.113	12	2		27				610	550	580	5999	37.41
Alder (*Alnus rubra*)	.092		.117		158	2	25				600	530	567	5158	32.16
White pine (*Pinus montecola*)	.1	.125	.15	2	25						500	450	473	4427	27.79
Cedar (*Thuja gigantea*)	.1	.133	.158	2	25						460	450	453	4001	24.95
Spruce (*Picea Menziesii*)	.1		.15	2	3						440	420	427	315	25.88
Hemlock (*Tsuga Mertensiana*)	.09	.1	.14	18							420	380	400	5037	31.41

THE OPENING OF NAVIGATION.

THE coming season promises to be a very successful one for the boat forwarders on both the Rideau and Ottawa River routes. Owing to the passing of the Inter-State Commerce Bill by the American Congress the rates by rail to Burlington and other American ports to which our Canadian lumber is shipped are considerably higher than they were last season, and even last season rates by rail were one-third higher than the rates by water, the only difference being that the shipments could be made in less time by rail than by boat.

The further increase of these rates by rail this season will and in fact has taken all or nearly all of the carrying out of the hands of the Railroad Companies and in consequence of this it is impossible for shippers to secure enough barges to supply the demand notwithstanding that a dozen new ones were built during the winter.

It is difficult to get at the amount of lumber shipped during a season from Ottawa by boat, but the following is a calculation made by a prominent forwarder and is as nearly correct as possible :

All the mills last year at the Chaudiere, including J. R. Booth, Bronson & Weston, Grier & Co., E. B. Eddy, Perley & Pattee, and Hurdman & Co., turned out on an average 600,000 feet of lumber per day each, making a total output for all the mills for a day of 3,600,000 feet. The total output for all the mills for the season, which was about 210 days, was about 756,000,000 feet. Of this amount about 252,000,000 feet was carried in American bottoms. The remainder, about 404,000,000 feet, was carried in Canadian bottoms and by rail. Of this last amount it is estimated that at the very least 200,000,000 feet was carried by rail. As this cannot be carried by rail on account of the rise in the freight rates it will have to be carried by boat and the forwarders state that every foot of it will be carried in Canadian bottoms. If this be the case it will easily account for the great demand which there is at present for Canadian barges.

The forwarders have completed the repairs to their boats and are now engaged in placing their barges and loading tows. Messrs. Blanchard & Co. are now engaged in loading a tow of 30 barges with lumber for Burlington. Messrs. Murphy & Co., are loading tows of 60 barges with lumber for Burlington. Messrs. Kirby & Bangs' tow of 6 barges will load with lumber for Buckingham on Monday. Messrs. Blanchard & Co., have leased all the barges and steamers of the Sincennes, McNaughton Line, and will run them in connection with their own line. Geo. Harris' line, of six barges, loads lumber for Buckingham on Monday. S. T. Easton's line of five barges will also load lumber on Monday next, besides these are many other smaller tows and crafts loading for intermediate points. The forwarders on the Rideau route are confident of a splendid season, and state that fully a third more freight will be carried this season than last owing to the high railroad rates between Montreal and Ottawa and Ottawa and Kingston, and also that forwarders this year refuse to make yearly contracts.

Mr. Wise, the engineer of the Rideau Canal, has notified all the forwarders having crafts on the Rideau route that the water will be let in to-day, and that navigation will be open on Monday. The Steamer Olive, of the Merchants' Despatch Line, will arrive down from Smith's Falls on Monday, going to Montreal.

On Wednesday next the steamer Ida, of the Merchants' Despatch Line, will arrive down with a load of freight on her way to Montreal. The wharf of the Olive and Ida, S. T. Eastman's is now open to receive freight.

The steamer Ella Ross will not begin running until the first of June, as she will only carry passengers.

All the other lines will begin running on their old route as soon as navigation is fully opened.—*Ottawa Journal.*

STILL IN THE TREE.

A. G. Van Schaick, who is pretty generally considered able to make as reasonable a guess as any one, has summed up the standing pine in Michigan and Wisconsin. Mr. Van Schaick does more than jump at conclusions ; he has maps and charts and charts of each section, and has for years kept a tab on experts, reports, and noted what the output has been. He gives his figures in the Northwestern *Lumberman* as follows :

	Feet.
In the Saginaw district	6,000,000,000
Other Lake Huron districts	12,000,000,000
Mackinac to Manistee, west shore	5,000,000,000
Manistee	5,000,000,000
Manistee to Muskegon	10,000,000,000
Muskegon and south	7,000,000,000
Menominee, in Michigan	4,000,000,000
South shore of peninsula	3,000,000,000
Lake Superior, in Michigan	5,000,000,000
Railway lands	12,000,000,000
Total	70,000,000,000

He estimates the amount in Wisconsin as about the same as in Michigan and locates it as follows :

Green Bay Shore	8,000,000,000
Wolf and Wisconsin rivers	8,000,000,000
Black and its branches	4,000,000,000
Chippewa and its branches	10,000,000,000
St. Croix and its branches	4,000,000,000
Lake Superior	6,000,000,000
Railway land	30,000,000,000
Total for Wisconsin	70,000,000,000

Mr. Van Schaick estimates the amount in Minnesota at about 30,000,000,000 feet, and believes the whole amount will be required for home use.

If consumers of lumber can see anything in the outlook that promises any permanent decline in lumber I cannot, and when the consumption of the past 20 years has advanced the price of pine in the West from $1.25 per acre to $4 per thousand, and from $1.50 per thousand, in 1880, to $5 for the same timber in Michigan, in 1886, with a demand for lumber that doubles every 15 years, nothing can, in my opinion, prevent the value of pine stumpage from advancing 10 per cent. per annum on its present value until the whole supply is exhausted. The time has already come when it is difficult to buy pine timber and manufacture and sell it at a profit ; and such being the fact timber owners must look with more favor [illegible] shape their business to cut it with a view to securing the profit it should pay under such circumstances.

THE SAGINAW OUTPUT.

The output of the streams in the Saginaw district is as follows :

Tittabawassee and tributaries	410,000,000
Cass, Flint and Bad river	10,000,000
Kowkawlin	20,000,000
Rifle river	80,000,000
Au Gres river	40,000,000
Saginaw and Shore pine	10,000,000
Total	570,000,000

The railroads hauled directly to the Saginaw river last year 149,555,557 feet, and as near as can be ascertained they will handle direct to the river 170,000,000 feet, and about 30,000,000 feet will be towed here from the Upper Michigan and Georgian Bay points. There is now in the mill booms 33,190,000 feet. This gives a total stock for the mills :

Streams in Saginaw District	570,000,000
Railroad logs	170,000,000
Rafted from upper lake, etc	30,000,000
In mill booms	33,190,000
Total	803,190,000

To the foregoing may be added about 40,000,000 feet that will be put in during the summer.

At Escanaba the log output of that river is estimated at 25,000,000 feet.

DECAY OF LUMBER.

Beech, says the *Industrial World*, rots very easily if exposed to the elements, but under shelter remains sound. If covered by water it will remain sound for a long time. Oak, if exposed to the weather, loses its sapwood, but the old wood remains sound for many years. All young timber should either be put in water immediately after it is cut or put under shelter, as the young wood begins to rot very quickly if it is alternately wetted and dried. It follows, then, that deterioration takes place to a far greater extent than we imagine by letting young trees lie out in all weathers with their bark on, as they can not resist wet without having been first dried. All wood should be either put in water immediately after being cut, or at least when spring comes, as it is absolutely necessary that all timber should be water-soaked before any attempt is made to dry it. It is a well established fact that boards dry much quicker if the logs have previously lain in water. Another fact worthy of record is that water-soaked lumber is never attacked by insects and hence plank treated in this way can stand for many years without injury.

LUMBERING IN NEW BRUNSWICK.

The general estimate of the lumber that would be cut on the St. John river during the past winter, outside of Mr. Gibson's cut, was in the vicinity of 150,000,000 feet B.M. It is now supposed that there will be a falling off one-third or more in this quantity. The depth of snow, which above Fredericton would average 5 feet on the level, was a great drawback to the woodsmen. The winter was a succession of cold snow storms. The snow not packing, made the hauling very hard. Shoveling to the standing trees, which in ordinary years begins late in February or early in March, had to be begun about the middle of January, and the work of getting to yarded logs was as great as the chopping, hauling and yarding of them would have been in any ordinary year. Thus the last winter has been one of the most expensive to the log handler in New Brunswick that has been known for many years. Then the cost of portaging, always a heavy item, was increased by the frequent snows, so that it may with confidence be affirmed that few of our log handlers will make much out of their winter's work, while many will be losers. The prospect for a successful drive is good.

—The Messrs. Emery Bros., of Saginaw, Mich., have concluded this year that all the logs they got out, about 40,000, will be sawed in Canada, and they have rented a mill on the Georgian Bay for that purpose. This is a result of the high export duty on logs. The probabilities are that as they own extensive limits in the Nipissing and Georgian Bay territory, they will build mills of their own to saw their Canadian log cut.

THE NEWS.

ONTARIO.

—The Toronto wholesale lumber trade is reported good.

—On an average one hundred million feet of lumber is consumed in building operations in Toronto yearly.

—About 60,000 logs will be stuck in the Gatineau this winter, some of which belong to Mr. Jas. McLaren.

—A lad engaged in McClymont's saw mill at New Edinburgh, had his hand cut off recently while running a saw.

—News from the Gatineau lumber district states that the lumber drive has arrived at the mouth of the Gatineau river.

—Messrs. Jull & Stearns, not having succeeded in making money by their planing mill at Port Rowan, have assigned.

—William Latch, wholesale lumber merchant, Toronto, has assigned. The cause is principally attributed to business neglect.

—Considerable activity prevails around the docks at Parry Sound these days. Lumber is the staple article, and is being shipped freely.

—Mr. J. R. Booth has placed some new shingle machines in his Ottawa mill, which enables him to turn out pine as well as cedar shingles.

—Mr. Brennan of the Ontario Lumber Co., caught two young moose on the French River. He will keep them for a driving team.

—A large number of men are leaving Ottawa and vicinity for Michigan to work in the bush and mills for the lumbermen throughout that State.

—Mr. Hall, an Ottawa lumberman, thinks that no better class of logs can be got out anywhere than on the Whanapitae and around that district.

—Mr. John T, Brown the well known farmer and lumberman, formerly of the township of Ramsay, died at Burlington, Ont., during the past month.

—The shingle mill owned and run by Mr. George Cummins, on the 7th con. of Beverly township, was recently destroyed by fire, nothing being saved.

—The Minden *Echo* says that the last of Strickland's logs have already passed through that place, and that Mr. Irwin's drive will pass sometime in July.

—McArthur Brothers, of Cheboygan, Mich. and Toronto, will ship about 6,000,000 feet of lumber and board pine from the Georgian Bay district this season.

—George Taylor aged 22, while fixing machinery in a mill near Port Elgin, was struck by a saw which cut off the top of his head and threw him into the river.

—McArthur Bros. have about 6,000,000 feet of lumber and board pine in the Georgian Bay district, which will be shipped on their own boats to lower lake points.

—A washout occurred on the mill-race at Whitevale lately, destroying the pipes leading to the water-wheel in the saw mill, and taking the embankment around it.

—Mr. W. F. Whitney, of Bay City, Mich., intends rafting about 10,000,000 feet of logs from the Georgian Bay district this season to be manufactured into lumber across the border.

—This year's drive of sawlogs on the Ottawa is now down and the lumbermen are sawing on last winters cut. The quality of the new logs is pretty much the same as other years.

—A young man named John Hunt, of Mt. St. Patrick, had his hand crushed between a block of wood and a rapidly revolving saw in Carswell, Thistle & Mackay's mill at Calabogie.

—Messrs. Bronson & Weston, Ottawa, have put a new steamer, the Transfer, on duty to facilitate the passage of lumber from the mills to the piling ground on the canal banks.

—Messrs. Taylor & Lount, of Whitevale, propose to remove their saw mill to the site of the old grist mill, and to use the second storey as a brush factory, running both by water power.

—Mr. Thos. Jennings has purchased from Messrs. Falconer & Hamilton the new planing mill and furniture factory lately belonging to the estate of Messrs. Irwin Bros., at Shelburne.

—Mr. A. C. Dallas has leased the premises owned by the Pike & Richardson Cooperage Co., near Chatham, and will continue there the manufacture of patent coiled hoops, staves, heading and liner hoops.

—Messrs. Perley & Pattee, of Ottawa, have a large number of men engaged in putting down a trestle foundation for the new lathe mill which is being erected in the place of the one recently destroyed by fire.

—The boiler of a portable saw mill engine which was at work near the old Crawford mill, about three miles north-west of Culloden, burst recently, killing the two men (father and son) who were operating it.

—The Canada Lumber Company, lately incorporated, will operate principally at Buckingham, Ontario. It is understood that the capital stock will be $500,000, which will cover the lumber business, stock-raising and merchandizing.

—The tug "Gladiator" recently brought in a tow of logs for Mr. Miscampbell's mill at Midland, sufficient to make two and a half millions of lumber. Owing to this mill making a late start it will run day and night during the balance of the season.

—The lumbering firm of Francis Bros. & Co., Pembroke, have purchased from Messrs. Reopelle & McGuire a timber limit on White Fish Lake in the Indian Reserve, Algoma District. The price paid was somewhere in the neighborhood of $55,000.

—Reports from the Parry Sound district go to show that the drives of the different lumber companies are going down the rivers in fairly good shape; most of them are now safe and but few logs will be "hung up" this year, notwithstanding low water.

—Ald. Bingham, who has charge of the log drive on the Gatineau river, states that he has 60,000 logs high and dry on the banks of the river at different points, as a result of the river subsiding. He will use horses to have them rolled into the stream.

—McLean Bros., of French River, propose manufacturing about 4,000,000 feet of lumber this year. Next fall they intend erecting a large gang and band mill at the same point. They are also doing a large amount of rafting and towing for the Oscoda Lumber Co., this year.

—A company with a capital of $25,000 is being founded at Brantford for the manufacture of patent asphalt paving blocks, tyling, roofing, and materials of a like nature. The promoters are S. J. Aiken, D. J. Conger, R. Holmes, and Wm. Smith Burton, of Boston, Mass.

—The Rat Portage council has decided to sell the property of the insolvent Rainy Lake Lumber Co., located at that place, for taxes. The property consists of a saw mill, logs, etc. It is understood the liquidators have refused to pay the taxes, which now amount to a total of $2,526.47, accrued during the past three years.

—Messrs. McKinnon & Walsh have purchased the limits and mill of Charles Anderson, at Little Current. The price paid was in the neighborhood of $112,000. Mr. McKinnon is from Philadelphia, and Mr. Walsh is an old resident of Toronto. Both gentlemen are well up in the business and are well and favorably known throughout Canada.

—The quantity of material in the shape of lumber, iron, etc., consumed at the Canadian Pacific railway Perth carshops during the past six months has been very large, owing to the erection of box cars, of which three and four per day are being built. At present there are about fifty cars loaded with shop material, principally lumber, at the station.

—The Bobcaygeon *Independent* says:—The water in the lakes has kept up well, and the navigation is excellent. It has been an exceptionally good year for the drives of logs coming down. The dams put up by the Provincial Government in the back country work admirably, and the high level of the water will probably be maintained during the season.

—Lumbering operations have not had all their hindrances during the late severe winter. Rafts passing through minor streams find the supply of water extremely short. McLaren on Black Creek, has been compelled to abandon 8,000 of his logs, one-fourth of his entire raft. He brought the whole to within four miles of Lake Dore, but could only get 24,000 through.

—McLaren's drive of Black Creek, inlet of Lake Dore, has, in part entered Snake River. It was found necessary to leave a quarter of the drive, 8,000 logs, up the creek, four miles from its mouth. Low water is seriously interfering with the forwarding of timber on all the smaller streams. A small drive belonging to Johnston Bros., of Ottawa, is now passing through the slide at Calumet.

—In Montreal an active business is being done in lumber, owing to the extensive building operations which are now being conducted. There are no changes to note in prices although the mills have made an advance in some descriptions. The present briskness has every appearance of continuing. Shipments in bulk have so far been in very limited compass; but the trade of the season is not expected to manifest any diminution, if, indeed, it does not show an advance.

—A Detroit dealer gave his views on the future lumber business of his model city recently as follows: "Michigan pine is growing very scarce and in five years we will have to draw from Canada. Detroit is accessible to Georgian Bay and other large timber tracts. All the waste of a saw mill can be utilized in a city like this and the good lumber easily distributed. We will have big mills on the river in a few years." The same might be said of the Lake cities.

—The C. P. R. have got all Messrs. Timmins & Gorman's Whanapitae square timber conveyed to Pipineauville where it is now being rafted up to be taken to the Quebec market. Mr. Thomas Hall, who has charge of taking the timber from Papineauville to Quebec, in speaking of the lumber business of the Nipissing district, said that nearly all the logs got out in that district will be got safely to the mills. Out of the whole season's cut only about 20,000 will be stuck in South River.

As five of Gilmour & Co.'s men were proceeding down the river below Ranney's Falls, near Trenton, a few days ago, their boat struck a swell and upset, and they were thrown into the water. Three of their number were carried down the river about half a mile, and reached the shore. The remaining two grabbed the boat when it went over and clung to it, and landed safely on Meyer' Island, about one mile and a half distant.

—Whilst a youth named Edward Henry was removing some saw-dust from a place near the belt which drove the shingle machine of Messrs. Berney's saw mill at Thompsonville, a short time ago, he was caught by the belt and his leg broken and torn from his body. His brother found him shortly after in a state of sensibility and able to speak to him. Doctors Armstrong and Cheffey removed the broken part of the thigh-bone from the socket, and shortly after death put an end to his sufferings.

—Thos. W. Hotchkiss, U.S. Consul, at Ottawa, Ont., reports that the supply of oak timber in Canada is practically exhausted and that for some time past special lots of oak lumber have been obtained from the United States for Canadian uses. Oak is scheduled in the Canadian tariff among "free goods" but a recent customs decision is to the effect that all oak sawn to a special size, or for any special use is—dutiable. Practically, there is a duty of 25 per cent. on oak lumber going into Canada.

—The old Toronto wholesale lumber firm of McCool, Boyle & Wilson has been dissolved, and in its stead a new firm under the name of McCraney & McCool will conduct the business in the future. Mr. McCraney hails from Oakville, and is a thoroughly experienced and well known lumberman. Mr. McCool has been engaged in the business since his boyhood, and evidently what he does not know about lumber is hardly worth finding out. THE LUMBERMAN bespeaks for the new firm a liberal support.

—The Canadian Pacific Railroad Company carried out of Ottawa last year 75,000,000 feet of lumber and the Canadian Atlantic Railroad Company about a similar amount, making the amount carried out of the Ottawa by rail last year about 150,000,000 feet out of a total cut of somewhat over 350,000,000 feet. Two-thirds of this amount shipped by rail went to the United States. The C.P.R. have secured several large contracts for carrying lumber from Ottawa to points in the United States this season.

—Various tales come back from the Georgian Bay country to the effect that Lawton Bros. are cutting some pretty slick pine from their Blind river holdings. The old concern of Lawton Bros., of Toledo, the senior member of which died last fall, has been reorganized under the same name and will be continued by J. R. and S. H. Lawton. The former is now over at the Canadian mill, arranging for forwarding the output to the Toledo yards. J. R. says: "You just wait, and I'll show you some cord pine that didn't grow on the Cass river." —*Chicago Timberman.*

—The following members called upon Sir John Macdonald recently to impress upon the Government the desirability of placing a duty upon Elm logs:—Messrs. Moncreiff, Brown, McKay, Roome, Sproule, Ferguson (Welland), Porter, Cockburn, Wright, Perley, Ward, White (Renfrew), Gordon, Bergin, Coughlin, Stevenson and Guillett. The case was presented by Mr. Adam Brown, and several members of the deputation spoke in support of the duty. The Premier promised to consider the matter.

—The late rains has proved of wonderful service in getting out the square timber and logs on the different streams. It was feared that Charette's drive of Perley & Pattee's on the Black River would be stuck, and the recent heavy rains have so raised the water that all fears have been dissipated. This drive is an extensive one of fully 10,000 logs. Alexander Fraser's 40,000 saw logs drive on the Schyan is coming down nicely, the recent rains swelling the stream to considerable dimentions. Fears were at one time entertained that these logs would be stuck owing to the water falling so fast. R. & J. White's two rafts of timber got out on Moose Creek near the head of Big Lake is coming down in good style in charge of Mr. Lalonde. This timber is of the make of 1885-6. Reports heard from all points say very little, if any, of the cut of this year will be left behind, which fact is attributed to the recent copious rains, which have boomed the creeks and swelled the rivers.

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—While McLaren & Edwards' gang of rivermen were working at a big dam at an exceedingly dangerous point on the Falls at No. 1 Mill, the jam suddenly broke away, precipitating half-a-dozen men into the water—right in the middle of the jam. One strapping fellow, and among the best of the gang, named David Saiyen, was killed almost instantly, his head being cut open. He came from Ripon, Que., and was about 30 years of age. His body got entangled beneath the logs, and was not got out for half an hour afterwards. Another man named John Ferguson, of Carleton Place, was very badly crushed between two logs, and would undoubtedly have shared the same fate as poor Saigen but for the timely assistance of Mr. John Anable, who kept the logs apart with his pole. Ferguson was taken to the tents and medical aid summoned. Saiyen's body was taken to Mr. Donaldson's, coffined, and sent to his friends. His comrades felt their loss keenly. It was a miracle more of them were not killed.—*Gazette.*

—The two mills of the Langford Lumber Company located at Langford, 100 miles north of Toronto, are both in full blast with a cutting capacity of 120,000 a day. The stock of 16,000,000 feet is now all down out of Black river into Lake St. John, at the mills. The Black river and Head river drives have all got out earlier than former years by about 10 days. Water for driving and sorting purposes is ample. The stock wintered here and also this year's cut has all been sold to the Skillings, Whitneys & Barnes Lumber Company, of Ogdensburg, N. Y. The stock held over is being shipped very rapidly, a full train of 22 cars having left the yards every day during the last ten. William Thompson, President of the Langdon Lumber Company, has been making extensive improvements and purchases during the spring on his own account. He has built a fine shingle mill in Orillia, and a handsome steamer to ply on Lake Couchiching, between Orillia, Langford and Washago. He also purchased a mill and limit of the estate of the late R. C. Smith, which he purposes stocking next season.

—The lumbermen of the Chaudiere have, through Mr. Perley, M.P., represented to the Government the necessity of replacing the present suspension bridge across the Ottawa river, at the Chaudiere Falls, with a more substantial structure better able to accommodate the greatly increased amount of traffic which passes over it daily. The lumbermen represent that the roadways leading to the bridge, and in fact, all the roadways on the Chaudiere have been repaired and reconstructed to accommodate the greatly increased traffic, while the bridge across the river is totally inadequate for the heavy traffic over it. They represent that the bridge has now been in use about thirty years and is not in good repair, and although plenty wide enough for the traffic which passed over it at the time of its construction, it is now far too narrow and should be replaced by a more substantial and wider bridge. It is understood that the demands of the lumbermen are being favorably considered by the Government, and that ere long a new iron bridge will span the Ottawa in the place of the old Suspension Bridge.—*Journal.*

—Robt. Campbell, M.P., died at his residence, Eganville, on June 14th, of disease of the liver, complicated with kidney affections. Mr. Campbell was the eldest son of Dugald Campbell, an Argyleshire man, and was born at Glenurquhart, Argyleshire, Scotland, March 20th, 1818. He was therefore over sixty-nine years of age. Practically he was a Canadian as he came with his parents to Canada when but two years old. His parents settled in Lochiel, Glengarry, in 1820. Mr. Campbell began business life as a clerk in the employ of the late John Egan, the lumber king of the Bonnechere, and was one of his most valued employees. He married at Hawkesbury in 1845, Miss Elizabeth Lothian. After Mr. Egan's death, Mr. Campbell became manager of his estate, and finally started in the lumber business himself, establishing what has been up to now the firm of Robert Campbell & Sons. He ran for South Renfrew in 1878, but was defeated by Mr. William Bannerman, by something over 200 majority. In 1882 he was successful, being elected over Mr. Bannerman by 154 votes, and in February last was again returned, defeating Mr. Ferguson by 125 majority. Mr. Campbell was not an active parliamentarian, but was much respected personally by his fellow-members.

Please mention this paper when writing to advertisers.

QUEBEC.

—G. W. L. French, is re-erecting his saw mill at Island Brook.

—Dunbar Beaudry, sash and door factory, Montreal, has assigned in trust.

—An international congress of Canadian and American Boards of Trade will be held in Montreal in June.

Quebec market is showing a little more life, but shippers do not seem to be in want of much tonnage; one or two ships have been placed to load timber at $4.60 and $4.70.

—The Cookshire Mill Co., at Cookshire, are running their mill day and night. The river for a mile above the mill is completely covered from bank to bank with floating logs.

—The Eddy Manufacturing Company's new paper pail factory back of their match factory, Hull, is being rushed up. The contractor expects to complete the stone works by the end of June. The roof, it is understood, will be similar to the roofs on the company's saw mills.

—G. W. L. French, of Island Brook, who had the ill luck to lose his saw mill by fire a short time ago, is just now commencing to rebuild. His loss is a very severe one, as his insurance was not more than two-fifths of its value, and then loss of this year's work will add still more to his loss.

—The Supervisor of Timber Cullers at Quebec gives the following statement of timber, staves, masts and spars culled at that port this season and last up to 1st June. Basswood, butternut and tamarac are items which are left blank in both years:—

	1886.	1887.
Waney White Pine	45,358	127,965
White Pine	11,049	15,840
Red Pine	179	269
Oak	165,012	174,295
Elm	59,907	.....
Ash	4,707	18,274
Basswood	.....	.....
Butternut	.....	.....
Tamarac	.....	.....
Birch and Maple	147,742	43,462
Masts and Bowsprits	—pcs.	—pcs.
Spars	—pcs.	—pcs.
Std. Staves	3.8.3.20	.....
W. I. Staves	8.1.2.16	.....

NOVA SCOTIA.

—D. Wright & Co. manufactured a large number of spars this winter at their camp in Ogemaw county. Several car loads will be shipped to Halifax, N.S. They are the full length of two cars, and the largest of them are fully 18 inches in diameter at the top.

—The projectors of the big timber raft in Nova Scotia, which it is proposed to tow to Boston or New York, and thereby avoid both the duty on manufactured lumber and the freights by vessels, have not lost courage, it appears, on account of their failure to launch the huge craft from the ways on which it was built last season. In fact, they are building it some 200 feet longer, with something like 500,000 feet more logs than before. The only hitch in the launching last year was the weakness of ways, which could not support the immense weight resting on them. As this will be amply guarded against next time, there is but little doubt but that the leviathian will be successfully floated. The matter of towing it 400 or 500 miles in the open sea is, however, an unsolved problem. If it should happen to strike one of the storms that sweep this coast at frequent intervals, even in the summer season, the sticks would likely soon be piled up on the beaches from the Bay of Fundy to Cape Cod.

NEW BRUNSWICK.

—About 80,000,000 feet of logs will be hung up in the upper St. John in New Brunswick.

—St. John, N. B., exported for May, deals, lumber and timber to the value of $382,598.

—Edgar Taylor, aged 33 years, was killed in a saw mill at Botsford Parish, June 1st. His head came in contact with a saw and was cut in two.

—Mr. Thos. W. Flett has made an arrangement to start the Flett saw mill at Nelson this season, and is now busily engaged with a large gang of men fitting her up.

—Very few logs are in the boom on the Restigouche near Campbellton. The freshet is yet very high and lumbermen are afraid to drive. The boom is being run by Mr. Wm. Bryenton, of Derby.

—Of an anticipated cut of 150,000,000 on the St. John River it is improbable that over 110,000,000 feet will be realized, although this quantity will no doubt be increased by the 17,000,000 old logs held over.

Nearly all the lumber expected has come into the north-west boom, at Newcastle, only one drive having stuck. There will be about twelve million rafted this year. The logs are said to be of better quality than last year.

Advices from the Aroostook state that there is a big jam of logs at Aroostook Falls, and between twenty and twenty-five million feet of logs will be hung up for the season in consequence, as the water is falling very fast. This will seriously inconvenience some of the St. John millmen and will materially reduce the season's cut. On the upper waters of the St. John about eight million logs will be hung up.

MANITOBA AND NORTH-WEST

Mr. McArthur reports seeing a quantity of white on the North Fork of the Saskatchewan during his recent exploring [illegible]

It is stated that the Normoi Mills' (Rat Portage) average cut for a week recently was 75,000 feet of lumber, 1[illegible] of lath and 34,000 shingles daily.

The new C.P.R. hotel at Banff. is being pushed ahead rapidly. About 750,000 feet of lumber and 300,000 [illegible] will be used in the construction.

—Messrs. Hoyt and Sage, of the Alberta Lumber Co., report disastrous results to settlers from fire which have been raging north and west of the Crossing. Two settlers were burnt out and barely escaped with their lives.

—Dennis Shea, foreman of a pile driver, while releasing some logs in a jam at Banff, N. W. T., fell into the river, and was drowned in sight of his men, who were unable to reach him. He was 28 years of age and unmarried.

—The Winnipeg *Free Press* states that British Columbia lumber is becoming a prime favorite with carpenters and cabinet makers in that city for certain classes of work. Quantities of pine and cedar are being imported. Its advantage over the Manitoba timber is that much larger boards can be obtained. For instance a board three feet broad and sixteen long without a flaw or knot in it, was found in a consignment from British Columbia.

—The Calgary N.W.T., *Herald* gives the following particulars regarding the new saw mills just erected by the Eau Claire & Bow River Lumber Co., at that place: It is a splendid structure. The boiler house and engine room is of solid stone 32x 46, walls two feet thick. The engine is 75 horse power. The most conspicuous thing about the place is a very substantial structure, 23x122, and its capacity is 40,000 feet per day, though with large timber it would run 100,000. The machinery consists of a rotary saw, gang saw, lath mill, clapboard machine and shingle machine. The intention is to manufacture every kind of building lumber and woodwork, so that it will not be necessary to import any manufactured lumber. Mr. Prince thinks prices will remain pretty firm, though they may be able to make a slight reduction on present prices and there will be no danger of the supply giving out. The Company intend manufacturing 2,000,000 feet this summer. Rough lumber will be sold at about $20; shingles $3; lath $3. The Company have invested about $40,000 and they want to get some of it back this year. The mill will give employment to about 50 men. The company have ten timber limits, equalling 500 square miles. They have had gangs of men at work in the woods for a year and two million feet of logs have been taken out. The gangs have been working at Canmore and Silver City, about 60 men being employed. The company's booms and arrangements for utilizing the Bow are on a large and most complete scale, and it is more than likely that they will utilize the fine water power at no distant day, not only for the lumber business but for flouring and woollen mills. The members of the company are as follows: President, J. G. Thorp; Vice-President, O. H. Ingram; Secretary-Treas., V. W. Bayless; ass.-sec.-treas., E. B. Putnam; P. A. Prince, Manager. The headquarters of the Company is San Claire, Wis., where the officers reside.

UNITED STATES.

—Eastern spruce is reported very scarce in New York.

—There is a mill at Tacoma W. T. which cuts 400,000 feet a day.

—The loss by the recent fires in Michigan is estimated 7,000,000 dollars.

—A good deal of summer logging is going on this year in the Saginaw Valley.

—Eastern demand for lumber is good and commercial men have little difficulty in securing favorable orders.

—Something of a famine of shingles is reported. There has been a shortage in this line in the Eastern markets all the spring.

—The lumber receipts at Toledo, Ohio, for the season of 1886-87 were 30,000,000 feet more than the previous season.

The Canada Lumberman

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PETERBOROUGH, ONT., JULY, 1887.

EDITORIAL COMMENT.

THE *Timber Trades Journal* of London, Eng., says :—"The CANADA LUMBERMEN has vastly improved in every way since Mr. A. G. Mortimer has taken it in hand."

* * *

FROM out the list of goods brought into Canada last year free of duty we find the following :—Woods manufactured, including walnut, pitch pine, cedar, oak, mahogany, $226,000 ; logs, $493,200.

* * *

THE *Timber Trades Journal*, of Chicago, has presented itself in new and enlarged shape, and from present appearances the new proprietors are going to make it second to no class journal in that country, where trade publications are becoming as numerous as flies in July. Chicago is one of the leading lumber centres of the world, and can claim credit for having three of the ablest representative papers to be found anywhere.

* * *

THE Mississippi Valley *Lumberman* comes to hand in an entirely new dress and now presents a very handsome appearance. The new management evidently not only understand how to turn out a sound and practical trade paper, but also demonstrate their knowledge of the "Art Preservative" in a way that does them credit. The American papers *do* put on a great deal of style typographically, but the CANADA LUMBERMAN is not going to fall behind as will soon be demonstrated. Success to the *M. V. L.*

* * *

THE increased export duty on pine logs does not seem to prevent exportation to the mills in the United States, though it has undoubtedly put a strong check upon such operations. The export, we learn, is still taking place, especially from the Nipissing District. This trade should be carefully watched, both to make sure that the payment of duty is not evaded and also to obtain accurate statistics of its extent. If it is found that the present duties do not suffice to confine this practice within narrow limits a further advance should be made when Parliament next meets.

* * *

THE value of the lumber exported by Canada from 1873 to 1886 inclusive, exceeded 310,000,000. Of this amount the United States bought about $110,000,000 worth, while the exports to Great Britain were valued at $177,000,000. But the Eastern States in spite of a prohibitory revenue tax of $2 per 1,000 feet, is gradually becoming Canada's chief market, particularly for lumber upon which labor is expended, and which, therefore, is the more valuable to Canada. In years prior to 1880 Great Britain's purchase of lumber exceeded that of the United States from Canada by over $12,000,000, while in 1885 Great Britain's purchases amounted to $8,577,581, against $9,355,591 by the United States.

* * *

BILL NYE takes occasion to express himself in a soul-stirring manner in a recent letter on the subject of forest denuding. In one of his erudite paragraphs he says : "Driven from my quarters by the heat, and the torturing remorse which sometimes comes to a man who has fished not wisely but too well, I strolled forth for some time beneath the gathering wings of the great quiet night, and finally backed up against a softly-sighing pine, to scratch my blotched and corrugated back between the shoulder blades, where no human hand could reach. I look forward with horror to the day when our forest trees shall be utterly swept from the face of the earth, and when, with all the agony shed over our race by the mosquito, we will not have a forest tree to our backs."

* * *

ANOTHER dispute seems to have arisen between the Dominion and Ontario Governments which will in all probability be fought out in the courts. It appears that some years ago the Crown Lands Department of Ontario sold a number of timber limits on the Georgian Bay, which the purchasers have failed to develop, preferring to hold them on speculation. Of late, however, a move has been made to sell off these limits, but it has recently transpired that the Dominion government had laid out eighty square miles of this country as an Indian reserve, and sold the pine on the same to certain lumbermen. The treaty under which the limits were converted into Indian reserves was made in 1850, so that in all probability those who have bought these limits will find that they have no legal right to hold them.

* * *

WE cannot congratulate the Dominion Government on having yielded to the opposition against the proposed export duty on elm logs. It is not perhaps a matter of great importance to many of our friends, but it is a bad precedent, and a reversal of the salutary principle that has apparently been adopted, so that it has an importance reaching far beyond the interests of those immediately concerned. Even in its more restricted aspect it is an unfortunate step backward. There are Canadian manufacturers buying elm to convert into staves, &c., and it is not a wise policy to allow this raw material to be taken freely abroad to be there manufactured, while the article manufactured by our own people is subject to an import duty. Nor will the farmers and others having elm logs to sell find themselves gainers in the long run by this policy, for if their home factories were free from one-sided competition they would be able to give the best price for the raw material. This mistake should be rectified next session.

* * *

SPEAKING of the steady advance in pine lumber a Toronto operator made a true remark when he said that while all other material could be reproduced pine when once exhausted could never be replaced. At the present rapid encroaches on this class of timber it will only be a matter of a few years before the supply will become exhausted, and then the question which has already arisen regarding a substitute will become a live question indeed. What this substitute will be is hard to determine, but we venture the opinion that iron will be brought into requisition in building operations just as rapidly as the supply of pine becomes exhausted. Of course this will make the cost of building increase, but in the adoption of iron in many places where pine is now used, we may safely look forward to more durable and substantial structures, and the value of property built in that way will be proportionately increased. The progress of this change, no matter what shape it way assume, will be slow, and as it gradually comes about, it will be observed to have many peculiar and interesting features.

* * *

WE have heard numerous complaints of late from Toronto and elsewhere regarding the scarcity of cars for the shipment of lumber, and it is a matter which demands the immediate attention of the different railway companies interested. One firm in particular informed us about the middle of June that they were then nearly five weeks behind with their orders, and through not being able to ship their stock customers were compelled to cancel their orders. It is said that this state of affairs has existed, to a greater or less extent, since January, and as there is still a busier season near at hand, it is feared that the difficulty now experienced may increase instead of diminish. From what we can learn the greatest difficulty is found in Grand Trunk shipments, and the feeling is freely expressed that too little attention is paid to this matter by the authorities of that line. In proof of this statement it is claimed that it is no uncommon occurrence to see a half dozen or more loaded cars of lumber standing for days on sidings awaiting the convenience of the company before unloading, while at the same time other shippers are urging their claim for cars, and are told that there are none to be had. We trust that this mild hint may have its desired effect, and that this serious inconvenience may hereafter be averted.

* * *

IN conversation with about a score of Toronto wholesale lumbermen a fortnight ago THE LUMBERMAN found that trade in the Queen City was just about all that could be desired, and that the then proposed strike of the carpenters and bricklayers was the only thing calculated to cause a feeling of uneasiness among the trade. "Let the dispute between master and workman be amicably settled and we can take care of ourselves in good shape," was the opinion expressed by a leading dealer, and endorsed by many others. But from later accounts it has become apparent that the hope then expressed has not been realized. The strike which is now going on is calculated to impede, in fact almost cease, building operations in Toronto for some time to come, and as a consequence the lumbermen will be heavy losers. It is indeed unfortunate that hardly a season can pass by without disputes arising between capital and labor, and through nearsightedness, often on the part of both employer and workman, a city's trade is seriously injured, and those who are in no way to blame are forced to suffer, and in more cases than one driven to the wall in consequence. The sooner some improved method is adopted to remove disaffections in the labor market, and compromise disputes, the sooner will stagnant money and enterprise be brought out and utilized to build up our naturally prosperous country.

* * *

THE establishment of a new department in the Government of the Dominion, that of Trade and Commerce, will be regarded by the lumber trade as having great possibilities for good, of course till it is put in operation and its scope and duties are deened by practical experience, the effect of its action can only be conjectured. It can hardly fail to do some good to the lumbering and kindred industries, and if energetically but judiciously conducted it may be made of very great benefit. By facilitating the opening of new channels of commerce, by collecting and disseminating information as to the special requirements of foreign markets, by establishing commercial relations with other countries and in a variety of similar ways, the Department of Trade and Commerce may give a great impetus to the trade of the Dominion, and there is no Canadian industry that is more susceptible of expansion by such means than lumbering and the timber trades of various kind. Except at London and Paris the Dominion has no officials from whom such reports can be obtained as are supplied by the Imperial consular service. These valuable reports are however open to the public. It is true they are seldom seen in Canada, and the new department could ensure them greater publicity, could no doubt obtain them in advance and probably would find no difficulty in having the attention of consuls and agents called to such branches of trade as are of especial importance to us. They could also collect within Canada itself information and statistics bearing on trade matters, compile them in a useful form and give them publicity. In many ways which might be suggested and which practical experience will point out, the new Department of Trade and Commerce can be made of material service in the extension of our industries and not least of those which we represent.

* * *

IN the May issue of this journal we pointed out the advantages to be derived from opening out new markets in the West Indies and Australia for the products of the Canadian forests. We then realized that our remarks only covered a limited field, and that equally as much could be said regarding the inducements held out by other countries for the utilization of our lumber and manufactured products. From the official report of the Canadian representatives to the late Colonial Exhibition we have been particularly impressed with the suggestions thrown out referring to the advantages of commercial trade with South Africa. Doubtless at first thought this may appear to many to be looking altogether too far away for a desirable market, but on reflection we think that the scheme will prove to be a feasable one. The South African Colonies, including the Cape of Good Hope, cover an area of over 500,000 square miles, and have a population of white and colored races amounting to about 2,860,000, but about 800,000 square miles are directly tributary to British trade and influence, and the total population of this would be considerably over 3,000,000. It the modern history of the African continent is studied it will be seen that civilization has extended more rapidly and steadily from the Southern, or temperate regions, than from any other quarter, so that the trade of Africa can be best cultivated for the future by making the Cape or Natal the chief base of operations. There can be little doubt but that in the future the American continent will supply a large quantity of goods to Africa, and as manufactured and unmanufactured woods is one of the greatest necessities of that country we cannot help but think that a large and profitable trade might be worked up by Canadians in this market. From the Baltic ports lumber is already being largely shipped, and from the United States we also find large shipments of various manufactured goods. A return cargo of wool can readily be obtained for the return trip, which makes such an enterprise doubly remunerative. Africa is not now, and will not be for a long time to come, if ever, a great manufacturing country, and there are certain manufactures wanted there, notably building materials, which this country can produce to better advantage than any other. The Americans, stimulated by the reports of their consuls, have for some years recognized this and have been pushing trade to good effect. It is to be hoped that Canada will not lose the advantages of an early start in this direction. If such a direct trade were opened the Dominion Government would, we have no doubt, support the line of steamers or vessels with a sudsidy.

It is a pity that there should not appear in the estimates an appropriation for subsidizing a line of steamers to the West Indies, for the encouragement of such commerce would have the undoubted effect of increasing the export of lumber and wooden goods to the Islands. The reason given by Sir Chas. Tupper for delay was that it would be premature and possibly injurious to take any action in the matter until the pending negotiations with Spain are completed, as he hoped would shortly be the case. We trust that by next year such satisfactory commercial treaties will have been concluded with Spain and possibly with France, as to open up new channels of trade for the Canadian lumber interest, and at the same time that the obstacle to establishing a line of steamers to the West Indies may be removed.

* * *

The decision of the Supreme Court of Canada in the case of the St. Catharines Milling and Lumber Company is one of considerable interest- It will be remembered that the company obtained from the Dominion Government timber land in the disputed territory of Canada, the Canada authorities claiming to deal with the property because they had acquired the Indian title. The Ontario courts, have upheld the right of the Province and now by a majority of four to two judges, the Supreme Court, the highest tribunal in the Dominion, has confirmed their judgment, maintaining that the Indian title is only extinguished not acquired and that the Province, not the Dominion, represents the Crown and enjoys its rights. It is said, and is probably true, that the case will be taken to the Judicial Committee of the Imperial Privy Council. This is the last resort and must settle the question definitely and finally. Thus an end must soon be put to a state of uncertainty from disputed title that has been very inconvenient to the lumbermen of Northwestern Ontario.

PROTECTION, COMMERCIAL UNION, OR LIMITED RECIPROCITY, WHICH ?

There has arisen lately considerable discussion as regards commercial relations between Canada and the United States. Some are advocating absolute commercial union between the two countries with no custom houses on the international boundary, and the same tariff as against the rest of the world. Some on the other hand would maintain, and even push still further, the policy adopted both at Ottawa and Washington of protecting home productions against foreign competition even between the two countries. The advocates of both plans are doing their utmost to advance their views and gain converts to their opinions. And between the two extremes there are many who without going the length of unrestricted commercial interchange between the two countries, would be glad to see some of the restrictions removed and mutual trade fostered and encouraged. With the object of ascertaining the views of the lumber trade on this important issue, a representative of this journal has during the past month, interviewed a number of representative lumbermen in Ontario. The original intention was to publish the substance of each interview separately, but after inspecting our note book it was found that the opinion of one was in reality the opinion of all, therefore it only becomes necessary to set forth the views as expressed in a general way. From among the wholesale lumbermen of Toronto an expression of opinion was given by the following well-known gentlemen : Messrs. J. M. Dollar, manager Ontario Lumber Co. ; Tennant & Co. ; F. N. Tennant ; A. H. Campbell, of A. H. Campbell & Co. ; William Kerr, of Christie, Kerr & Co. ; Mr. Willmott, of Willmott & McIntosh ; Mr. Scott, of Scott, Scott & Co. ; Mr. Donagh, of Donagh & Oliver ; Mr. Hargreaves, of Hargreaves & Co. ; Frank Thorpe ; Mr. McCraney, of McCraney & McCool, and Wm. Leak. In Hamilton we called upon Messrs. Flatt & Bradley ; R. Cruickshank ; Robt. Thomson and Patterson Bros. When we say that every member of the trade visited expressed himself in favor of commercial union, we mean that they were unanimous in the opinion that from a lumberman's standpoint such a treaty would be of incalculable advantage to the trade in general. The views as expressed on this question can be summed up in a few words. The rapid destruction of United States forests has made it nesessary for Americans to look to Canada for a large percentage of their lumber. The production in this country is even now much larger than the home market requires, and naturally enough we turn our attention to the most contiguous outside market. This market is found in the Eastern States. Under the present protective tariff there is an import duty of $2 per thousand on manufactured lumber going into the United States, and an export duty of $2 per thousand feet on pine logs. This import duty, it is claimed, comes out of the pockets of the Canadian manufacturers, for the reason that Canadian shippers are compelled to lay down their lumber on the other side as cheap as the same article can be obtained at Tonawanda or any other point. If both the import and export duties were removed it is but natural to conclude that a much larger and more profitable market would be opened out, an advantage alike to the American as well as the Canadian. Such an arrangement would at once enhance the value of timber lands, and would induce capitalists from both sides of the line to make heavy investments. It would, to a great extent at least, do away with the export of saw logs, as it would be found far more profitable to bring the saw mill to the timber than the timber to the saw mill. New mills would spring up rapidly, and additional employment would be found for thousands of men who are compelled to seek work elsewhere, and in a word it would give an incentive to the lumber business of Canada such as has yet never been realized. Under a commercial treaty such as is here referred to the probability is that Manitoba and the Northwest would be largely supplied from Minneapolis and other contiguous points ; the Western peninsula of Ontario from Michigan ; and the eastern markets from Ontario, Quebec and the other eastern Provinces. Then also would be found a ready market for our course lumber and mill culls, which at the present time are a drug on the market, as owing to the import duty it is impossible to profitably ship them abroad. The opinion seems to be general that such a step would not materially, if at all, affect the present price of lumber. It might have a tendency towards slightly higher rates, but not enough to influence the market to any extent.

Till the year 1867 there had been in force since 1854 a treaty establishing limited reciprocity between Canada and the United States. But this arrangement was then terminated by our neighbors for reasons which they deemed sufficient. Under this reciprocity as it then existed there were no duties but freedom of interchange between the two countries as regards the products of the forests, the farm, the fisheries and the mine—the raw materials as they may be called for the food, the clothing and the habitations of the people. While we do not assume to voice the whole lumber trade of Canada, from what we can learn from those with whom we have conversed, the conclusion arrived at is that a treaty similar in every respect to the one just referred to, is all that is really required by the lumbermen of this country, as we have been repeatedly informed that the trade was never so prosperous as during the existence of the old treaty. The advocates of the protection of native industries and the advocates of a zollverein, however much they differ, may unite in accepting a return to reciprocity as it existed from 1854 to 1867. Many in both countries are in favor of such interchange of produce and would gladly see it revived whether it went further or not. To the lumbermen it would be of as much advantage as unrestricted commercial union ; removing the duties on what they export to the other side of the line and the duties they have to pay on any food, such as pork for instance, that they import. Such limited reciprocity might be adopted without difficulty or much delay. Indeed the Canadian statute book already contains a measure authorizing the executive to adopt it. One objection made to "commercial union" does not apply to this more limited arrangement, for both countries import little of such goods except from each other and may easily make them free of duty, so that the question of Canada discriminating against the mother country is not involved. Neither would the other difficulty arise as to the equitable division of the custom receipts between the two countries. In fact there is no serious obstacle in the way of a speedy return to a limited reciprocity, while on the other hand there are strong barriers to surmount before the people of either country will care to express themselves favorably on the question of commercial union.

BUSINESS NOTICES.

One of the neatest machine catalogues issued this year is that of the Tanite Company, Stroudsburg, Pa., describing its specialties in Emery wheels, grinding machinery, gummers, &c.

We have received from Messrs. Butterworth & Lowe, Grand Rapids, Mich., their new catalogue of cars for logging roads. It is a neat production and not only contains descriptions and illustrations of all the latest productions in logging cars, but also some valuable tables, rules, data, etc., which we have no doubt will be of value to lumbermen and others. This catalogue will be cheerfully mailed to any of our readers who are contemplating a purchase in this line.

Through the courtesy of Mr. J. H. Walker. manager of the Toronto branch of the Canadian Rubber Company, we were recently shown through the various departments of the Toronto house, and was much interested not only in the large and varied stock of goods there shown but also in the valuable information given us concerning the extensive proportions of this business. We were informed that the business done last year by this company aggregated $2,000,000, whi'e employment was given to nearly 1000 operatives. The Toronto branch alone, through the indefatigable efforts of the Company's popular manager, done a business of one half million dollars. We have pleasure in again directing attention to the Company's advt. on another page.

We have much pleasure in dire[illegible] nouncements made in this issue of [illegible] representative whol[illegible] nouncement will increase f[illegible] to have a classified list of all or nearly all the leading lumber firms in Canada. The [illegible] ment of special interest. W[illegible] in every part of Canada cards similar [illegible] this issue, and shall be pleased to furnish quotations promptly

On another page will be found an advertisement from Mr James T. Milne. of Peterborough, which appears for the first time in this issue. This gentleman has con[illegible] facture of Milne's Oscillating Steam Gang [illegible] Band Mill. We have examined models and [illegible] new device in saw milling and consider it a valuable improvement on anything of the kind yet introduced. This machine has a substantial straight column frame, containing the foundation, engine-power, sawing resistance and os[illegible] ment. The sawing movement does away entirely with side rods and slides, which not only [illegible] reomes a great trouble and expense, but also increases the power and speed. Placing the engine under the saw frame is also a great advantage, in giving steam and steam-cushion to th[illegible] the self-acting press rolls, taking their power from main column under saw floor, and the device for cutting cro[illegible] logs, are each of themselves an improvement on anything yet introduced. Mr. Milne is a practical millwright [illegible] man, and the merits of his machine are worthy of his long and practical experience.

EUROPEAN NOTES.

The subject of an exchange for the timber trade is again receiving considerable attention in London.

Glasgow trade is reported as being in a very unsatisfactory condition. "Nothing doing" is the report that meets one at almost every turn.

At at auction sale held in Glasgow, on the 18th May, Quebec deals realized the following figures according to Brown's *Export List :* Quebec 1st yellow deals—

12 ft.	7/10 × 3	3s 11 d
12 ft.	7/10 × 3	2s 1½d
11 ft.	7/10 × 3	2s 0½d
10 ft.	7/10 × 3	1s 11½d
9 ft.	7/10 × 3	1s 9 d
9 ft.	11 × 3	2s 0½d
10/14 ft.	6 × 2	2s 1½d

On the same occasion, Quebec second yellow pine deals ten by fourteen feet, six by two inches, brought one and four pence half penny.

The English import of hewn timber for May was 174,477 loads, as compared with 145,041 loads for the corresponding month of 1886. For the five months ending May 31st, the statistics give 572,066 loads for '87 as compared with 489,819 loads for '86. Taking sawn timber for May the increase is still larger, the figures being 315,723 loads, as compared with 221,983. For the five months ending the 31st ult., the returns give 655,855 loads, as compared with 499,825, [illegible] 156,030 loads for 1887. The increase in sawn timber mainly goes from Russia, Norway, and Sweden, the former getting the larger portion of the increase. For the month of May, staves show a larger importation by 5,700 pieces than in May of the previous year, and for the five months the large increase of 9,642 pieces must be credited to them. Mahogany, on the other hand, is the only item showing a lessened quantity, the importation being 3,815 tons for May, 1887, as against 4,431 for the previous year. For the five months ending the 31st ult., 19,835 tons have been received, as compared with 21,589 tons for 1886.

The *Timber Trades Journal* speaking of London trade prospects and other things, says :—While prices of the limited quantity of sale goods offered at the "Baltic" each succeeding week appear to be hardening, complaints of dull trade, or rather no trade at all, are certainly not diminishing ; but rather on the increase, if that were possibler. Now, how to fit these two things together is the puzzle. Nobody can point to a scarcity of any one commodity, and give an illustration of the stagnation on one hand, and the seeming advance on the other, for all, or nearly all, the goods sold last week exhibited an improvement. Can it be the continental drain on the Baltic stocks, or a colonial demand that has been under cover of the low freights restoring the level? Fortunately, according to Canadian reports, there is a strong demand arising in the Southern States for whitewood, and spruce of the higher grades is already beginning to feel the effects of this increased demand, so that as it goes out of consumption [illegible] market may possibly be found for it. If [illegible] will sell here, it should be the better class, which is also [illegible] the "States" are apparently enquiring for.

TRADE REVIEW.

TORONTO.

From Our Own Correspondent.

The retail trade is fairly active with room for improvement. Car lots are somewhat slow in moving as builders are chary of purchasing more than will supply their immediate wants. The strike of the carpenters along with that of the plasterers, lathers and plasterers' laborers, have somewhat unsettled trade. Prices remain firm and are on the whole well maintained—very little cutting being done. Dry lumber is fast disappearing. Our market is almost omnivorous, nearly every description of lumber finding a buyer.

What is badly required in this city are extensive piling ground affording every facility to the lumberman in the handling of his lumber, and to which mill men can ship stocks to be sold on commission. The growth of Toronto in the past and its present rapid strides warrant such an undertaking. In a few years the very limited piling ground now afforded by the R. R. Co.'s, will be required for other purposes than piling lumber, and, unless a district be set apart for lumber, our lumber dealers will find themselves hampered in their endeavors to transact business. The present very slow handling of lumber along the Esplanade prevents the R. R. Co.'s from getting greater use of their rolling stock, as well as causing a hindrance to traffic generally. At the present time there are in Toronto over 600 cars of merchandize of all kinds under load, some of which have been standing since May. Officials from Montreal are making enquiries as to the cause of detention. They are not difficult to find. Limited space at the disposal of the R. R. and an ever increasing traffic. In the interests of the lumbermen, the railroads and the city at large, lumber must leave the Esplanade and go elsewhere.

The following are present prices:—

Mill cull boards & scantling	$10 00
Shipping cull boards, promiscuous widths	12 00
" stocks	13 00
Scantling and joist, up to 16 ft	13 00
" " " 18 ft	14 00
" " " 20 ft	15 00
" " " 22 ft	16 00
" " " 24 ft	17 00
" " " 26 ft	18 00
" " " 28 ft	19 00
" " " 30 ft	20 00
" " " 32 ft	21 00
" " " 34 ft	
	22 50@22 50
" " " 36 ft	24 00
" " " 38 ft	27 00
" " 40 to 44 ft	30 00
Cutting up planks 1½ and thicker dry	20 00@25 00
" boards "	20 00
Dressing stocks	16 00@18 00
Picks Am. inspection	30 00
Three uppers, Am. inspection	40 00

B. M.	
1½-in flooring, dressed	25 00@30 00
1½ " " rough	14 00@15 00
1½ " " dressed	23 00@25 00
" " undressed	14 00
" " dressed	16 00@20 00
" " undres'd	12 00@14 00
½Beaded Sheeting, dressed	18 00@20 00
Clapboarding, dressed	12 50
XXX sawn shingles, M	2 75@2 90
Sawn Lath	2 25
Red oak	20 00@25 00
White "	25 00@30 00
Basswood, No. 1 & 2	18 00@20 00
Cherry, No. 1 & 2	50 00@60 00
Whiteash 1 & 2	25 00@30 00
Black ash 1 & 2	20 00@25 00

HAMILTON.

The following are the quotations of the yards here :—

Mill cull boards and scantlings	$ 9 00 to $10 00
Shipping cull boards, promiscuous widths	10 00 to 12 00
Shipping cull stocks	13 00
Scantling and joist up to 16ft	13 00
Scantling and joist up to 18ft	13 50
Scantling and joist up to 20ft	14 00
Scantling and joist up to 22ft	15 00
Scantling and joist up to 24ft	16 00
Scantling and joist up to 26ft	17 00
Scantling and joist up to 28ft	18 00
Scantling and joist up to 30ft	10 00
Cutting up plank 1½ and thicker, dry	20 00 to 25 00
Cutting up boards	20 00
Dressing stocks	6 00 to 18 00
1½ flooring, rough	16 00 to 18 60
1½ flooring, rough	16 00 to 18 00
1½ flooring, dressed face measure	32 00
1¼ flooring dressed face measure	25 00
1 flooring dressed face measure	23 00
Beed sheeting 1	28 00 to 30 00
Picks A M. Inspection	30 00
Three Uppers A. M. Inspection	40 00
XXX sawn shingles per M	2 60 to 2 70
Sawn Lath	2 25
Red oak	20 00 to 25 00
White oak	25 00 to 30 00
Basswood No. 1 and 2	18 00 to 20 00
Cherry No. 1 and 2	50 00 to 60 00
White Ash No. 1 and 2	25 00 to 30 00
Black Ash No. 1 and 2	20 00 to 25 00

MONTREAL LUMBER MARKET.

MONTREAL, 25th June, 1887.

Trade in Montreal since last report has generally been active, and some large lines, principally for export account have changed hands. Contractors have also been extensive buyers as a large amount of building is likely to continue all summer. Dealers here have enough to do to fill all their orders ; in fact they have some difficulty in doing so on account of short stocks. Prices in this market are still steady, but advices from Ottawa are strong, and the advance that has taken place at the mills on some kinds of lumber will likely be felt here before long.

Last season of navigation opened very favorably, the arrivals from sea exceeding those of 1885, as did the exports generally. Pessimists predicted that the figures of 1886 would hardly be reached this year, but already the shewing is an excellent one, as will be seen from the following statement :—

Statement of ocean tonnage from the opening of navigation, up to and including June 11th, arriving at the port of Montreal :—

	1887. No.	1887. Tons.	1886. No.	1886. Tons.
Steamships	82	139,708	61	111,105
Barks	10	6,593	7	5,759
Brigs	...	...	4	1,299
Totals	92	146,301	72	118,163

The shipments from the port of Montreal up to date include 11,000 deals, and 750,000 feet of sawn lumber, as against about 5,000 deals and 1,500,000 feet of lumber for the corresponding portion of last year, the freights on which are quoted at $11 to $11.50 per M. to South America, and 40s. to 47s., 6d. per standard to the United Kingdom.

The following are the quotations at the yards here :—

Pine, 1st quality, M	$30 00@40 00
Pine 2nd " "	00 00@30 00
Pine, shipping culls, M	14 00@16 00
Pine 4th quality deals M	10 00@12 00
Pine, mill culls, M	8 00@10 00
Spruce, M	10 00@13 00
Hemlock, M	9 00@10 00
Ash, run of log culls out, M	20 00@25 00
Bass, run of log culls out, M	$18 00@20 00
Oak, M	40 00@50 00
Walnut M	60 00 100 00
Cherry, M	80 00 100 00
Butternut, M	35 00@40 00
Birch, M	20 00@25 00
Hard Maple, M	25 00@30 00
Lath, M	1 50@ 0 00
Shingles, 1st, M	2 00@ 3 00
Shingles, 2nd, M	2 50@ 0 00

OSWEGO, N.Y.

Three uppers	$46 00@47 00
Pickings	36 00@37 00
Cutting up, No. 1	26 00@27 00
Cutting up, No. 2	18 00@20 00
Dressing	19 00@21 00
No. 1 Culls	16 00@17 00
No. 2 Culls	13 00@14 00
Sidings, selected, 1 in	31 00@38 00
" 1¼ in	33 00@41 00
Mill run, 1x10, 13 to 16 ft	19 00@22 00
Dressing and better	25 00@27 00
1 x 10 shipping culls	16 00@17 00
Mill run, 1¼ in. strips	15 00@18 00
Selected	32 00@34 00
1x6 selected for clapboards	32 00@34 00
Clear butt cedar shingles, 18 in	2 70@ 2 80
Shingles, XXX, 18 in pine	3 00@ 3 20
XXX 18 in Cedar	3 60@ 3 75
XX 18 in cedar	2 30@ 2 40
Lath No 1, 5-4	2 00
No. 2, 5-4	$ 1 80
No. 1, 4-4	1 50
Cedar, 4-4	1 70
Pickets, 5 4 x 5-1x4, No. 1	14 00@15 00
1x3x4, No 1	18 00@20 00
1x3x4, No 2	10 00
1st and 2nd black ash, 1 in	23 00@25 00
5-4 and thicker	24 00@26 00
Culls	10 00
Basswood, selected 4-4 and 5-4	20 00@22 00
Strips, selected 4-4 and 5-4	16 00@18 00
Culls, 4-4 and 5-4	11 00@12 00
Birch and maple 1st and 2d	23 00@25 00
Mulding strips, $6 per M. pieces	⅝x1¼ p4;
Door panels, 6 in. 1 pr door s 7 in h do 16c	
Blind slats, ½x2x4, 6c per M. piece	

ALBANY.

ALBANY, N. Y., June 24th, 1887.

The lumber market here is very quiet at present, shipments being light and lumber coming in slowly. It is stated that there is less lumber in the yards by 25 per cent. than for the past 20 years. Notwithstanding this prices are weak. The principal change in prices is an advance in spruce. Pine is quiet, as are also hardwoods.

Pine, clear, M	$55 00@60 00
Pine, fourths	58 00@60 00
Pine, selects	48 00@ 3 00
Pine, good box	22 00@33 00
Pine, common box	13 00@15 00
Pine 10-in. plank, each	00 45@00 47
Pine, 10-in. plank, culls, each	00 24@00 27
Pine boards, 10-in.	00 30@00 32
Pine, 10in. boards, culls	00 16@00 20
Pine, 10-in. boards, 16 ft., M	28 00@32 00
Pine, 12-in. boards, 16ft	28 00@32 00
Pine, 12-in. boards, 13ft	28 00@32 00
Pine, 1¼in. siding, select	40 00@43 00
Pine, 1¼-in. siding, common	15 00@18 00
Pine, 1-in. siding, select	40 00@42 00
Pine, inch siding, common	13 00@15 00
Spruce, boards, each	00 00@00 17
Spruce, plank, 1¼-in., each	00 00@00 20
Spruce, plank, 2-in., each	00 00@00 30
Spruce, wall strips, each	00 00@00 12
Hemlock, boards, each	00 00@00 14
Hemlock, joist, 4x6, each	00 00@p0 32
Hemlock, joist, 2½x4, each	00 00@00 14
Hemlock, wall strips, 2x4, each	00 00@00 11
Black walnut, good, M	$95 0@120 00
Black waluut, ¾ inch.	75 00@80 00
Black walnut, ¾ inch.	90 00@85 00
Scaymore, 1-inch	26 00@29 00
Scaymore, ¾-inch	21 00@23 00
White wood, 1-inch and thicker	32 00@38 00
White wood, ¾-inch	28 00@30 00
Ash, good, M	38 00@42 00
Ash, second quality, M	25 00@30 00
Cherry, good, M	65 00@80 00
Cherry, common, M	25 00@30 00
Oak, good, M	40 00@43 00
Oak, second quality, M	20 00@25 00
Basswood, M	25 00@30 00
Hickory, M	38 00@40 00
Maple, Canada, M	25 00@30 00
Maple American, per M	26 00@28 00
Chestnut, M	38 00@40 00
Shingles, shaved, pine, M	0 00@ 6 50
shingles 2nd quality	0 00@ 5 00
" extra, sawed, pine	4 15@ 4 25
shingles clear, sawed	2 80@ 3 00
" cedar, mixed	0 00@ 2 60
" hemlock	2 00@ 2 00
Lath, hemlock	0 00@ 2 00
Lath, spruce,	0 00@ 2 25

NEW YORK CITY.

NEW YORK, June 22nd, 1887.

The wholesale people are doing a good business with prices fairly firm, although not as strong as they were some time ago. The receipts of spruce from the East are looking up in amount and the canal and river are sending down northern and western lumber. The coastwise receipts of hard pine and Virginia are good. Eastern hemlock is in short supply and in active demand from all quarters for building. There is still a lack of some assortments in the yards and everything offered is readily placed at fair prices. The only weakness is in hard pine, and that is more the result of overstocking in a few lines as the distributive demand was never better.

At the retail yards the distribution is quite general and the outlook good. Hardwoods are in especial demand, the call being for walnut, cherry and quartered oak. Good old quartered oak is wanted for the high priced houses going up on the west side, while ash is the trim used in the lower priced buildings.

In Brooklyn the demand in the out-lying districts is very good and the teams are kept busy all the time. North of Broadway and Bushwick avenue building is general on almost every block. The class of houses going up range in prices from $2,500 to $12,500 to build. The sale of improved property continues good, and this keeps up speculative building. Those who built last year and the year before find no trouble in disposing of the buildings at an advance above cost and usual profits of not less than 10 per cent. This in many cases runs up to 25 per cent.

SPECIAL CONTRACTS

Pine, very choice and ex. dry	$65 00@70 00
Pine, good	55 00@60 00
Pine, shipping box	21 00@22 50
Pine, common box	18 00@20 00
Pine common box	16 00@18 00
Pine, tally plank 10 in	00 44@00 50
Pine, tally plank 2nd quality	00 35@00 40
Pine, tally plank culls	00 30@00 32
Pine, tally boards 2nd good	00 32@00 35
Pine, tally boards dressed common	00 25@00 30
Pine, strip boards culls	0 15@00 20
Pine, strip boards merchantable	0 20@00 22
Pine, strip boards clear	00 25@00 26
Pine, strip plank, dr clear	0 32@00 35
Spruce boards dressed	00 25@00 25
Spruce, plank, 1½ inch each	00 28@ 0 30
Spruce, plank 2in each	00 38@00 45
Spruce plank 1½ inch dressed	00 28@00 30
Spruce plank 2 inch dressed	0 43@00 45
Spruce wall strips	00 15@00 18
Spruce timber	20 00@22 00
Hemlock boards each	00 18@00 20
Hemlock joist, 2½x4	00 16@00 18
Hemlock joist 3x4	00 18@00 20
Hemlock joist 4x6	00 40@00 44
Ash, good	45 00@53 00
Oak	50 00@60 00
Maple cull	20 00@25 00

Cargo rates 10 per cent. off.

EXTRA SELECTIONS.

Maple good	40 00@48 00
Chestnut	40 00@50 00
Cyprus, 1, 1½, 2 and 2½ in	35 00@40 00
Black Walnut good to choice	140 00@160 00
Black Walnut ¾	85 00@100 00
Black Walnut selected and seasoned	150 00@175 00
Black Walnut count'r	00 22@00 28
Black Walnut 5x5	150 00@160 00
Black Walnut 6x6	160 00@170 00
Black Walnut 7x7	175 00@180 00
Black Walnut 8x8	175 00@180 00
Cherry wide	100 00@120 00
Cherry, ordinary	70 00@80 00
Whitewood inch	45 00@50 00
Whitewood ⅝ in	35 00@40 00
Whitewood ⅝ panel	45 00@50 00
Shingles ex. shaved pine 18 in	8 00@ 9 50
Shingles ex. sawed pine 18 in	5 75@ 6 00
Shingles clear sawed pine 16 in	4 50@ 5 00
Shingles cypres 24x7	22 00@24 00
Shingles cypress 20x6	00 00@14 00
Yellow pine dressed flooring	30 00@40 00
Yellow pine girder	26 00@35 00
Locust posts, 8 ft	00 18@00 20
do 10ft	00 24@00 25
do 12ft	00 29@00 34
Chestnut posts	00 00@00 34

SAGINAW VALLEY.

BAY CITY, Mich. June 25th.

Shipments for the past week or two have been a little more lively than heretofore, although the cargo market is by no means up to the average of past years, caused principally, it is said, through the scarcity of vessels. A dealer, says the *Northwestern Lumberman*, who usually handles large quantities of lumber for Ohio says that Ohio men have bought sparingly in the Saginaw Valley this season. Ed. McCarty reiterated that he had not bought a board, and Rose and Mason, who handle millions of feet, tell the same story. It is nevertheless true, however, that lumber is being sold quietly in considerable quantities. George V. Selden, who spent two elegant weeks in the Valley and left for home on Saturday, bought 1,500,000 feet to be cut, chiefly stock boards and strips ; and 200,000 feet of Norway bill stuff, but he would not divulge the price ; neither would the settler. Moshet & Fisher report having sold 5,300,000 feet during the week. The lot contained 1,300,000 feet of box at $10, and the figures for the remainder could not be obtained. The sale is also reported of 500,000 feet at $19 straight, 400,000 feet of box lumber at $10.50 ; 100,000 feet of good stock at $10, $20 and $38 ; 700,000 feet of coarse boards at $11.50 ; 150,000 feet, at $12 ; 600,000 feet of bill stuff, 12, 14 and 16 feet, at $8.50 ; 120,000 feet of sap boards at $20 ; 80,000 feet of Norway bill stuff at $10 ; and 280,000 feet of hemlock at $7. I also hear of the sale of 300,000 lath at $1.15. A dealer from Grand Rapids was in the city yesterday looking for stocks. He said Chicago had cleaned up the west shore closely, and he was of the opinion he could buy on this river and ship to advantage, the rail rate being only 6 cents. The call is chiefly for common lumber, stocks, strips and box. Uppers drag a little and prices for really good stock have been shaded. Norway strips are held at $11.

CARGO QUOTATIONS.

Shipping culls	$ 8 00@12 00
Common	15 00@19 00
3-uppers	36 00@38 00
Bill stuff	8 30@10 00
Norway bill stuff	8 50@10 00
Under straight Measure	16 00@22 00
Shingles, XXX	3 00@ 3 25
Shingles clear butts	2 00@ 2 25
White pine ath.	1 40

YARD TRADE.

3 uppers wide and thick	45 00@45 00
Do. 1 in	40 00@45 00
Selects	37 00@38 00
Fine common	00 00@32 00
1, 1½, 1¼, 2 in. cut ups	20 00@25 00
No. 1 base, 7, 8 and 9 in selects	30 00
No. 2 do. (fine common)	27 00
No. 1 flooring strips	40 00
No 2 "	35 00
No. 3 "	29 00
Fencing	12 00@15 00
Fencing, coarse common	$ 00
Fencing, mill culls	4 00@ 6 00
No. 1 stock 12 in	14 00@15 00
No. 2 stocks	11 00@12 00
Wide common	12 00@15 00
Piece stuff and timber	9 00@10 00
12, 14, 16, 18 ft	9 00@12 00
1 o. do. 20 ft	12 00
Lath	1 50@ 1 75
Lath No. 2 (cul)	1 00
Shingles XXX	3 15@ 3 25
Clear butts	1 90@ 2 15

DRESSING.

Surfacing	1 00
Dressing and matching	2 00
Making drop siding	2 25
Making bevel siding and ceiling	3 00

TONAWANDA.

Prices unchanged as follows:—

CARGO LOTS—MICHIGAN INSPECTION.

Three uppers	$46 00@47 00	Culls	12 00@13 00
Common	20 00@25 00		

YARD PRICES—CAR LOTS.

3 uppers, inch	$44 00@46 00	Dressing stocks	18 00@22 00
3 uppers, plank	45 00@46 00	Dressing sidings	19 00@22 00
Pickings, inch	38 00@40 00	Common stocks	12 50@13 00
Pickings, 1¼ in. to 1 inch	39 00@40 00	Common sidings	15 00@17 00
Fine Common	32 00@34 00	Common box	12 00@13 00
Fine Common, thicker	34 00@40 00	Shingles, XXX, 18 in. sawed	3 40@ 3 50
Cutting up	25 00@28 00	Do. clear butts, sawed	2 40@ 2 45
Shelving, 12 in. and up	27 00@30 00	Shingles, XXX 16 in, cut ₱ sq	@ 3 10
Coffin boards, 12 in. and up	16 00@18 00	Do. XX do	@ 2 75
		Lath	1 90

DETROIT, MICH.

Uppers, 4x4	$48 00	Siding, clear	23 00
5 " 6x4 & 8x4	50 00	A	21 00
3 & 4in	50 00	B	18 50
Selects, 4x4	42 00	C	16 50
5x4, 6x4 & 8x4	45 00	Bill stuff ordinary sizes :	
Shop, 44	22 00	12 to 16 ft	11 00
5x4x 6x4 & 8x4	25 00	18 to 20 ft	12 00
Fine common, 4x4	35 00	22 to 24 ft	13 00
5x4, 6x4 & 8x4	38 00	26 to 28 ft	14 00
Stocks, 1x12 & 1x10, No 1	19 00	30 to 34 ft	16 00
1x12 & 1x10, No. 2	16 00	Ship culls	12 00
1x12 & 1x10, No. 3	13 00	Mill Culls	10 00
Flooring, select common	19 00	Shingles, clear, 18 in	3 30
No, 1 common	18 00	10 in. clear, 18 in Ex	2 30
No. 1 fencing	16 50	6 in. clear, 18 in	2 25
Ceiling, select common	25 00	6 in stocks clear, Ex	4 00
Ceiling, No. 1 common	22 00	5 in. " "	4 80
No. 1 fencing	20 00	Lath, per M pcs	2 50
Roofing, D. & M.	16 00	Add for S. 1 or 2.	$1 ₱ M

CHICAGO.

We extract the following from *The Timberman's* review of June 25th :—There has been so little abatement in the activity of the general lumber market, that it may practically be recorded as without notable change. Reports of a slightly diminished volume of sales at some points are met by advice of a contrary nature from others, so that it would be hazardous to affirm that there has been less lumber distributed this week than last. The situation of the trade is very satisfactory, except, perhaps, in respect to some of the conditions of the distributing business which are the natural forerunners of the impending rise in values. Lumber is moving very easily and freely. In all quarters sales are making without difficulty, and in a good many cases without effort on the part of jobbers.

Lumber sells itself, almost, and sometimes fades away more rapidly than suits the fancy of the dealer who feels sure that he can get more for it in the near future. It is a notable and most significant fact, that nowhere are jobbers making any special effort to push sales, and it is frequently mentioned that they are at some pains to sell no more than they are obliged to to keep up their trade. This is doubtless, however, a transient condition, growing mainly out of the relative cheapness of lumber in car lots. To keep their stocks in motion to the degree that is essential to the proper manipulation of a lumber yard, it will shortly be desirable for dealers to offer them freely, though there is nothing in the outlook now to warrant the expectation that the forcing process will be necessary at any time this season. The market for lumber by cargo here has maintained its strength, and possibly gained a little on dimensions, but so far as can be learned, stock at the mills is merely steady. Indeed, there are rumours that concessions are not wholly unknown. The extreme reticence of sellers in respect to the prices they are getting, in some measure confirms this. Considering that lumber is netting the mill people from a dollar to two dollars more than they averaged last year, it can hardly be said that this branch of the trade has had very much to complain of.

Lumber is quotably higher in a few markets, and the steadily increasing firmness comes to a point where an advance is the next thing to do, every day. There are signs that Chicago dealers will come out with a practical new list shortly, and this will doubtless be quickly followed by advances at other points, corresponding to such as may be made here. If there is any escape from a condition of higher prices all over the district wherein pine is sold and consumed, the way of it does not now appear.

Indirectly, the lumber trade, in common with other lines, has suffered a little from the financial disturbances arising out of the crash in the grain market here last week, but on the whole the bursting of that bubble has inflicted less injury than might have been feared. It makes money a trifle harder to obtain for those who are using their discount lines freely, but the result to legitimate business of the failure of a gambling deal can hardly be permanent or severely injurious. It is good evidence, indeed, of the financial health of the country, that such a collapse could occur with so little damage. In a certain way it is likely that the attempt to corner the market has been of benefit, in that it enabled holders of old wheat in the country to unload at a price that will give them more money than they could have got otherwise.

Shingles continue to attract a good deal of attention. They are very active to the extent of the supply, which falls considerably below the demand. Producers are very firm in their views, though they are apparently making no great effort at present to advance prices. They usually refuse offers to contract on the basis of present figures for future delivery, which indicates a hope and belief that they will be able to do a trifle better by and by.

In respect to prices, the change this week has been very slight. One hears nothing of any lower price for short green piece stuff than $10.25. A few lots may have sold a notch below this but the commission men profess to be getting it for anything reasonably good, and $10.50 for loads showing any considerable sprinkling of 18 and 20 feet stuff in the tallies. Most of the cargoes, however, which run a fair percentage of 18 feet and over are sold on a separate basis for long and short, the figures being usually $10.25 and $11@12.50. Cull dimensions sells at $7@8 according to what it happens to be.

There has been no special change in inch lumber, which maintains all its former strength and may have even gained a trifle in this respect, though this fact is not to be shown in quotations. The demand is largely for common stuff, which is extraordinary firm and high. As high as $13, and even $13.25 is paid for cargoes in which the pickings hardly balance the culls, so that they average no more than flat common. Lath comes forward in rather small quantities and are quickly taken up at $1.50@1.60 for green.

The following are the ruling quotations at present :—

RECEIPTS FOR WEEK ENDING JUNE 23.

	Lumber.	*Shingles.*
1887	76,584,000	23,887,000
1886	77,192,000	37,431,000

RECEIPTS FROM JAN. 1, TO JUNE 23, INCLUSIVE.

	Lumber.	*Shingles.*
1887	284,950,000	166,094,000
1886	502,532,000	231,838,000

STOCK ON HAND JUNE 1, INCLUDING SOUTH CHICAGO.

	1887.	1886.
Lumber	285,767,940	361,008,670
Shingles	167,996,000	269,701,250
Lath	16,749,758	36,337,385
Pickets	473,292	5,705,033
Cedar posts	88,022	131,266

FINISHING LUMBER ROUGH

1st and 2d clear, 1 inch	$47 00	A select, 2 inch	$41 00
1st and 2d clear, 1¼ and 1½ in	45 00	B select, 1½ in	31 00
1st and 2d clear, 2 inch	46 00	B select, 1 in	30 00
1st and 2d clear, 3 inch	48 00	Clear and select 2x4	26 00
3d clear, 1¼, and 2 inch	43 00	2x6	32 00
3d clear, 1½ inch	44 00	2x8	34 00
A select, 1 inch	38 00	All one length $1 extra.	
A select, 1¼ inch	39 00		

STOCK BOARDS.

12 in. A, 12 to 16 ft	$42 00	12 in. 20 ft	23 00
12 in. B	35 00	10 in, A	37 00
12 in. C	32 00	10 in. B	33 00
12 in. D, 12, 14 and 16	20 00	10 in. C	26 00
12 in. D, 18 ft	23 00		

FLOORING—DRESSED AND MATCHED.

A flooring	$32 00	B flooring 4 in	29 00
B flooring	30 00	C flooring 4 in	25 00
C flooring	23 00	Norway clear and A	22 00
Fencing flooring	15 00	B, 4 or 6 in.	20 00
Clear and A, 4 in	31 00		

SIDING—TIED.

1st and 2d clear, 12 ft	$21 00	B siding	18 50
1st and 2d clear, 14 and 16 ft	22 00	C	13 50
A	20 50	Fencing	10 50

BEADED CEILING—TIED.

Clear, ⅜x4@6 in	$22 00	Ceiling, ⅜x6 in	14 50
A, ⅜x6 in	20 00	Clear and A, ⅜ or ¾x6	32 00
B, ⅜x6 in	19 00	B, ⅜ or ¾x6 in	29 00

COMMON BOARDS—ROUGH.

Com boards, 1 in. 18 to 20ft	$12 00	12, 14, 16 and 18 ft	14 50
10, 12 to 16 ft	15 00	1¼ and 1½ common	13 50

FENCING—DRY.

No. 1 all lengths	$14 50	4 in. common	12 50
No. 2, 12, 14, 16 & 18ft	11 50	Norway	14 00

TIMBER AND DIMENSION—DRY.

Joist and scantling, 2x4, 12, 14 and 16 ft	$12 00	12, 14 and 16 ft	$13 00
2x6, 2x8 2x10, 12, 14 and 16 ft	12 00	2x4, to 8x8, 18 ft	13 00
Timber, 4x4 to 8x8 inclusive,		2x4, 4x4, 20 ft	14 00

MADAWASKA LETTER.

MADAWASKA, N. B., June 15th, 1887.

From Our Own Correspondent.

I don't think I can add anything you have not already heard about the unusual high water this spring. Most everywhere the damage has been more or less severe but no worse than was generally expected. The drives are about all out in the main river, and the water rapidly falling leaves lumber high up on the banks.

No doubt you have seen that the export duty on shingles, bolts, and cedar and pine logs capable of being made into shingle bolts, has been placed at $1.50 per cord of 128 cubic feet. I cannot see how those parties having hauled logs of pine and cedar for shingles can very well cut them up into shingle bolts and cord them so as to come at the duty ; nor can I see how they can figure logs into cords unless they do, to be correct. Suppose we take 128 cubic feet, which makes one cord, and see how many superficial feet there is in it. We will find it contains 1536 superficial feet of lumber. So far so good. Now we will saw one cord of shingle bolts into shingles, and we will get 3,000 shingles out of it. Then we will measure 1536 superficial feet of cedar logs, which makes one cord of 128 cubic feet, and we will get 15,000 shingles. So by measuring the logs into superficial feet instead of sawing them into bolts and cording them, we lose the export duty on 12,000 shingles on every cord of 1536 superficial feet, which makes one cord of 128 cubic feet. The great difference is in measurement. When we scale logs we take the top end, square it up and take the contents, allowing nothing for the wood thrown off to make the log square from top to butt, and the taper on cedar logs is by no means a small consideration in measurement. It is perfectly absurd to take 1536 superficial feet of logs to make one cord of 128 cubic feet.

The press should post the department regarding this matter. If they adopt a scale charging $1.50 per cord of 128 cubic feet, and count the same into superficial feet, take 1536 feet for one cord of 128 cubic feet, and collect the export duty of $1.50 per cord, the shingles which can be taken out of 1536 superficial feet of cedar logs will be 15,000, and fifty cents per thousand will amount to $7.50 for 1536 superficial feet. On the other hand if we saw one cord of 128 cubic feet of cedar into shingles we only get 3,000, which makes the export duty fifty cents per thousand. Now mark the difference. In one cord measured superficial feet we have 15,000 shingles, and one cord cubic feet we have 3,000, losing 12,000 export on every cord, superficial measure instead of bolts. One operator on the American side manufactures each season about 30,000,000 of shingles besides other lumber, the raw material being taken out of our forests. This man has never paid one dollar export duty, whereas if our government had exacted the same there would have been $15,000 yearly coming in to replenish the provincial treasury. I hope that the views as here expressed may have their desired effect, and that our representatives may see this important matter in a new light.

I see that Messrs. Brown, Masson, Guellet, Hesson, Perley and Dawson, are urging that a high export duty be imposed upon logs and timber of all kinds, but Mr. McMildon protested against it, saying it was a scheme to reduce the price of logs to mill owners. The mill owners of St. John who supported him must feel thankful to him for advocating no export duty, and encouraging Americans to continue our forest destruction, to the detriment of our own people. He is a lawyer, however, and, doubtless, has an axe to grind, which doubtless accounts for his discrimination against his own country in the interests of Americans.

NEWS NOTES.

—The building trades in Chicago are gradually recovering from the annual spring strike and lock-out, and the men are going back to work.

—A cargo of 300,000 feet of black and white ash lumber is being loaded at Bay City, destined for Africa. It goes by water the entire distance.

—The firm of J. J. Howe & Co., is credited with the intention of putting in a lumber yard at every town on the Duluth and Manitoba road.

—The lumbermen of south-western Pennsylvania are getting up an organization to be known as the Lumbermen's Protective Association of South-western Pennsylvania.

—Twenty vessels which cleared from Alpena, Mich., for a week ending on a late date, carried 6,355,000 feet of lumber, 5,600 cedar posts, 114,000 shingles and 600 ties.

—Since the opening of navigation Alpena has shipped by lake 27,707,000 feet of lumber, 614,000 shingles, 49,600 railway ties, 26,400 cedar posts, and 40 cords of match timber.

—The Inter-State Commerce law has had the effect of changing a large volume of the carrying trade from the railroads to the water routes. This is seen in a number of sections.

—J. S. Chase, a well-known commission lumber dealer of Chicago, after a six-months' sojourn in the forests of British Columbia, has returned to Chicago and resumed charge of his business interests.

—The mills at Cheboygan, Mich., are making a good record this year. The probable cut during the season will be about 100,000,000. The estimated product of shingles for the present year is 21,900,000.

—Scores of camps have begun work in Clare county, Mich., to save the burned-over timber, which must be cut at once. Logs are already moving in considerable volume. Thousands of trees have been killed.

—An American paper says that the new Canadian tariff, now under consideration, adds to the free list Redwood, planks and boards, sawn, but not further manufactured. This is intended to encourage the manufacture of cigar boxes.

A log jam on the Menominee river, in Michigan, reaching from Little Quinnesec falls to Big Quinnesec falls, and containing 100,000,000 feet, is called the biggest ever known on that stream. It fills the river full, and at some points is filled 30 feet high.

THE NEW LINE FOR MANITOBA.

THE St. Paul, Minneapolis & Manitobarailroad which is extending its system with marvelous rapidity is destined to play an important part in the lumber business in the very near future. Since the boom days of 1882 the trade along the Manitoba lines has been neither lager or important. Dealers have found that the consumptive demand, of farmers struggling to get out from under a load of debt could not be large, and the growth has not been conspicuous in any of the towns along the lines. But besides the extension the Manitoba is pushing west-ward from the Minot to the Great falls of the Missouri and Halena at the rate of five miles a day, the road promises soon to be a competitor for some of the southwestern carrying trade. At least the direction of some of its lines so indicate. One of these branches has already reached Watertown, D.T., and it is understood is to be pushed to Huron and how far beyond only President Hill probably knows. Another branch has reached Aberdeen, and is the confessed plan of President Hill to push one of these lines sooner or later to the Black Hills country and on to Denver. These lines already tap points heretofore reached only by the Chicago roads, and open markets for the Northwestern manufacturers which have belonged to Chicago and the manufacturers at Winona, Lacrosse and middle Mississippi points. These various extensions mean a large increase in the consumptive demand but it has been no part of the policy of the Manitoba thus far to foster the St. Paul and Minneapolis market. The greater part of all the lumber consumed along the Manitoba lines has been drawn from Duluth, from railroad on the St. Paul & Duluth line, the Hinckley branch and mills at St. Cloud, and in that vicinity. Presumptively Mr. T. B. Walker with his mills at Grand Forks and Crookston, and his virtual monopoly upon the lumber supply of the Red Lake region, holds the gateway to the line stretching westward towards the Pacific Slope. But the Manitoba has already begun to extend its lines into the pine region lying north of the northern Pacific, and it is part of the present rapidly developing plan to build the St. Paul, Brainard & Northwestern along the Rum river and Mille Lac to Brainard and thence to a point of Juncture with the line building east from Crookston somewhere near Leech Lake. All this means a multiplication of railroad mills, as well as an increase of consumption and under the most favorable conditions the manufacturer of Minneapolis and of North Wisconsin can reasonably expect sharp competition from these newer fields of supply. They may cast an eye of covetous expectancy upon these new fields, but may as well make up their mind first as last that they will have to fight for a share of the trade.—*Mississippi Valley Lumberman.*

LUMBER IN THE UNITED STATES.

THE New York *Lumber Trade Journal* of the 1st June reports the West India market fairly active, with prices firm. For Rio a 1,000 ton barque, now loading general cargo, will take half a million feet. Another cargo is also being loaded. This will about clean out the Rio shippers and for future shipments lumber to arrive will have to be depended on. There is very little being done for Para, Australia, or Africa. For the west coast of South America, a few shipments are being made. For the River Plate, two cargoes have been ordered to go forward. The general tendency of the White Pine export trade is toward an advance and a better outlook for business. The demand for North Carolina pine is heavy in consequence of the scarcity of Spruce. One firm have six mills running steadily to fill orders now on their books. Quotations are not changed, but higher figures are more easily obtained than heretofore. Dressed stocks is growing steadily in demand. The market for Yellow Pine is steady at present quotations, with a fair demand for export. The stock of heart face boards is large and accumulating. There has been a falling off in the car trade. The local demand is good, and is freely supplied. The local demand for White Pine continues light with no immediate prospect of any large increase, while a fair market is found in the coal mining regions and far bridges on northern railroads. Very few mills are running on hemlock for want of water to bring the logs down. They will be fully thirty days late in starting, consequently there is little or no Hemlock coming from the north. It is in full supply, however, from Pennsylvania. The market is very active and firm, and agood business is being done. The heavy freshets in the east has caused serious delay to the mills, and they are only now starting up, nearly a month later than they expected. As a result, orders for Spruce have accumulated. They are very firm in prices. Almost any kind of a cargo will bring $16, and from that up to $18 can be called the range of the market. There are but two mills running in St. John, and very few on the Kennebec, consequently there cannot be much Spruce lumber before the middle of June. The market is very active and prices have an upward tendency. The market for lath is steady and strong. All sales have been made at $2.05, except one lot was sold as high as $2.75. Some few winter sawn are coming to hand, but are hard to place, as the slab sawn stock has the call every time. These are selling at $2.25 to $2.30. Canadian lath, from the Ottawa, are offered at $2.50, but no amounts have been placed, as they come 50 in a bundle, which does not suit our dealers, as it entails too much handling. The hardwood goods are in accord that business never was so dull. All good lumber, however, arriving finds ready purchasers at the yards. Prices have not advanced, but are firm at our outside quotations, necessarily with some few exceptions. The local dealers are beginning to realize that the sources of supply are being rapidly reduced. Choice lumber cannot be replaced except at a marked advance. Those that have any such are aware of this, and are naturally firmer in theirs. While the demand increases the supply does not. The time is drawing very close when the cost of all kinds of hardwoods will be greatly enhanced. Business has been fairly active and steady in the log market, a good regular trade having been done. Good logs are still scarce, particularly Walnut. Inferior logs are very dull of sale. Good Walnut logs, running on an average, say 25 inches, straight grained and smooth, without defects, would find a ready sale. Poplar logs are in fair demand. A car or two of logs running 20 to 30 inches could be sold without difficulty. The arrivals of Mahogany and Cedar have been considerable. A number of the cargoes have been promptly sold, leaving the stocks in first hands about the same; the demand continues fairly active and prices firmer. The market for Spanish Cedar is quiet. The demand is fair, and prospects for a good business are rather more favorable than they have been. Prices remain the same, but are much firmer, with an upward tendency.

LATEST NEWS NOTES.

—Forests cover twenty-four per cent. of the entire area of Norway.

—The losses by the Michigan forest fires including the destruction of Lake Linden, are estimated at about $7,000,000.

—The drives on the Androscoggin in Maine, have been only partially successful, and the outlook is reported bad. No logs were cut this season on the Swift river. On the Sandy, however, there was a big cut, and all the logs came out easily and early.

—The operations of the Inter-State Law have played sad havoc with the lumber trade of Oswego, N. Y., compelling several of the leading firms to go out of business, as on the same freights as those from Buffalo and Tonawanda competition cannot be had on equal terms

—William F. Whitney, Bay City, Mich., has just sold his Canadian timber holdings. with all his outfit for operating, to Hon. Joseph Jackson, of Simcoe, Ont., for $130,000. The purchaser will get out long timber for the Tonawanda, N.Y., market. It is said Edward Lynn, who made the sale, received $25,000 as his commission.

—The announcement is made that Torrent & Co. have put into the Muskegon Mill a machine for converting slabs into lumber. The slabs are cut four feet long, and such as are worth re-sawing fed to the machine, and five-eights inch lumber of good average width secured. Twenty-five per cent. of clear lumber is secured, suitable for making panel stock for cheap doors, while more goes into good box stuff.

—A Canadian named Boulette was drowned Kennebec river, Me., while working on a drive for Thales Spaulding, 14 miles below the forks. He was riding a log in the drive, fell off and drowned. He had hid $175 before starting out with the drive, so the money would not get wet, but his friends were unable to find it after his death.

—A considerable conflagration broke out in the island lumber district of Buffalo, N.Y., June 8, which would have been much more disastrous except for the efficient work of the fire department. About 1,000,000 feet of lumber owned by Hurd & Hauenstein, Hurd Bros., Noyes & Sawyer, W. S. Crostwaite, W. W. Tyler, Albus & Co., and others, together with Playter's planing mill, Austin's sash factory, shops of the Union Dry Dock Company and buildings belonging to R. Wills & Co., shipbuilders. Playter's loss was about $20,000 on mill and considerable on lumber; G. W. Austin, $16,000, one-half insured; R. Mills & Co., $7,000 on shops, which were insured, also considerable on lumber; also upward of $4,000 by local firms who had car loads of lumber burned on track. The total loss was about $100,000.

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A STEARNS No. 2 Circular Mill, Friction Feed, with five head blocks, carriage and track for long timber; two 60-inch Hoe patent and one solid saw, all in first-class condition. Address HENRY HOWARD & CO.,
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TIMBER LIMIT FOR SALE—WOULD take property in part payment. Box 2, LUMBERMAN office.

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Deputy of the Supt. Gen'l. of Indian Affairs.

Department of Indian Affairs,
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Plans and profiles will be open for inspection at the Office of the Chief Engineer and General Manager of Government Railways at Ottawa, and also at the head Office of the Cape Breton Railway, at Port Hawkesbury, C. B., on and after the 6th day of June, 1887, when the general specification and form of tender may be obtained upon application.

No tender will be entertained unless on one of the printed forms and all the conditions are complied with.

By order,
A. P. BRADLEY,
Secretary.

Department of Railways and Canals.
Ottawa, 27th May, 1887.

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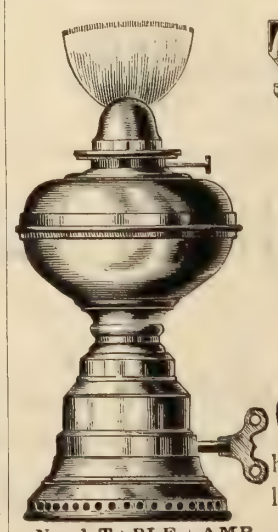

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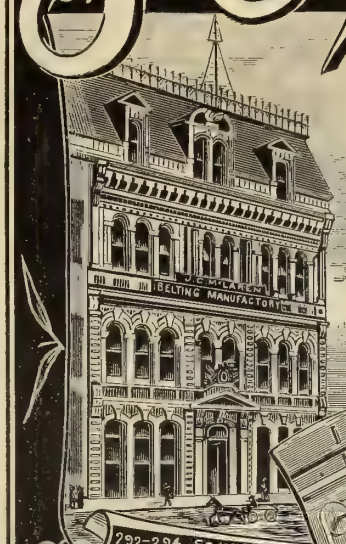

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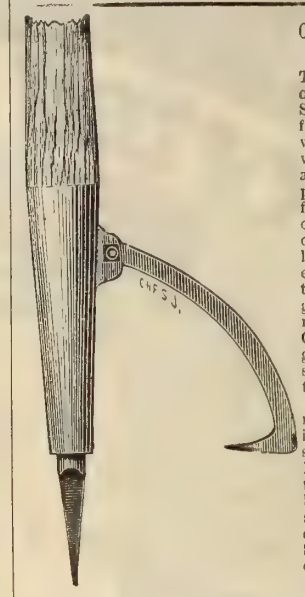

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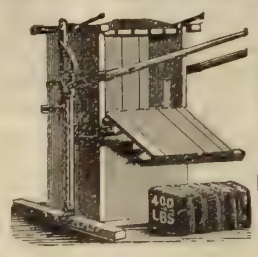

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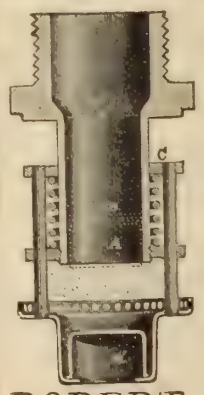
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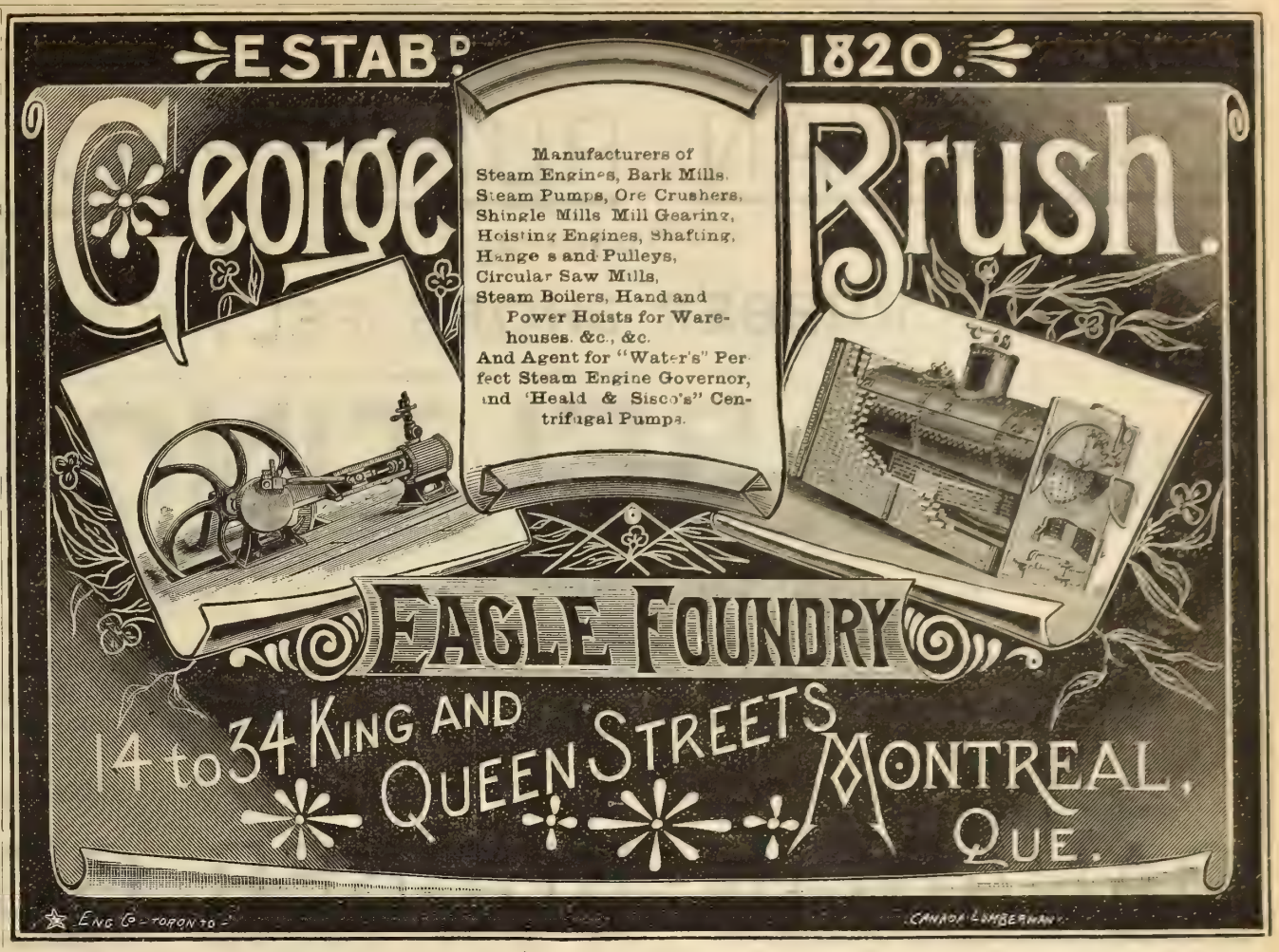

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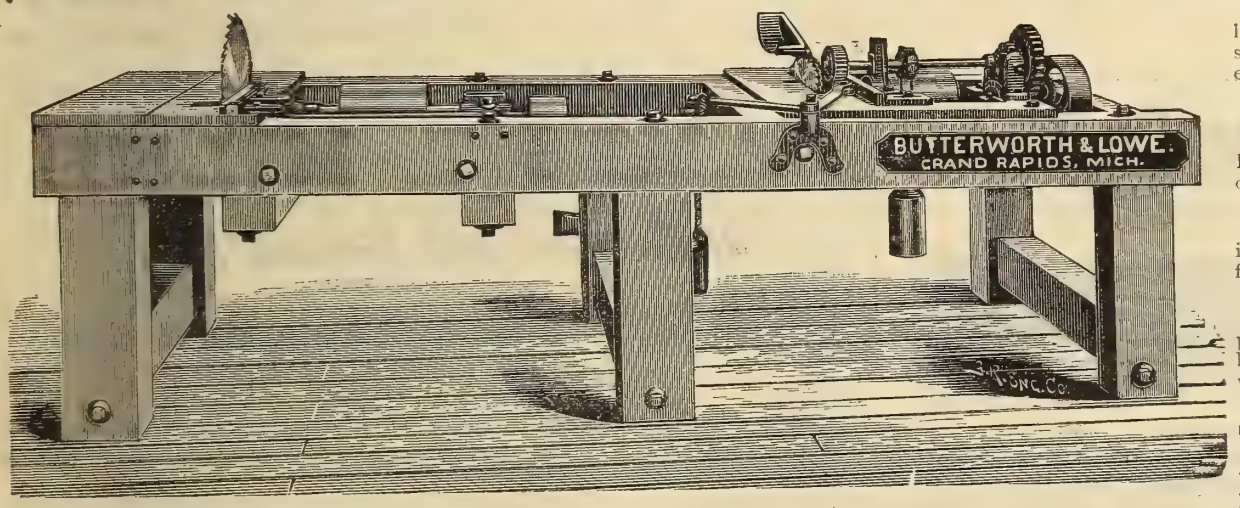

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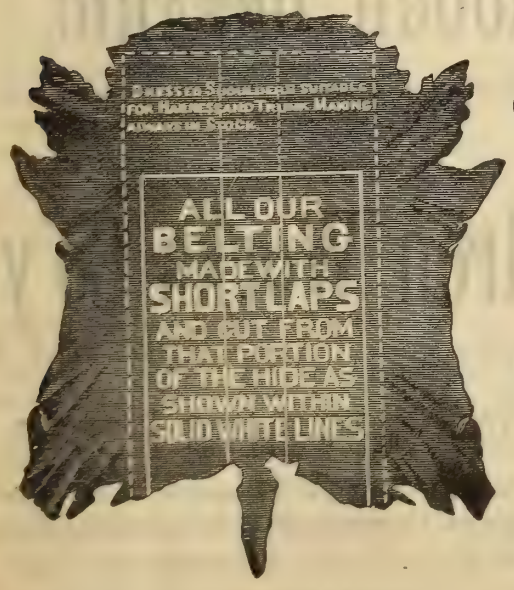

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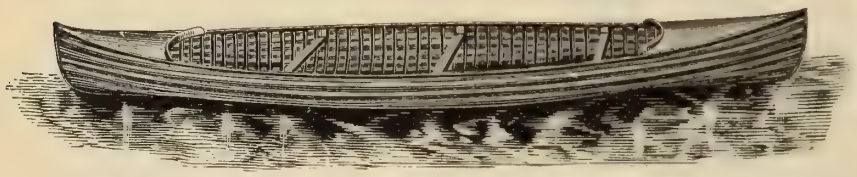

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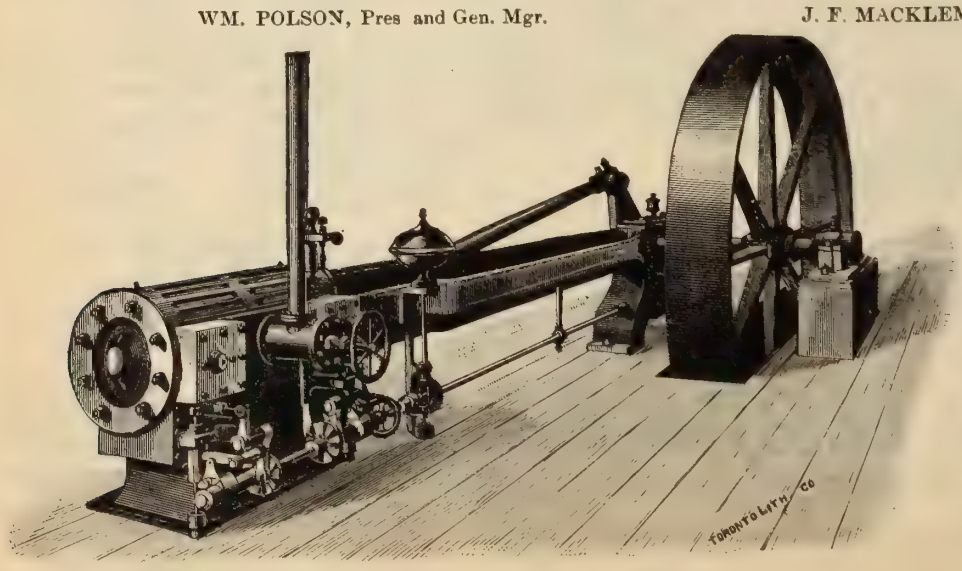

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VOL. 7. PETERBOROUGH, ONT., AUGUST, 1887. NO. 8.

The Canada Lumberman

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PUBLISHED MONTHLY BY

A. G. MORTIMER, PETERBOROUGH, ONT.

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PETERBOROUGH, ONT., AUGUST, 1887.

EDITORIAL COMMENT.

IF we are to accept the statement of the *Northwestern Lumberman* the price of lumber must have increased to a fabulous price in Canada lately, as that journal furnishes the startling intelligence that a loss of $10,000 was incurred by the destruction by fire of 60,000 feet of lumber in Ottawa. Surely $166 per thousand should leave the manufacturer at least a living margin of profit.

* * *

SHIPMENTS to Europe from Montreal, Quebec, St. John and Chatham, N.B., and other ports, are, according to latest reports, increasing daily. The English trade journals are chronicling almost daily arrivals from this side of the water, and although trade in that country is generally considered at low ebb, the consumption to all appearances is nevertheless large. Our news columns this month contain considerable information regarding the arrivals and sale of Canadian woods in Europe.

* * *

A NEW lumber cutter, a description of which is given on another page, has recently been tested in Toronto, and promises great results. This cutter substitutes a knife for a saw and does its work at one stroke. It cuts anything from a slab to a veneer and that without the slightest waste. Steps are already being taken for the organization of a strong company to go into the manufacture of this machine for the Canadian trade, and it is therefore quite probable that our readers will soon become familiar with the new process.

* * *

THE dispute between the Dominion and Ontario Governments *in re* the title to the timber land and minerals in north-western Ontario has been going on for some time, and although the Supreme Court has sustained Mr. Mowat in his views, the probability is that it will yet go before the Privy Council for final decision. Sir John Macdonald contends that the title resides in the Dominion Government as acquirers of the Indian title, while Mr. Mowat on the other hand holds that the Indian title was extinguished, not acquired. Time will tell who is right.

* * *

"WE should not loose sight of the fact," said G. W. Warren, the pine land dealer, "that the greater part of the pine to be manufactured at Rat Portage and Winnipeg, for use in the British possessions, must come from this side of the line. The bulk of the stumpage is owned by Minnesota men, and so the condition of the market up there, and what is being done, is of a great deal of importance and interest. I look for a very important development up that way. More men are interested in the Northern slope development than is generally supposed."

* * *

ONE hundred in the shade is a temperature seldom experienced in this part of the world, but for the past month it has been no uncommon occurrence to see the thermometer sizzling around that number. By donning our airy linen coat and trousers, with a nicely starched unmentionable, we *can* stand ninety-nine, but when the thing gets up to a hundred and over a line has to be drawn somewhere. We drew the line and went over to see some of our American cousins, but the scheme didn t seem to work. The further we went the hotter it got, and after bunking on the floor for several nights with our head in close proximity to a refrigerator, we made up our mind that Canada was not such a mean place after all and accordingly packed our valise and took the first train for home. To get the lumbermen to talk business these days is just about out of the question. Even a newspaper man can't draw them out. Their main ambition now-a-days seems to be directed to some sylvan resort where sweet breezes can lull them into a feeling of security against the heat of the office, and where by the aid of the lemon—and something else—they can keep in a somewhat natural physical and mental condition.

* * *

NEWS has recently come from Washington that the Treasury Department has decided that sawed elm boards 6½ feet in length, 1½ inches in thickness, the edges of which follow the natural shape of the tree, used in the manufacture of hoops, are dutiable at the rate of $2 per thousand feet, board measure, under the tariff provisions for sawed elm lumber. And this decision, aimed at our Canadian mills, comes just after the resolution of our own Parliament, at the instigation of the friends of foreign industries, not to impose an export duty on elm logs. The manufacturers in the United States want our elm, but they are so greedy as to grudge Canadians the profit even of this primary stave manufacture, wishing to obtain at small cost our raw material that they may reap all the advantage of turning out the manufactured article. Well may the Toronto *World* remark that our Parliament has committed "a grave blunder" in allowing hardwood logs to be exported free of duty, and add that we are offering encouragement to carry off out of the country valuable raw material, which we ought to hold at home with a firm grip, in order that the wealth it is converted into may remain with the country to which it belongs. This decision of the Washington Treasury Board supplies another strong reason why the export duty should be exacted and our Parliament should reconsider the matter as soon as it again meets.

AN important meeting of the representative lumbermen of Ontario was held in Toronto the end of June, at which several important matters of peculiar interest to the trade in general came up for discussion. The meeting was of such a character that for the present no public statement can be made of the work done. Suffice it to say that live questions affecting legislation were freely talked over and steps taken to protect the trade in every case where an undue advantage was being taken by the government, calculated to prove injurious to the lumber industry. The question of the immediate organization of a Provincial Lumberman's Association was again debated, resulting in positive steps being taken to further the scheme. THE LUMBERMAN is pleased to accept this as an indication of unity among the trade, and the overthrow of the barriers which in the past have tended to destroy the unanimity of action which should characterize so important a body of manufacturers. In union is strength, and at no time in the history of the lumber trade of Canada is organization more required than at the present time. The vital interests of the trade are threatened by the late action of both the Ontario and Quebec governments, and the strongest influence must be brought to bear if the lumbermen are to be protected from serious loss. We hope at an early date to be in a position to give our readers tangible proof of the work now under way, and to announce as a matter of fact the successful organization of a Lumberman's Exchange for Ontario, to be followed no doubt, by similar action on the part of the trade in the other provinces of the Dominion.

* * *

A GOOD deal has been said for and against the timber on the Canadian side that grows in the Georgian Bay region, but those who have put their money in there appear to be fairly well satisfied that they will have a chance to turn it over again, notwithstanding the restrictions which the Dominion Government has seen fit to put upon the exportation of logs. A gentleman who has lately been in the Spanish river district, says that the quality of the timber there is very satisfactory. It is not cork pine, nor the soft, black knot timber, but it is a sort of medium size, red-knot variety that makes a good average. It does not run remarkably high to uppers, but it is said that it does yield a satisfactory low percentage of culls, which perhaps makes it worth quite as much. It is not apparently a class of stock that is either very choice or else good for nothing, but a sort that may nearly all be marketed at a fair price. The Detroit gentlemen who favors *The Timberman* with some facts about that country this week, figures out a very good profit on it at present rates of cost and market value. He makes its net cost in pile at the mill $9 for stock that will average, say, $17 in the market. It can be freighted for about $3, and with $2 duty will cost $14 in market, leaving $3 as the net profit. There is, of course, not the bonanza in it there would be if there were no $2 to pay the Government, but there is still a chance on this showing for those who have invested there to make a profit on what they have put in. They are likely also to profit later by the removal of the duty, which is pretty sure to come off within a few years on both sides. The fact of the matter is, the natural market for the pine standing in western Ontario is through the distributing points on the lakes, and the inevitable tendency of trade will carry it where there is a demand for it, and in time break down any barriers that stand in the way of its free movement. —*Chicago Timberman.*

It is reported that an effort is being made in Michigan to enforce the prohibition of the importation of foreign contract labor against the French-Canadians who go over there to work in the woods in the winter. If this movement should be successful it would have a tendency to increase the expenses of the Michigan operators, and at the same time to increase the supply of labour and make wages easier for Canadian lumbermen.

* * *

Dr. Robt. Bell, of the Geological Survey, in a paper recently read before the British Association, states that the amount of timber which has been lost through forest fires in Canada is almost incredible, and can only be appreciated by those who have travelled much in the northern districts. The proportion of red and white pine which has thus been swept away in the Ottawa Valley and in the St. Maurice and Georgian bay districts is estimated by the lumbermen as many times greater than all that has been cut by the axe. Yet all this is insignificant in quantity compared with the pine, spruce, cedar, balsam, etc., which have been destroyed by this means in the more northern latitudes all the way from the Gulf of St. Lawrence to Nelson River and thence northwards. The total quantities which have disappeared are almost incalculable, but even a rough estimate of the amount for each hundred or thousand square miles shows it to have been enormous and of serious national importance. This is all the more to be deplored that these forest fires are usually the result of carelessness, and any laws existing on the subject seem to be a dead letter.

* * *

Preparations are already being made for an International Exhibition at Glasgow in the summer of 1888. The fact that the corporation has given a site of 60 acres whereon will be erected buildings covering 10 acres, shows the scale of this enterprise, promises to support which have even now been received from all quarters, the guarantee fund already exceeding $1,250,000. One of its stated objects is "to stimulate commercial enterprise by inviting all nations to exhibit their products, both in the raw and finished state." Our timber trades should be adequately represented on this occasion. It is true that the woods from Canadian forests are already well known and appreciated in the Glasgow market, but there should be such a display as will ensure our not suffering by comparison. And those Canadian mills that carry the manufacture of our lumber to a more advanced stage, might find their interest in trying to extend their market in this direction. We are ahead of Great Britain in wood working machinery, and ought to be able to obtain custom for doors, sashes, &c. Our manufacturers of machinery should also be represented.

* * *

The city of Melbourne, the most populous and most enterprising community of Australasia, has announced that it will hold a Centennial International Exhibition next year to celebrate the hundredth anniversary of the first settlement of the great Island-continent. With the impetus that the C. P. R. and its associated line of steamers has given to the trade of the Dominion, and the facilities for transport thus afforded, the Australian market has acquired increased importance, and this is especially the case with the products of our forests. The documents we have received in relation to it show that the management of the exhibition is in good hands and that every arrangement is being made for the convenience of exhibitors and spectators. We will quote one useful suggestion :—"Exhibitors are particularly requested to mark the trade price of the articles exhibited, so as to facilitate the judgment of the jury as well as the information of visitors." It is intended to keep the exhibition open from the 1st of August, 1888, to the end of January, 1889. We will give further information as we receive it, to our readers, but those of them proposing to exhibit would do well to communicate with the Minister of Agriculture, Ottawa, as applications for space should be made by the end of August, 1887.

* * *

Bradstreet's, usually well informed in trade matters, speaks of the increased export duty on saw logs as having succeeded in its objects of retaliating for the duty on our lumber and frustrating those Michigan lumbermen who while enjoying this protection bought pine lands in Canada, in order to get a cheap supply of logs. This importation of logs has, it says, been abandoned, and it mentions a concern, which owning 1,000,000,000 of Canadian pine, put in 12,000,000 feet of logs last winter in order to tow them to Tarvos and Saginaw, a project which has been abandoned. This is satisfactory and it is still more satisfactory to learn that these logs, sold to a Boston concern, are being sawn at Midland. According to the same authority other lumbermen from the States are withdrawing from these attempts to carry off Canadian logs. *Bradstreet's*, as might be expected, is better informed as to the real position of affairs than many who are laying down the law with more confidence than knowledge. It places the responsibility on the right shoulders by remarking that "meanwhile the Canadian Government is ready to permit free exportation of logs whenever the United States allows free importation of lumber." And until the United States sees fit to accept our standing offer, the export duty, which seems to work as was intended, will be retained.

EFFECTS OF RECIPROCITY.

Is it so certain that reciprocity would be all gain to the Canadian lumberman? There are two sides to every question and it is always as well to see what there is to be said on the other side. It is claimed by those in the United States who favor reciprocity that Canadian lumbermen would not obtain the amount of the duty for their own profit, but that the purchaser would secure the benefit of cheaper lumber. Though there is some difference of opinion of this point the majority of the lumbermen of the States more immediate affected, do not seem to fear that reciprocity would seriously reduce prices, and as they ought to be well qualified to form a reasonable conjecture, our lumbermen may fairly hope to pocket at least a considerable portion of the amount of the remitted duty. Again the advocates of reciprocity in the United States claim that their pine is being fast exhausted in the Northern States, and that free access to the forests of Canada would spare their own from such rapid destruction. In this some of the lumbermen of Michigan, Wisconsin and other States seem to concur, for it is notorious that some of those who have extensive limits in their own country have obtained others in Canada with hardly any concealment of their intention to work these and spare their home timber for the present. If there is any profit for United States lumbermen in reserving their limits till timber becomes scarcer and therefore more valuable, it seems as if such a policy must be equally advantageous for Canadians.

Another point to be taken into consideration is that with reciprocity the export duty on Canadian saw logs must go with the import duty imposed by the United States on our lumber. Would the increased competition of citizens of the United States for Canadian limits materially increase the price our lumbermen would have to pay for them? And would the drain of logs out of the country to be sawn in mills across the international boundary prejudice the Canadian trade?

Another question is whether reciprocity would materially cheapen the lumbermen's supplies. Perhaps in some localities corn could then be obtained at a price that would make it an economical substitute for oats purchased near at hand. Possibly, too, pork might be obtained more cheaply from the States than from the home market, though the abolition of the duty might not always have this effect, as there is little doubt that the great pork men of the Western States have in times of a glutted market sold in large quantities to our lumbermen at a reduction to cover the duty, thus reducing their surplus stock and maintaining prices at home.

A further question is what the effect of reciprocity would be upon our home markets for lumber. If, as is asserted by protectionists, Canadian industries would suffer from the competition thus facilitated, it is evident that the home market which some of our lumbermen have assiduously cultivated and which they find most remunerative, would be prejudicially affected, but on the other hand the friends of reciprocity maintain that it would give an impetus to our Canadian towns and increase business.

Weighing the different considerations, it seems that reciprocity would in some respects benefit the Canadian lumberman, but that this advantage would not be without some drawbacks. The relative importance of these drawbacks it would be difficult to estimate. They would vary considerably with distances from markets, facilities for conveyance and other local influences. It is at least certain that the trade should not be too sanguine as to the effect of reciprocity or exaggerate its benefits so as to be led into disappointment and perhaps inconvenient miscalculations.

There will, however, be time for further consideration before reciprocity is adopted. The United States does not seem to be eager to accept the Canadian offer of a renewal of the old restricted reciprocity, nor does Canada seem more eager to snatch at the suggestion of unrestricted reciprocity. If either bargain is made it cannot be concluded in a day.

THE N. & N. W. R. AND ITS MANAGEMENT.

Our attention has been frequently drawn to the manner in which the Northern and Northwestern Railway Company is treating the lumber merchants in Toronto and vicinity, and during a recent visit to that city we made enquiries of every lumber dealer we called upon, and found the dissatisfaction universal. To rightly understand the grounds of complaint it may be briefly mentioned that for many years Toronto, by its position as the terminus of a number of roads running through lumbering districts, has been practically made a slaughter market for the lower grades of lumber. For instance: Sales are frequently made by Toronto merchants of, say, 75 per cent. of a certain stock of lumber at the mills to go to the United States, and during the shipping of which the balance, or 25 per cent. is forwarded to Toronto to be sold for whatever it will bring. In this way an immense quantity of lumber is thrown on that market, and the builders and their consumers of lumber reap a great benefit in low prices. Much of this lumber has, however, either to be unloaded on the railway docks and yards, or has to be held on the cars for a few days until a market can be made for it. Certain rules in regard to demurrage on these cars have been laid down by all the roads coming into Toronto. The Grand Trunk and the Canadian Pacific railways have always treated their lumber shippers in a liberal spirit in this regard, and have shown themselves reluctant to add to the difficulties of the dealer by making charges for demurrage if unloaded in anything like a reasonable time. The management of the N. & N. W., however, has construed these rules in the harshest manner. and most unyielding manner. The agents are allowed no discretionary power and the only satisfaction consignees can get is to be told to place their case before Mr. Barker, and perhaps he may do something for them, which remark is generally accompanied by a smile of doubtful portent. These charges for demurrage by the Northern have become so onerous that customers in fear of such charges are reluctant to purchase lumber coming over this road, and so make matters worse for the wholesaler. Several of the leading merchants of the city stated in the most positive manner that they would not buy any lumber to come over the Northern railway if they could get it by any other route. Practically the severe rules put into effect by Mr. Barker are provoking a "boycot" most injurious to the road. The Grand Trunk and C. P. R. are often spoken of as huge monopolies, but their treatment of their Toronto customers is in marked contrast to the road which of all others should act in the fairest spirit towards its Toronto patrons. This question of demurrage is by no means the only ground of complaint against the Northern, and we certainly found in our interview with the Toronto lumber dealers an irritation and prejudice against Mr. Barker's management that must in the end act most detrimentally to the road.

WHERE IT GOES.

The annual draft on the United States forests for purposes outside of the ordinary lumber supply, is as follows: Shoe pegs require 100,000 cords of timber annually in their manufacture; matches 300,000; lasts and boot trees, 500,000. All this is of the most superior quality. straight grained and clear of knots and gnarls. To raise the telegraph poles of the country require 800,000 trees, and 300,000 more are required for annual repair. The railway ties of the country annually consume 75,000 acres of timber at least thirty years old, and the fencing of railways represents $45,000,000 and the annual repair $15,000,000. These are but a moiety of what is required of the United States forest supply. The burning of brick alone requires 2,000,000 cords of wood annually.

THE VENEER CUTTING MACHINE.

A Brooklyn, N. Y., man has invented an improved veneer cutting machine, and has applied it to the cutting of logs into lumber, claiming that it will effect a complete revolution in lumber manufacture. The invention is a large steel plate with knife-like edge, a compressing roller and ingenius appliances to serve the log and remove the lumber when cut—all operated by steam power. The log is held stationary in a horizontal position. The knife-like plate, capable of from 20 to 30 strokes per minute, strike the log at an angle of 45 degrees at each stroke, passing through its entire length and cutting off a board of perfectly smooth surface and uniform thickness. It is claimed that any degree of thickness can be cut, even to the hundredth part of an inch. A machine adapted for cutting logs four feet long and averaging two feet in diameter will cut in one day 37,500 feet of inch, 60,000 feet of half-inch, or 80,000 feet of quarter-inch lumber. Besides the present process of sawing, planing is also done away with, as the operation of cutting renders smooth the surface of the board. In material alone a saving is effected of from 37 per cent. in the manufacture of half-inch to 233 per cent in the manufacture of one-sixteenth inch lumber. It is the expectation of the inventor that in the case of thin lumber, at all events, which composes 66 per cent. of United States consumption, his machine will superspede saws and planing mills. He shows barrel staves made from lumber manufactured by his machine. He says that from 1,000 feet of lumber 1,800 of such staves is the highest number now obtainable, whereas by the use of his machine 4,500 can be got.

THE NEW CHICAGO LIST.

THE lumber dealers of Chicago, says *The Timberman*, have yielded to the inevitable and advanced their prices. At least they have made a new list. Perhaps strict exactness requires it should be said that they have not so much raised the figures they were getting, as they have made a basis for future advances; for it is certainly a fact that on many grades the meeting attempted to do nothing more than to put into shape prices that have been asked and received for some time back. The item of No. 1 fencing, for example, was not really advanced, though admitted to be the strongest thing on the list. The figure established—$15.50—has been current in this market for a couple of weeks, and in its last issue *The Timberman* noted the fact that this stock was held by some yards at $16. So far as fencing goes, the new list merely brings the prices up to the plane that had been reached some days ago by houses that lead the market. And certainly, any conservative man must admit that $14 for common boards, though it is a distinct rise from previously ruling figures, is not a price for them that can long obtain. They are selling for $13 by the cargo, including a liberal percentage of culls, which leaves a handling bill for the yards of an even dollar. Lumber cannot be handled on such a margin. The piece stuff list is put in rather better shape. The advance of short lengths to $12.50 gives the yards about $2 margin, which will let them out, though it will give them no great profit. But they have not been in the habit of making much money on their dimension stock, and it is probable that most of them will feel very well pleased for the present, to be assured that when they fill a bill of two-inch lumber they are getting back the money they invested in it.

It is well known that the "official" Chicago price lists, so called, have had a bad reputation. They have been known to be unreliable and to be disregarded entirely in the business of selling. But there is reason to believe now that the old order of things has, for the time at any rate, passed away, and that all things relating to these prices have become new. *The Timberman* is inclined to put faith in the new list which has been issued, because it conceives that the prices rest upon a basis of necessity and good business sense. The theory that prices can really be advanced by a price list meeting is exploded. A price list meeting has no such function, as a matter of fact. It cannot make values. It can by inquiry ascertain what values are, and through consultation and by agreement can secure concert of action to the end that the price of lumber and its actual value may be made to correspond. When it undertakes to go beyond this, and strain its power to force prices above a natural and healthy level, its deliberations become farcial and its resolutions come to nought.

It is fortunate that in their action this week the Chicago dealers kept carefully within the limits set by prudence and good judgment. They have made a list of prices that may fairly be obtained. They may be obtained, not because they are declared by a meeting, but because they represent what lumber is worth.

There is another good reason why the new list should prove one that will be observed by the trade—it is simply the basis of further advances that are certain to follow within a few weeks. There is the strongest "bull" feeling in lumber that was ever known at this season of the year. It is a feeling developed out of the conditions of the trade, and that is bound to increase. As it transpires from day to day—and it certainly will do so—that competing markets follow promptly in the lead of Chicago, and put up their figures to correspond, the practicability of securing still better prices will become apparent, and the necessary result will be a steady upward movement. A lingering fear of the dull weeks about the Fourth of July, led to the making of a slightly lower list than the strength of the situation warranted, but in this respect if the dealers made any error it was on the right side. The mistake of making their list too low, can be easily rectified; the mistake of making it too high, has always proved demoralizing and disastrous.

Beginning with the better grades, there was little attempt made to advance them; in fact, none of the items were really put up except B select, which was made $31 for 1¼ and 1½ inch, and $32 for 2-inch, and 2-inch third clear, which was put at $44. In 12-inch stocks, B was advanced $1, to $37, and D to $22 for 12 to 16 feet, and $24 for 18 and 20 ft. Twelve inch common, was put at $16 for 12 feet, $14.50 for 14 and 16 feet, and $18 for 16, 18 and 20 feet, being an advance of about fifty cents. No. 2 boards 12 feet, were raised a half dollar to $14. Box boards were not changed particularly, except on D, which was lifted to $24. There was considerable discussion over strips, which were finally left about as they have been quoted, with a provision that sixteen feet strips be held one dollar higher than other lengths. In flooring, the practical changes were on C, 6-inch, put at $24.50; No. 1 Norway raised to $16.50; A and B, 4-inch, $33 and $31 respectively; Norway, clear, $23, B $21 and C $18; shiplap was advanced to $15.50 and $16 for 8 and 10-inch; the balance of the flooring list was left without much further change. It was developed that there is a good deal of variation in the prices made on siding, and after some talk it was decided to quote it $21.50 for clear, $20.50 for A, $18 for B, $13.50 for C and $10 for D. The price of ceiling was made in proportion. Common and cull boards were advanced decidedly over the prices that have been secured heretofore. They were made $14 for No. 1, $12.50 for No. 2 and $10 for No. 3. Thick common went up to $14 also. The list on fencing was fixed at $15.50 for No. 1, $13 for No. 2, $10 for No. 3; No. 1 Norway, $15; and 4-inch common, 12 and 14 feet $13, and 16 feet $14. It was recommended by the committee that the D flooring should be left in the No. 1 quality of this sort of lumber. Piece stuff was advanced to $12.50 for 2x4 to 2x10—12, 14 and 16 feet. For 2x12 and small timber the price was put at $3.50. Up to 2x10 the price of 18 and 20 feet was settled at $15. The quotations on the larger sizes and longer lengths may be found in our market columns. Cull dimension was also advanced a trifle, 2 inch plank of promiscuous widths being made $10, and 2x4 $11. The shingle quotations were established at $2.40 for extra A, $2.25 for choice, $2.15 for standard, and $2.20 and $2 for extra and standard cedar. Lath was put up to $2.10.

HOW TO SELECT GOOD TIMBER.

There are certain appearances which are characteristic of strong and durable timber, to what class soever it belongs. In the same species of timber, that specimen will in general be the strongest and most durable which has grown the slowest, as shown by the narrowness of the annual rings. The cellular tissue, as seen in the medullory rays (when visible), should be hard and compact. The vascular or fibrous tissue should adhere firmly together and should show no woolliness at a freshly cut surface, nor should it clog the teeth of the saw with loose fibres. If the wood is colored, darkness of color is in general a sign of strength and durability. The freshly cut surface of the wood should be firm and shining, should have somewhat of a translucent appearance. A dull, chalky appearance is a sign of bad timber. In wood of a given species, the heaviest specimens are in general the strongest and the most lasting. Among resinous woods, those which have least resin in their pores, and among non-resinous woods those which have least sap or gum in them, are in general the strongest and most lasting. It is stated by some authors that in fir wood which has most sap wood, and in hard wood that which has the least, is the most durable; but the universality of this law is doubtful. Timber should be free from such blemishes as clefts or cracks radiating from the center; "cup-shakes" or cracks which partially separate one annular layer from another; V upsets, where the fibres have been crippled by compressions; V "rindgalls," or wounds in the layer of the wood, which have been covered and concealed by the growth of subsequent layers over them and hollow or spungy places in the centre or elsewhere, indicating the commencement of decay.—*Chicago Lumber Trade Journal.*

TREES ON THE PACIFIC SLOPE.

GEORGE H. Hamm, the well-known correspondent, who is "doing" British Columbia in the interests of the Winnipeg *Manitoban*, writes as follows: "The timber supply of the province is apparently inexhaustible, and will doubtless prove a mine of wealth before many years. Already shipments are made to the Australian, South American and Chinese markets, but the volume of trade has not as yet reached the proportion that it is capable of. The principal tree is the Douglass fir, which ranges from four to twelve feet in diameter, and from two hundred to three hundred feet high. It is straight and tough, and capable of bearing a great strain, and is almost unequaled for bridging, framework and for shipbuilding, while its great length and straightness make it especially adapted for masts and spars. Besides the Douglass, the following trees are to be found in the province—the lists being obtained from a work issued by the local government. Western hemlock, large, found on coast and Columbian river; Englemann's spruce, eastern part of province and interior plateau; Menzie's spruce, very large, mostly on coast; great silver fire, coast tree of great size; balsam spruce, abounds in Gold and Selkirk ranges, and east of McLeod's lake; Williamson's Alpine hemlock, too scarce and too high up to be of much use; red pine (yellow pine or pitch pine,) a variety of the heavy yellow pine of California and Oregon, very handsome, four feet in diameter, common in dryer parts of the interior; white pine, (mountain pine,) Columbia region—Shuswap and Adarms' lakes—also interior of Vancouver's Island; white-barked pine, small; western cedar (giant cedar or red cedar,) wood pale, yellow or reddish color, very durable, often found 100 to 150 feet high, and 15 feet thick; yellow cypress (yellow cedar,) mainland coast, Vancouver and Queen Charlotte islands: western larch (tamarac,) Rocky Mountains, Selkirk and Gold ranges, west to Shuswap lake, large tree, yields strong, coarse, durable wood: maple, valuable hard wood, on Voncouver and adjacent islands, Queen Charlotte [illegible] the mainland coast, up to 55 deg., attaining a diameter of four feet; vine maple, very strong, tough white wood, confined to coast; yew, Voncouver and opposite mainland shores, very tough and hard, and of a beautiful rose color; cr[illegible] along all the coasts, wood very hard, takes good polish, and withstands great wear; alder, two feet thick, on the Lower Fraser and along coast, good furniture wood; western birch (paper or canoe birch,) Columbia region. Upper Fraser, Peace river, range and value not much known; [illegible] couver island, 70 feet in height, and three feet in diameter; dogwood, Vancouver and coast opposite; arbutus, close grained, heavy, resembling box, reaches 50 f[illegible] 20 inches in diameter, found on Vancouver and neighboring islands; aspen poplar, abounds over the whole interior, reaching a thickness of two feet. Three other va[illegible] are found, commonly included under the name cottonwood. One does not extend above Yale, and is the [illegible] used in Puget Sound to make staves for sugar barrels for San Francisco. The other two kinds occur in valleys [illegible] Mountain ash, in the interior; Juniper (red cedar or [illegible] cedar,) east coast of Vancouver, and along the shores of Kamloops and other lakes in the interior.

There are already some very extensive saw mills in operation—and have been cutting for a quarter of a century—and yet this branch of industry is only in its infancy. Not only is there the trans-Pacific trade, gigantic as it should soon be, but with cheap freight rates the treeless plains of the [illegible] could be readily supplied, and profitable interchange of commodities spring up.

THE SPEED OF CIRCULAR SAWS.

Competent authority has decided after long experiments that the rim of a circular saw should travel about nine thousand feet or nearly two miles a minute. Following is a table compiled to show the number of revolutions a minute saws of different sizes should make to reach an average speed of 9,000 feet a minute:

Size of Saw.	Revs. a minute.	Size of Saw.	Revs. a minute.	Size of Saw.	Revs. a minute.
8 in	4,500	30 in	1,200	52 in	700
10 in	3,600	32 in	1,125	54 in	675
12 in	3,000	34 in	1,058	56 in	650
14 in	2,585	36 in	1,000	58 in	625
16 in	1,222	38 in	950	60 in	[illegible]
18 in	2,000	40 in	900	62 in	575
20 in	1,800	42 in	870	64 in	550
22 in	1,636	44 in	840	66 in	545
24 in	1,500	46 in	800	68 in	529
26 in	1,384	48 in	750	70 in	514
28 in	1,285	50 in	725	72 in	500

These calculations are based on the assumption that the circumference is just three times the diameter. This assumption is for ease in computation, and the reader of course understands that, as the circumference is more than three times the diameter, by a small fraction, the saw will in each case run a little faster than this computation demands. The speeds are near enough for all practical purposes.

—Says a traveller who has recently visited the Pacific coast: Among the myriads of natural curiosities and wonder that confront the visitor to the coast of the North Pacific ocean, nothing impressed me so deeply as the gigantic forests of Puget Sound. That arm of the Pacific is 200 miles in length, with a shore so irregular and indented so plentifully with bays and deep harbors that its measurement is over 1,800 miles in extent. Along this whole shore line and extending thence on both sides miles and miles farther than the eye can see, is one vast unbroken area of forest trees, the like of which I never saw. A few saw mills have been erected along the sound, and although for several years they have ripped 500,000,000 feet of lumber from these forests annually, these spaces made by what seem like tremendous inroads on the timber, appear like little garden patches. The markets for this product of these mills in the depths of the Washington territory wilderness is South America, Australia, Central America, and the Pacific ocean islands. The great belt of virgin timber covers 30,000,000 acres, an area equal to that of the States of Massachusetts, Connecticut, Vermont, and New Hampshire. The forests are of fir, cedar, maple and other valuable wood. The firs comprise two-thirds of the timber. An official estimate places the amount of timber on this belt at 500,000,000 feet, enough to last the mills now there for more than 1,000 years. The fir trees grow to the enormous height of 250 feet, and I have seen piles of boards cut from them, not one board in which was less than 10 feet long and six feet wide, without a knot from one end to the other.

EUROPEAN NOTES.

Baltic timber is at present selling well in England.

Wholesale business is not active and the complaint is that things are quiet.

The arrivals of timber from Canada are increasing in importance, the principal commodity being pine.

The trade in Grimsby is firm in its character, but there is no great amount of business doing from quay or yard.

The first arrivals in Liverpool of the spring fleet from Quebec will make the quays appear more lively than for some time past.

An important reduction is being made in the London dock rates of timber. This will be good news to shippers, importers and the trade generally.

The importation of wood goods into the port of London still continues to be restricted within much narrower limits than are usual for this period of the season.

Steamers are pushing themselves into every branch of the wood trade in England, and it is said that they will largely pervade the pitch pine trade this year, with consequent reduction in freights.

Things are very quiet at the London timber docks, and the absence of the bustle usually expected at this period of the year is very noticeable. It is evident the undercurrent of activity which brought to the surface the advance in flooring, and some other descriptions, was not sufficient to keep the volume of trade at its ordinary level, and stagnation has again become a marked feature.

Messrs. A. F. & D. Mackay say :—"The importation from Quebec has not yet commenced, the amount of consumption falling wholly on the stock on hand, which has now got to a very low ebb. Of Quebec square pine the stock is 28,000 cubic feet, of waney pine 62,000, and of St. John and other ports pine 12,000 feet, making a total of 102,000 cubic feet, against a like total of 346,000 cubic feet twelve months ago. The bulk of the present stock is Quebec waney board pine."

The stock of wood in the public docks in London on the 30th June, 1887, was: Foreign deals and battens, 3,211,000 pieces; pine and spruce battens, 1,705,000 pieces; boards, 5,894,000 pieces; total, 10,810,000 pieces. The deliveries for the first six months have been: Foreign deals and battens, 4,319,000 pieces; pine and spruce battens, 1,058,000 pieces; boards, rough, 854,000 pieces; boards, prepared, 4,903,000 pieces; total, 11,134,000. These figures will do much to account for the very depressed state of the market.

There have been considerable arrivals of deals at Glasgow lately, comprising Quebec deals and Pictou, N.S., spruce deals and a small cargo of Namsos deals and battens. There have also been a number of sundry imports of wood goods per steam liners, and American walnut logs and oak planks, &c. The first sailing vessel with timber from Quebec had arrived at Greenock last year on 23rd June. There is a quiet demand, and imports of Quebec log timber this season are expected to be small.

Messrs. Churchill & Sim, of London, in their last wood circular, report the following arrivals from Canada during the past half year :—Pine deals, &c., 265,000 pieces, against 86,000 pieces in 1886; spruce, 32,000 pieces, against 86,000 pieces in 1886. And from New Brunswick, &c.: Spruce deals, 15,000 pieces, against 83,000 pieces in 1886. There is little market business to report in pine deals, such sales as have been made are at last month's quotations. Spruce have been more freely taken by the trade, but at no improvement on recent rates. For timber the demand has been very feeble and prices lower.

From the accounts relating to the trade and navigation of the United Kingdom for the month of May, we learn that the difference between the value of the imports and exports to that country for the first five months of the year amounts in round numbers to about £62,000,000, or, in other words we receive value for our goods to the extent of £90,000,000, and pay to foreign countries and our colonies something like £152,000,000. The question of how this enormous difference is made up is left to the political economist. There can be no question but that there has not been anything like a balance between the exports and imports for a considerable time past, the former being uniformly downward.

Messrs. Dobell & Co., report as follows :—"We have no change to note in our trade, which has throughout the month shown a lack of animation. The import from Quebec has been confined to pine deals, and though it has not been excessive it has been considerably beyond the requirements of our trade, and an unduly large proportion of the arrivals have had to be yarded. Spruce deals are down to a very low point, in fact the stock now held is not equal to the consumption of last month. Pitch pine has been arriving freely but the consumption has also been on a liberal scale, and in view of the season being about over, the stocks cannot be considered excessive. All other goods are lower in stock than we have known them for some time, but, unfortunately, this has so far not had the beneficial effects on values which might have been expected."

Particulars of Glasgow stocks at 30th June are appended :—Teak timber shows about 2,600 loads less on hand than at corresponding date last year; about 3,000 loads of teak have gone into consumers' hands during the past quarter. Pitch pine is less by about 8,000 loads than the stock of a year ago, but at that time it was far in excess of requirements; the quantity now on hand is about the same as at 30th June, 1885, and is ample. The consumption of pitch pine during the past three months (say about 8,000 logs hewn and sawn) shows a falling off compared with corresponding quarter last year. Of Quebec log timber there is, on the whole, a smaller stock than at this time last year, to the extent over all of about 3,000 loads. There has been a moderate consumption during the past quarter. In the Clyde import list for this week the first of this season's import of timber from Quebec to Greenock is included, viz.: the cargo per Arizona from Quebec.

Farnworth & Jardine, of London, report as follows regarding the imports from Canada;—Yellow pine timber: The stock of both waney and square pine is now reduced to a very low compass, the consumption has been small, and very little will now be done until the arrival of the new season's wood now shortly due. Red pine is seldom inquired for; there has been no consumption and the stock is only nominal. Oak: The consumption of Canadian has been moderate and the stock is small. From the States the import of both logs and planks has been large; it has gone freely into consumption at rather lower prices, and the market is now very lightly stocked. In elm nothing has been doing, and the stock is very limited. Ash is in moderate request, but prices rule low, and the market is almost bare. Pine deals are heavy in stock, and, although the consumption has fairly kept pace with the import, sales are most difficult to effect; prices have had a downward tendency, and prospects are not encouraging for future imports. In Quebec staves nothing has been doing. Regarding New Brunswick and Nova Scotia spruce and pine deals, they say: The import has been unusually light, and almost entirely by steamer; the consumption has been satisfactory, leaving the market with the lightest stock held for many years past at this period. Prices have been fairly steady throughout the month, but it has not been possible to obtain any advance on the low prices now ruling. Birch is arriving freely, and, although the consumption has been large, the market has had a downward tendency; the stock, however, is moderate. Pine deals are seldom inquired for, and prices are low.

The half-yearly general court of the proprietors of the Canada company was held in London, on the 30th June, at the offices, No. 1, East India Avenue, Leadenhall Street, E.C. Mr. Robert Gillespie presided, and in moving the adoption of the report—which recommended a dividend at the rate of £2 per share—said that after the distribution a sum of £4,076 8s. remained to be carried forward. The results for the half year ending the 30th June had been, he thought, on the the whole satisfactory. The land sold and leased compared favorably with what had been done in the previous year, and though the rule receipts had been less than in the corresponding period of 1886, they would observe that the falling off had been in rents and interest, and also in the receipts from timber and sundries. He had analysed the transactions of the year considered up to the end of March, and he thought the proprietors would concur with him in thinking that the expectation he had at the last meeting expressed had been fairly realized. The transactions had resulted in a satisfactory advance upon the valuation of December, 1886. The total lands disposed of represented 1,936 acres, of which 883 acres, which were valued in December last at £1 4s. 11d., had realized £1 9s. 6d. per acre; 673 acres which had been valued at £5 6s. 7d. had realized £7 12s. 10. per acre, and 380 acres, which had reverted to the company at £3, had realized £3 3s. 2d. per acre. The general result was that there had been an increase at the rate of 20 per cent. over the valuation of December, 1886. This verified the contention that though the company might be slow in effecting its sales, it realized very advantageously on its property. The chairman concluded by reading extracts from the report of the Commissioners in Canada, which extracts testified emphatically to the satisfactory condition of the company.—The report was adopted.

Canada has at least one representative lumber journal. THE CANADA LUMBERMAN,, published monthly at Peterborough, Ontario, is one of the most readable of our exchanges :—*New York Lumber Trade Journal.*

GENERAL NEWS NOTES.

—Quebec freight market is dull.

—Edmund C. Spencer, Parrsboro', lumber merchant, has assigned.

—The Export Lumber Co., of Montreal, is doing a large shipping trade this season.

—A large number of mills commenced sawing operations in the province of Quebec during the month of July.

—Reports from Three Rivers (Que.) district state business in the shipping line from there has been very brisk this season.

—Montreal freight market remains weak, 37/6 for deals being about the rate, and even at this rate it is now easy to get shippers.

—A man named Arthur Prenovost was accidentally drowned July 15th at Hall, Neilson & Co's saw mill, Three Rivers, Que., where he was employed.

—A. L. Wright & Co. are building a steam saw mill at Cloverdale river, near Salisbury, N.B., which will have a circular and gang, with accessories.

—The drives on the St. Maurice have not yet got in, and it is rumoured quite a number of logs have stuck owing to the rapid fall of the water in the creeks.

—John Paterson's mill at Hollin, Ont., was struck by lightning and totally destroyed by fire, together with a large quantity of lumber. Loss, about $3,000; no insurance.

—Messrs. Hall, Neilson and Co., who operate in the province of Quebec, are reported to have a number of logs hung up on the Wattawin, which will now probably remain there until next spring.

—Disastrous forest fires have been ravaging Cape Breton. A tract of one hundred square miles of country, between Sydney and Cow Bay, has been completely devastated. It is said to be the worst fire known in the island.

—Mr. William Little, of Three Rivers, has been a heavy purchaser of laths and No. 1 cull pine deals, and it is rumoured he has badly burned his fingers, the market having broken and he has been left with large stocks on hand.

—At a recent meeting of the Quebec Board of Trade a successor was elected to fill the post of President of the Board in lieu of Mr. T. Beckett (Dobell, Beckett and Co.), whose other duties would not admit of his retaining the office.

—The Canadian Pacific road is likely to have a suit on its hands for not having built bridges over Bow river, west of Canmore, Ont., such as will not interfere with log navigation. The company owning the Eau Claire mills at Calgary will seek damages because of a jam above the railroad bridges, having given the railroad company due notice of the requirement for a log passage.

—The employees in the Burrard Inlet saw mills, British Columbia, went out on strike recently in order to enforce a demand for a reduction in the hours of labor to ten hours per day. The men have been working eleven and a half hours per day. The mills were very busy at the time of the strike, no less than six vessels being in waiting for lumber for foreign ports. The strike has since ended by the proprietors according to the demands of the men.

—Mr. T. Butler has succeeded in getting all his drive of 100,000 pieces down the Salmon river and all has been rafted and towed to Deseronto. On the Moira, the tail of the drive is at Cannifton with very little water. On that river over 150,000 pieces have been left behind owing to low water, in the dead water between Plainfield and the railway bridge. Of this stuff about 35,000 pieces belong to the Rathbun Company, the rest belonging to the Messrs. Gilmour, Flint & Holton, Wm. Sutherland, and Job Lingham. They may be got down should heavy rains occur in the fall.

—From the best information obtainable, says the Minneapolis *Lumberman*, it appears that the season's log cut has about come up to the expectations. B. E. Nelson, secretary of the Minneapolis exchange, who has given considerable attention to the subject, although not in possession of full statistics, is of the opinion that the cut will aggregate about 275,000,000 feet, and this figure is generally accepted by the lumbermen. In addition there are 25,000,000 to 30,000,000 of old logs in the river, making a total log supply of about 300,000,000 feet. The prospects are that all of this will be sawed this season. The present condition of the lumber piles throughout the Northwest warrants the full cut. Stocks have not been so low since 1882 as they are to-day, and they are lower in Minneapolis, in proportion, than they are at other principal manufacturing and shipping points. According to figures compiled for the lumber exchange the stock in Minneapolis was about 130,000,000 on April 1, against 200,000,000 in the spring of 1886, and a similar supply in the spring of 1885. In Chicago there is about 100,000,000 feet less this spring than last.

IMPERIAL TARIFF POLICY.

To the Editor of the Canada Lumberman.

DEAR SIR,—At present the movement in favor of Imperial Federation seems to be in the stage of a general policy, the cultivation of a sentiment for unity, and opposition to the adoption of anything leading to disintegration, rather than of a definite proposal of any immediate practical measure. As to the exact shape any modification of the present status of the difierent portions of the Empire shall take, it seems to be at present undetermined and left an open question even for members of the Imperial Federation League. A suggestion, not yet officially adopted, has however been made by the Canadian branch that all portions of the empire should agree to discriminate in favour af importations from each other and against foreign imports, an idea which has also found some acceptance among the members in Great Britain. The proposal is not to form an Imperial Zollverein with free trade, or a similar tariff for all parts; neither the principal Colonies nor the mother country are at all inclined to such a step, which indeed would be contrary to the constitution of the League reserving as it does to the self-governing colonies their right to frame their local tariffs. The idea briefly sketched is that the different portions of the Empire whether their tariff calls for high duties, low duties or no duties at all, should maintain them unchanged as against each other, but that they should all add a discriminating duty of a certain amount against foreign importations, thus whether protectionists or freetrade, favoring their fellow subjects against foreigners.

Though this idea is still undeveloped, and has not become a practical question, it may be of interest to your readers in these times of lively discussion of our fiscal policy and proposed amendments of it, to consider how such a policy of Imperial discrimination against the rest of the world would effect the Canadian timber trades. Our two great markets apart from home consumption are the United States and the United Kingdom. It would be impossible to estimate the effect of the change as regards the trade with the States, because it would depend greatly upon the action taken at Washington in consequence of it, and thus is an unknown factor in the problem. As to the trade with the United Kingdom it would undoubtedly give it an impetus for it would give our timber a preference as compared with that from Northern Europe and the Southern States of the Union, both strong competitors with Canada for the custom of Great Britain. In the British West Indies it would secure us almost a monopoly of the market, for a very moderate discriminating duty would transfer from the United States to Canada this valuable business of which the former has so far had the lion's share. The same would be true of Australia, which has hitherto drawn largely from Norway and Sweden and from the Pacific Coast States of the Union, neither of which in the face of any adverse discrimination should be able to hold their own against the splendid timber of British Columbia. It would be useless to extend this view to the markets of smaller or more distant portions of the Empire, though their aggregate trade might be worthy of consideration.

Though as I have said this is not at present a practical question of the day, it is not without interest for our lumbermen and others connected with the trade, who may watch, as I shall, to see what progress is made with this movement. It is a matter of curiosity now, but some day, perhaps in a modified shape, it may become a live issue. Events march rapidly in these times, and there is change in the air.

Yours truly,

I. F. L.

LOGGING ON THE OTTAWA.

OTTAWA, CAN., July 7.—This, the beautiful seat of the Dominion Government, is also the great entrepot of the Ottawa River. Draining a heavily wooded district containing 100,000 square miles, the Ottawa is the greatest logging river of Canada, and its timber industry is the most important in the Dominion. Each year the lumbermen work their way further back into the interior, logs now travelling as far as 200 miles before reaching the mills. The number of saw mills in the Province of Quebec is stated at 1,729, employing 12,461 hands. The estimated value of the rough products of the forest annually exported from the province is about $10,000,000. The number of logs that will be brought down this year will be about 2,500,000.

In former years great confusion and loss resulted from the mixing up of the logs, as well as their being left along the banks after the subsidence of high water. These annoyances are now reduced to a minimum, under the marvellous system adopted and carried on by the Upper Ottawa Improvement Co., popularly known as the "boom company." Extensive booms have been constructed, distributing stations established, and with the powerful steam tugs, and large body of experienced men at work, the losses amount to comparatively nothing.

The most important distributing station is near the town of Quyon, about forty miles above Ottawa. Here the logs are sorted with reference to the side of the river on which they are to be delivered, as well as by certain groups of mills, a further sorting taking place below. The logs are brought down into a narrow passage called the gap, and are distributed according to their axe marks. The principal sawmill men on the north side of the river are known. Eddy, Conroy and Hamilton; and those on the south side as Booth, Perley, Mason, Young and Bronson. The logs take the names of owners as they are pushed through the "gap" by the stalwart loggers, who sing out the particular pocket into which they are to be floated, by very singular, and to the uninitiated, incomprehensible terms. Here are a few of the calls:

CALL.	MEANING.
"Eddy, I roll!"	A log belonging to Eddy is rolled over in the water so as to bring the private mark to the surface, and is sent down the gap, being seized by the proper man and pushed into the appropriate pocket.
"Eddy, 3 times!"	Three logs for the Eddy pocket.
"Perley, I see!"	A log for the Perley pocket.
"Conroy, I shove."	A Conroy log is shoved down the gap.
"Bronson at the hustings!"	A playful tribute to the greenness of a former employee who described the platform or dock on which the company's quarters are located as "the hustings" having reference to the Canadian or English term for what is known in American politics as the speaking platform at a political meeting.

Thus the monotony of work is greatly relieved and the natural witty exuberance of the French and Irish loggers finds expression.

On the piling grounds around the Chaudiere Falls at Ottawa, there is always a stock of lumber estimated at 125,000,000 feet. To keep these filled to their utmost capacity, a large number of mills cluster around the falls, some of them employing over a thousand men. They are supplied with the finest machinery and lighted with the most powerful electric light, by the aid of which, work during the season is maintained without ceasing both day and night.—*Cleveland Iron Trade Review.*

U. S. LUMBER TRADE.

THE White Pine lumber market is generally fairly active. Prices continue firm. Since our last report about one and a half million feet has gone forward to the West Indies. Trade with Cuba is very quiet. For the River Plate several small lots have gone forward and two cargoes are loading. The demand seems to keep up in moderate degree. For Rio Janiero, 500,000 feet have been shipped recently. This will no doubt meet immediate demands. Small lots are being shipped to Australia to complete vessels landing on berth. For Africa and the West Coast of South America, there is nothing being shipped to speak of. Inquiries for North Carolina Pine continue in excess of the available supply, particularly kiln-dried boards, both rough and worked. Prices are firm and with a decided tendency to advance. Mills are so overrun with orders that they refuse point blank to bid on time bills which call for delivery by a specified date. Air-dried lumber is in good supply, but for many purposes this cannot be used to advantage. The scarcity and high price of Spruce has induced an increased demand for timber and large quantities are being placed. The trade in Yellow Pine continues fairly active, the yards reporting a good business, which is becoming restricted for forward delivery, the lumber for most of the buildings to be erected having been contracted for. Boards are still dull, with an over supply. There is an improvement in the export trade, especially for the River Plate, and for Europe, especially for continental ports; but Brazil seems to be suffering from over-importation of Pitch Pine, and the only orders received from there now are to postpone deliveries. There is a very moderate inquiry from the West Indies, the Windward Islands and Central America. Prices for Spruce continue firm and without change. Arrivals have been comparatively heavy, but not sufficient to cause any weakness in values. Yard stocks had been so bably broken that holders can afford to be stiff in their askings. There is considerable now on the way and it is possible, but not probable, that a slight shading in figures may occur within the next two weeks. Laths continue without change and with light receipts. The Hemlock mills are mostly busy with orders, and the retail yards are complaining that they cannot get stock as fast as they desire. There seems to be a feeling among them that they will soon have to pay an advanced price. A number of mills report that they are behind from two to three weeks in filling orders that they are usually able to ship in from a week to ten days. Should the preseut demand continue there must be an advance of from 50 cents to $1 per M., before September. Business in Hardwoods at the yards has been a little quieter. The demand has not been so steady and the moderate activity has not been kept up. Trade fully up to what it generally is at this particular season of the year. Arrivals are slightly on the increase and while prices are fairly firm, buyers are not as anxious as they were a few weeks ago. Manufacturers are offering lumber more freely and assortments, that were broken, have been sufficiently replenished for present needs. Quotations from first hands unchanged, but there is apparently more eagerness to place stocks. Rough edge Eastern Second Growth Ash and Hickory are in steady demand. It would be difficult to secure first rate lot of either in large quantity. The usual summer quiet prevails in the Mahogany and Cedar trades, and as stocks, remain very much as at last report. Cherry stocks are firm and unchanged. There is now a demand for export, more particularly for the light grades such as light pipes, West India light hogsheads and light barrel staves. There is a ready sale for these. Manufacturers of staves should watch the mark closely, as the demand fluctuates a great deal. To-day an accumulation of heavy stock with no demand make it undesirable, while light stock is wanted next week the reverse is just as likely as not to be the case.

DISAPPEARANCE OF OAK TIMBER.

It is stated that oak timber especially is rapidly disappearing from Europe, although half of the area of Sweden, one-fourth of Norway, one sixth that of Switzerland, and 780,000 square miles in Russia are said to be yet in forest. The consumption of oak in France has doubled during the last fifty years; she requires 15,000,000 cubic feet yearly for wine casks alone, 72,000 for building purposes, 600,000 cubic feet for her fleet, and 150,000 cubic feet for railway carriages; £800,000 worth of staves were imported in 1852; £5,900,000 worth are now needed. Since losing Alsace and Lorraine, France contains 150,000,000 acres, 20,000,000 of this surface is covered with forest. Holland and Belgium are nearly denuded of timber, and are large importers. North Germany is rich in forest, but within half a century has commenced to cut down young trees. Austria has sold her forests since railroads have been introduced. In Italy no forests remain. Spain and Greece are almost woodless. The southern coast of the Mediteranean is almost forestless.—*Ex.*

BUFFALO AND TONAWANDA, N. Y.

BUFFALO, July 19.—With all due respect to dealers in pine lumber here, says *The Timberman* correspondent, I am inclined to suspect a slight dullness in the trade, notwithstanding the assurance of the majority of them that business is good. There are several reasons why the demand is not as good as during the past three or four weeks. The principal cause of complaint is that smaller markets are being drummed to death by a few representative houses here and particularly at Tonawanda. That small lumber hamlet, judging from reports received, contains a large number of very weak-kneed sellers. One from there with a heavy stock of dry lumber on hand, has by his over-anxiety to dispose of it, created a widespread feeling of distrust and weakness in future prices. The trail left by one of them has furnished a large sized wedge to split prices in every town struck by him. It is also said that drummers are more numerous this year than last, and "tally a round dozen" or "fifteen for this morning," seems to be the greeting most agents meet on the road. The best bids are taken by agents outside, and in most cases the price is lower than would be accepted for the same stock here. There is no real change in the market at present, but the outlook for future trade, in my opinion, is very favorable.

Shingles and lath are in the same condition as reported heretofore, viz., demand good, supply light and prices strong.

OUR esteemed contemporary, *Timber*, of London, Eng., recently devoted considerable space to a criticism of Prof. John Macoun's article on "The Value of Canadian Woods for Export," which appeared in these columns some months ago. Owing to Prof. Macoun's absence in British Columbia at the present time we have not been favored with his views on the subject, but we can at least conjecture that he will have something to say in substantiation of his statements at no very distant date.

FOR the next issue of THE LUMBERMAN we would like to secure as many reports from individual lumbermen in all parts of Canada as possible, concerning the state of trade; how the cut is progressing; the condition of the drives; the probable output, and any other information concerning their business that can be furnished. It is these items of news which go to make up an interesting paper, and as a post card will furnish all the necessary information, we trust that the request herewith may bring in hundreds of replies. Let each of our readers consider this a personal invitation, intended In the interest of the trade. Replies should reach this office by August 15th if possible.

THE NEWS.

ONTARIO.

—Kingston is to have a new dry dock.

—R. Bell & Co., Toronto, builders, have assigned.

—John Patterson's saw mill at Hollen has been burned.

—The making of egg barrels is a new enterprise at Fergus, Ont.

—The Government is being petitioned to increase the duty on axes.

—Perley & Pattee's saw mills at the Chaudiere commenced running July 12th.

—Mr. James Benor is about erecting a new sash and door factory at Campbellford.

—Robert Campbell, of the firm of R. Campbell & Son, Eganville, Ont., is dead.

—The Parry Sound Lumber Co.'s tramway recently fell, injuring several emp'oyees.

—Charles Conrad, lumberman, of St. Thomas, has compromised with his creditors.

—The sash and door factory belonging to Hunter & Ezard, Milton, was recently damaged by fire.

—Large quantities of square timber are coming over the Grand Junction for shipment at Belleville.

—The saw mills at Crow Bay, owned by Messrs. Gilmour & Co., have a capacity of 14,000 feet per day.

—Jones & Beaudet succeed A. G. Jones as owners of the sash and door factory at Rochesterville, Ont.

—Joseph B. Weller, a lumber merchant, Belleville, has been committed to gaol as a dangerous lunatic.

—An immense amount of property has been destroyed by a fierce bush fire at Wilmur, Addington County.

—Mr. Wm. Smith, of Beaverton, has added a new planer and matcher to the wood-working department of his business.

—Mr. John Goodman, of Minden, is putting new machinery in his mill and expects to have it again in operation this season.

—About 60,000 feet of lumber belonging to Mr. Grier, of Ottawa, was burned on July 4th. The loss is estimated at $1,000.

—Fred Pual, a young fellow working in the Cedar Mill, at Deseronto, had three fingers of his left hand lacerated by a saw recently.

—Henry Bros., Randwick, have sold their saw mill to Mr. J. D. Smith, Toronto, who intends removing the machinery to North Bay.

—The saw mills owned by McLaren & Edwards, Carleton Place, are running at full force, and expect to cut 25,000,000 feet this year.

—On July 18th Suttaby's steam joiner and planing mill, at Gravenhurst, caught fire, and in a very short time a loss of from $4,000 to $8,000 was incurred.

The amounts passed in the estimates for slides and booms in the Pembroke district were: River Coulonge and Black River, $2,800, River Ottawa, $4,000.

—At Brockville, Manhard & Co., lumber, have admitted Thos. Doddridge a special partner, contributing $10,000, from May, 30, 1887, to May 30, 1890.

—The schooner Aurora landed at Owen Sound the first consignment of the twelve million feet of lumber which will be brought there for shipment over the C.P.R.

—The milling company, at Medonte, under the management of Mr. John Knight, will cut four million feet of lumber this season. This is about the average output.

—The Str. E. B. Eddy left the Chaudiere recently with a tow of twelve barges loaded with lumber for Quebec. This is considered one of the heaviest tows of the season.

—The planing mill owned by Mr. George Cormack, of Whitby, was recently destroyed by fire, together with most of the machinery, patterns etc. Mr. Cormack's loss is about $9,000.

—Pine drives on the Gatineau and Ottawa are progressing favourably, and the mills are all cutting up in full time. The demand for the lower grades of lumber is good in the U.S. market.

—Messrs. Dowd & Co., of Oscoda, Michigan, lost a large quantity of square timber by fire recently on the Pickerel River, supposed to be the result of carelessness on the part of the employees.

—Martin Hanmore, an employee in the saw mill of R. Traux & Co., Walkerton, met with an accident a few days since, from the effects of which he died in a few hours. It appears that the man who works the rip saw allowed a piece of wood to fall against the saw, which flew with terrific force, striking Hanmore in the ribs burying them into his lungs.

—Messrs. McLachlin Bros. and Mohr Bros. are putting their drives of saw logs and dimension timber through the slide at Eganville. The drives consist of nearly one hundred thousand pieces.

—Every department of the Cedar Mills, at Deseronto, is reported as enjoying a boom. Large shipments of ties, lumber and shingles are daily made to all parts of Canada and the United States.

—Chew's lumber mill, at West Gravenhurst, was burned June 30th. The weather was calm and consequently the fire did not extend to the lumber or other buildings. The mill was insured for $2,500.

—Great quantities of telegraph poles, hoops and staves, are being shipped from the vicinity of St. Thomas to the United States the present season, the value of the exports from that city exceeding $62,000.

—All the drives in the Parry Sound district are coming down slowly and none of them will be "hung up" this year. Some of the companies are still cutting logs in the bush and intend to keep their camps going all summer.

—The Terra Cotta Lumber Company, of Deseronto, celebrated the Queen's Jubilee by starting their works on that day. They have already commenced the manufacture of their products. The new industry will give employment to many hands.

—The *Intelligencer* says that the Rathbun Company have constructed a simple, yet effective machine on their property adjoining the Grand Junction dock at Belleville, for loading railway ties on flat cars. With this machine, which is operated by steam power, a car can be loaded in fifteen minutes.

—Prices of pine lumber at Ottawa do not vary much from last quotations, good lumber of all kinds but strips rating about $2, and strips from $1 to $1.50 less than last fall. For ordinary and coarse lumber prices remain about the same. Freights by boat to Albany $3 and to New York, $3.25.

The steam-barge Scotia, from Kingston, Canada, with its consorts Gaskin and Oriental, loaded about 40,000 cubic feet, or 480,000 feet, board measure, of timber for shipbuilding at Montague, Mich., recently. The timber was to be subsequently put on a raft, sent down the St. Lawrence, and shipped to England.

—THE LUMBERMAN regrets to announce the failure during the past month of the well-known and popular wholesale Toronto lumber firm of Hargreaves & Co., which was brought about, it is said, by the depression in the lumber trade. The liabilities are placed at $15,000 and a surplus of $4,000 is claimed by the firm.

—Messrs. A. & P. White of Pembroke, have opened the steam saw mill purchased from Mr. W. B. McAllister. The mill has been thoroughly overhauled and the old machinery replaced by new or made over. An extension has also been made to the building and on the whole it is now one of the best saw mills in this section.

—Attorney-General Mowat left for New York on July 13th, sailing from there by the Sardinian. It is understood his principal business in the old country is to settle whether the case of Queen vs. St. Catherines Mill and Lumber Company regarding timber in the disputed territory shall be carried before the Privy Council or not.

—Mr. W. H. Sicsmith, of Ottawa, is having built two large barges capable of carrying 300,000 feet of lumber at McRae's ship yard, opposite the Queen's wharf. The new barges will be two of the largest on the river. Mr. Sicsmith, who has been for a number of years connected with the forwarding firm of Blanchard & Co., intends establishing a new and independent line of barges and tugs.

—The Terra Cotta Lumber Company, of Deseronto, manufactured their first lot of materials three weeks ago. Experts pronounced them first-class and indeed superior to any they had seen elsewhere. This is most encouraging. The Company have made contracts with several parties for their wares. The works attract crowds of visitors who seek to satisfy their curosity about the new lumber.

—The Burk's Falls *Arrow* says:—Mr. Monroe of William Hamilton Machine Works, Peterborough, called upon us on Monday. He was on his way home from North Bay, where he had concluded a contract for a large steam saw mill which they are to build and turn over complete for operations. He inspected the W. Train & Son's mill here, and was much pleased with the manner in which the millrights had put in the machinery.

—The William Hamilton Manufacturing Company, of Peterborough, is building band-mill machinery for the Victoria Lumber Company, at Victoria Harbor, in the Georgian Bay region. The mill is the Allington patent, an invention of D. K. Allington, of Saginaw, four of which are now being put into mills on that river. The Victoria Company will have two gangs and a band-mill in its establishment, and will be prepared to do business in the latest style.

—The lumbering firm of J. R. Booth at the Chaudiere, expect, at the end of this year's cutting in the mills, to have a reserve of logs of at least 40,000, while Messrs. Bronson & Weston expect to have a reserve of 50,000 pieces to begin sawing on next spring. Messrs. Perley & Pattee as well as E. B. Eddy, will have sufficient over to carry on sawing operations in the spring until the first of their drive comes down. The shortage in last winter's cut will only average about five per cent. more than last year, so that no great scarcity of logs is anticipated.

—The drive on the Ottawa above Des Joachims is all on the main stream. It is expected that it will be swept into Des Joachims by the 15th of August. The drive on the estate of D. Moore, on Kippewa, will not be out of the lake for some time yet. It will be too late for the main drive and will very likely be laid up for this year, on Kippewa lake. J. R. Booth and Grier's drives on Mattawa are all out of the Mattawa river. The Dumoine drive is coming along slowly; it is just possible some part of it will not get out this year. The Black river drive is all swept out.

—It is rumored in lumber circles that the biggest transaction which has ever taken place in the trade is about completed, being the sale of McLaughlin Bros.' large mills at Arnprior, and extensive limits on the Upper Ottawa, to Hon. J. G. Ross of Quebec, and E. B. Eddy, the Match King, of Hull. The consideration is $2,500,000. The cause of selling is the ill-health of the managing partner, who has been advised by his physician to seek rest. In the event of the purchase being completed it is said Messrs. Ross and Eddy contemplate building a short line railway from Arnprior through the Townships of Fitzroy, Huntley, March and Napier to Ottawa.

—A dispatch from Ottawa says: The lateness of the timber drive this spring, owing to the long winter, is now becoming apparent. Several of the leading millers have recently had to shut down their mills temporarily several times during the last month or so owing to the scarcity of logs, as many supplies expected have not yet arrived. Experienced old lumber workers also declare their opinion that the lumber cut of last winter will soon prove to have been smaller than supposed, and the mills will not work nearly so long this season as in the past years. If they do they will have to use up the reserve supply of logs ordinarily kept over to begin work in early spring.

—The Georgian Bay Consolidated Lumber Co. at Waubaushene, have issued the following notice: "This Company appreciating the stand their men have taken during the recent strikes in the neighbourhood, as well as their loyalty to the Company's interests at all times, and desiring to acknowledge the same, propose until further notice to cease work in connection with the Severn and Waubaushene Mills, at three o'clock on Saturday. While some of the men might prefer half an hour daily, this Company believe the interests of the greatest number will be served by allowing the whole reduction of time on Saturday." Would it not be well for other concerns of a like character to join in carrying out the good example set by the above company?

—At the Russell House, Ottawa, on July 2nd, Mr. W. H. Lewis, auctioneer, sold three valuable timber limits on the North Shore of Lake Huron, No. 40, 46 and 47, each containing thirty-six square miles. The river Wahnapitus waters all three, and the C. P. R. Company have a station near at hand. Among the lumbermen present were Messrs. Wm. MacKay, R. H. Klock, A. McCormack, P. H. Colton, O. Latour and R. Hurdman. Berth 40 was knocked down to Mr. Colton for $25,000. Berths 46 and 47 were sold to Mr. Joseph Riopelle of Ottawa for $13,000 and $7,000 respectively. The terms of the sale were one half cash down and balance in one year. This is the first sale of limits that has taken place in this district this year. Lumber is high now and owners of limits are not anxious to sell.

—Mr. G. B. Greene, secretary of Upper Ottawa Improvement Company, says there is not a particle of danger that there would be any shortness in the lumber this summer. All the mill-owners with perhaps the exception of one, had sufficient logs to keep their mills busy all summer. Asked if there would be any trouble next spring from want of logs, Mr. Greene said there might be some of the lumbermen who had not a sufficient reserve. Messrs. Perley & Pattee had a drive of some 30,000 logs on the Kippewa River which would not reach Ottawa this summer owing to the lowness of the water on that river making the drive float very slowly. This would, of course, leave them short on reserve logs for next year, but he thought if they had enough reserve logs to keep their mills till the 1st of June next year this drive would be down and would keep them till that year's drive was in.

—Reports from the Upper Ottawa state that the lumber drive this summer would be considerably earlier than it was last year. The logs are taken at the head of the Long Sault by Mr. Alex. Lumsden, who has the contract for drawing the logs from the Long Sault to the commencement of the Upper Ottawa Improvement Company at Schewyn. Mr. Lumsden states that when he gets the tail of the drive into the company's booms the drive will make rapid progress to Ottawa.

—The Minden *Echo* of a late date says:—Our village has been visited during the present week by one of J. M. Irwin's drives under the superintendence of Mr. G. S. Thompson with Messrs. Preston & Johnston as foremen. The drive consists of some 32,000 pieces of pine and ash, a large number of which are 25 to 60 feet in length, having been got out specially for to meet the demands of bill timber trade. Mr. Thompson informs us that he is changing the base of his operations in the woods this year and building a new depot in the township of Harbun. The building consists of an office, storehouse, blacksmith shop, stable and dwelling, built in the form of a square, with a yard enclosed of 100 yards either way. He is also clearing a farm of some 200 acres, where he proposes raising hay and roots for the use of the shanties. The front of his dwelling is surmounted by a flag pole, sixty feet high, beating a large jubilee Union Jack, on which is inscribed "Port Irwin," by which name the depot is known in the district. Three more drives are expected in the course of the next few weeks containing in all some 60,000 logs.

—Mr. Cook wants to know what compensation the Government intend to allow the Indians of Christian Islands for timber cut by licensees of the Crown on their lands on the eastern shore of Georgian Bay; how have the moneys arising from the sales of the Indian lands on Georgian Bay, Lakes Couchiching, Huron and Simcoe, and of the Coldwater reserve, been applied; what disposition has been made of the £1,200 annuity payable to the Chippawa Indians under the surrender of 1818; and what compensation will the Government make to the Indians or the Christian Islands for the lands comprised in what is known as the Penetanguishene purchase, which the Indians allege was never surrendered by the tribe to the Government. Replying to the above Sir John Macdonald informed Mr. Cook that the money arising from sales of Indian lands on the Georgian Bay, Lakes Couchiching, Huron and Simcoe, and from the Coldwater reserve, had gone to the credit of the Indians in the Chippawa reserve. With regard to the claim of the Christian Island Indians for timber cut by licensees of the Crown on lands on the eastern shore of Georgian Bay, that matter would be settled when the commissioners met to settle the claims against the old Province of Canada.

—A Canadian writing to the Montreal *Herald* from the English metropolis, among other valuable suggestions makes the following pertinent remarks anent tree planting in Canada, which are worthy of every consideration:—"The question of protecting your country against a timber famine and all its attendant evils is becoming a pressing one in Canada, and is one which your Government might judiciously take in hand—at least negatively, by being less liberal in the granting of timber limits. That the planting of a country with trees is a work in which individuals may largely share, your institution of Arbor Day is a practical proof. It may interest your readers to know of one or two "big things" in the way of tree planting by individuals which have been done in the Old Country. Lord Dalhousie has planted on his Brechin Castle estate since 1884 nearly two millions of trees, and has in the nursery over another million of young first trees ready for planting. If Lord Dalhousie goes on like this he may before long beat the Duke of Athole, who, between 1774 and 1826, planted more than fourteen millions of trees at Dunkeld and Blair Athole. Scottish proprietors have for a good while past recognized the value of thousands and scores of thousands of barren acres as planting ground for hardy, marketable timber. Think what a gift to posterity such men bequeath."

QUEBEC.

—Local prices in lumber at Montreal are reported good, but for exportation the great competition has brought prices low.

—There seems to be every prospect this year of increased shipments of Ottawa pine deals from Montreal to Europe, chiefly by steamers.

—Very little chartering has been done in this Province so far this year, as most vessels arriving have been previously chartered in England.

—The supply of white pine logs in the Ottawa valley—which is now the almost exclusive source of supply for white pine—is variously estimated at between 600 and 700 million feet, board measure. Some square timber, which was wont, years ago, to figure for 10 to 15 million cubic feet, is reduced this year to under one million feet.

—The lumbermen, a Quebec despatch says, did not succeed in getting the Quebec Government to promise to reduce the tax on timber limits, but some modifications in regard to greater fixity of tenure, etc., were made.

—In the spruce districts, from Montreal down to Gaspe, operations in some parts were either suspended altogether or considerably reduced; in others, they were materially increased over those of previous years. On the whole a full average supply of spruce will be forthcoming.

—Reports from different points in Quebec state that there have been the cleanest drives this season than for years past, This is generally attributed to the fact that the winter's snow passed away slowly, giving plenty of water in the rivers and streams for floating with great advantage.

—No doubt owing to the small sales, comparatively speaking, made by Quebec exporting houses last winter in Europe, the vessels so far arrived since opening of navigation have not been numerous. Up to June 25th, the arrivals this year have been 97 ships, 75,480 tonnage, as compared with 120 ships, 103,090 tonnage, in 1886. However it is expected that by 1st August there will have been loaded fully as many vessels as last year at same date.

—The Quebec ship labourers are again trying to obstruct the trade of the port. They have, through some petty spite against a batteau owner, passed a resolution boycotting his batteau for the season. The result, however, has not turned out exactly as they would have wished, as the first vessel boycotted turned to with her own crew, and is now loaded. The consequence is that other captains will now do the same and it is hoped Quebec will soon be free of the obnoxious rules of the Quebec Ship Labourers' Society.

—Mr. Andrew Thompson, of Quebec, who has been in London for some time in connection with the floating of the Montmorency Milling property as a limited company, has returned home. We have not learned the result of his mission.

—The spruce mills in the vicinity of Quebec have now all secured their logs, and are cutting on full time. Spruce lumber is in fair demand from the U. S., and several mills have made considerable sales. One mill in this vicinity is in negotiation for the sale of all they can cut into boards. If this sale is made, the cut of spruce deals will be reduced some 200,000 to 300,000 q.s.

—A correspondent of an English exchange, speaking of Quebec trade, says:—The present state of our market is one of complete stagnation. Our shipping houses, with few exceptions, find themselves with pretty heavy stocks; in face of a demoralized market at your side, with sales difficult, almost impossible to make, they very naturally have ceased purchasing here. There are, therefore, still some spruce cuttings unsold. The pine manufacturers of the Ottawa Valley have the advantage, however, of sawing into boards for the United States, and those who have not yet made contracts to saw deals are now sawing into boards. The markets in the United States show great strength, and our pine manufacturers will find a good market, and good prices therein, for all they can make. We are sorry to say the present aspect of your markets does not warrant similar expectations. We wish we could see some ray of hoping better things for the future, but we fail in any direction to see it. As we often in past years brought to the notice of your readers, we look each succeeding year for a constantly decreasing volume of our wood exports to the United Kingdom, and a constantly increasing augmentation with the United States. In the latter country their magnificent pine forests of the West are giving out, as those of the East have given out many years ago. Their annual requirement of wood has grown to vast proportions, and is every succeeding year growing to still greater volume. Looking on the other hand, to the United Kingdom, the future outlook seems to us as if the requirements of wood goods are decreasing year by year. Another factor is the supplies coming from the Baltic, to which there seems to be no practical limit, and with which in prices it is becoming less and less possible for us to compete, more especially in spruce or whitewood.

NEW BRUNSWICK.

—All the drives are down the Restigouche.

—Freight rates still rule low from New Brunswick to British and Continental ports.

—The output of lumber from the port of St. John for the first six months of this year will fall very far short of that for the corresponding period of last year.

—The lumber mill and some lumber owned by Hilyard Bros., Portland, were destroyed by fire July 13th. The mill was valued at $30,000, and insured for $13,000.

—Last year 95,000,000 feet B. M. of logs passed through the Fredrickton boom. It is estimated that there will be 100,000,000 feet pass Fredrickton this season. The cut of logs below that city is unimportant.

At a meeting of the English creditors of Guy, Bevan & Co., lumber merchants, of St. John, N.B., held in London recently, the liabilities of the firm was found to be £180,000, of which £106,000 is unsecured. The assets are £25,000.

Mr. E. J. Smith's saw mill at Shediac, N. B., was thoroughly repaired last winter and a new foundation put in, and is now capable of sawing 50,000 to 60,000 feet a day. About 2,500,000 feet of logs were brought down the Scadouc this spring, and the mill is now running full blast, sawing deals, boards, laths and shingles.

The St. Croix *Courier* says the drive from Katahdin is now in the vicinity of the forks of the Penobscot and includes about 18,000,000 feet of logs. One hundred men and [illegible] horses are employed on the drive. All last winter's cut, with the exception of about a million feet, and the whole of the previous season's cut have been successfully brought from the Wissatiquoik. Mr. Tracey expects to reach his destination at Greenbush boom about July 20th.

—The big jam of 7,000,000 or 8,000,000 feet of logs still hangs on the Aroostock Falls, and unless there are very heavy rains it will remain there all summer. The Dechaine drive, of three and one-half millions, is hung up in Big Black river, about 60 miles above Fort Kent. These logs are owned by Hayford & Stetson, Bangor City. The Sewall & McIlvaney drive, which was hung up at the falls in the Allegash about a fortnight was started by the rise of water caused by the recent rains, and is now coming along well with every prospect of getting into St. John in good season. Allegash enters the St. John 30 miles above Fort Kent. The last rains brought up the water in the river seven feet.

A New Brunswicker writes: The American market for our staple continues very good, and were it not for the duty that the shipper has to meet in the United States Custom houses the returns would be highly satisfactory; as it is, the prices received on lumber shipments to American ports compare very favourably with those received for lumber cut for the British consumer; and I am of opinion that it is only a matter of time when by far the greater quantity of the lumber cut in this section will be shipped to the United States, simply because that country is our natural market, and, besides that, we cannot shut our eyes to the fact that the Baltic wood, which is taking the place of ours in many ways, can be laid down in the British market in much quicker time and for much less expense than can the wood from this side of the water. Consequently the consumer invests in that article which, other things being equal, he can get for the least money, and the Canadian lumber has to suffer.

MANITOBA AND NORTHWEST.

—Considerable quantities of lumber is being shipped from British Columbia to South America.

—Gangs of men are taking out saw logs along the Saskatchewan from Pitt to Saddle lake for Prince Bros., of Battleford.

—Messrs. Leamy & Kyle have the ground staked off and arrangements made for the erection of a large sash and door factory at Vancouver, B. C.

—The Alberta Lumber Company are establishing a saw mill at Red Deer, Alberta. They have lumber limits on the Red Deer and Saskatchewan rivers.

—The Royal City Planing Mills Co., of Vancouver, are sending to Yokohama, via the Abyssinia, samples of their windows, sashes. doors, blinds and lumber.

—Latest reports from the Lake of the Woods lumber district, go to show that a portion of the "hung up" logs have been got out. It is said, however, that the supply of logs for mills in this vicinity will be very limited.

—The logs being floated down the Bow river to the Eau Claire mills at Calgary, has been jamed up at the C.P.R. bridges west of Canmore. It is stated the the Eau Claire Co. will claim damages against the C.P.R. for the detention of their logs.

—The Northwest town of Calgary boasts of a 75-horse power saw mill, with a capacity of 100,000 feet per day, a 25-horse power planing, sash and door factory, the largest in Manitoba or the Northwest, and a smaller planing, sawing and grinding mill.

—A lot of sash, door and window ware from Vancouver, B. C., manufacturers, is being taken on board the S.S. Abyssinia consigned to Yokohama and Hong Kong. It is likely that the future will develop an important trade between those places in a few years.

—The Moodyville saw mills are working night and day at present to keep up with the demand for lumber and to hasten the loading of the vessels now taking in cargo at their wharf. This is rendered absolutely necessary, as a number of vessels are now under charter and are on their way to this port to load at the company's mills.

TRADE REVIEW.

TORONTO.

TORONTO, July 27, 1887.

Lumber trade in this city is dull. The striks of the carpenters and the season of the year both contribute to the existing state of the market. Even in the present condition the demand for bill stuff is in excess of the supply. Some of the principal dealers refusing bills, not being in a position to fill them.

Shipments to the United States are not numerous. Prices are well maintained and have an upward tendency.

No indications point to an early settlement of the difficulties between tee master carpenter and men. Each side seems resolved to starve the other into subjection. In view of the fact that seven of the best weeks for building purposes have gone by it might be as well did a general strike take place, or a lockout of the various trades, and the balance of the year be spent in effecting a solution of the questions between the interested parties. It is amazing that in this the end of the 19th century men can be found who will surrender their freedom of action to the keeping of irresponsible beings, curtailing misery on those depending on them for the necessaries of life; compelling children of tender age to go to work in factories, their wives to take in washing, or tramp the streets begging, cheat the grocer, butcher and all who furnish them with supplies of any kind. From all such assemblies good Lord deliver us!

Mill cull boards &scantling..$10 00	Dressing stocks.....14 00@15 00
Shipping cull boards, promiscuous widths..... 12 00	Picks Am. inspection..... 30 00
" stocks..... 13 00	Three uppers, Am. inspection 40 00
Scantling and joist, up to 16 ft 13 00	B. M.
" " " 18 ft 14 00	1½-in flooring, dressed 25 00@30 00
" " " 20 ft 15 00	1½ " " rough .14 00@15 00
" " " 22 ft 16 00	1¼ " " dressed 23 00@25 00
" " " 24 ft 17 00	" " undressed.... 14 00
" " " 26 ft 18 00	" " dressed 16 00@20 00
" " " 28 ft 19 00	" " undres'd 12 00@14 00
" " " 30 ft 20 00	½Beaded Sheeting, dressed ..... 18 00@20 00
" " " 32 ft 21 00	Clapboarding, dressed..... 12 50
" " " 34 ft ....22 50@22 50	XXX sawn shingles, ₱M 2 75@2 90
" " " 36 ft 24 00	Sawn Lath..... 2 25
" " " 38 ft 27 00	Red oak..... 20 00@25 00
" " 40 to 44 ft 30 00	White " ..... 25 00@30 00
Cutting up planks 1¼ and thicker dry.....25 00@26 00	Basswood, No, 1 & 2..18 00@20 00
" boards " 18 00@20 00	Cherry, No. 1 & 2 ...50 00@60 00
	Whiteash 1 & 2.....25 00@30 00
	Black ash 1 & 2.....20 00@25 00

HAMILTON.

The following are the quotations of the yards here :—

Mill cull boards and scantlings .....$ 9 00 to $10 00	1½ flooring, rough. 16 00 to 18 60
Shipping cull boards, promiscuous widths..... 10 00 to 12 00	1½ flooring, rough. 16 00 to 18 00
Shipping cull stocks 13 00	1½ flooring, dressed face measure ... 32 00
Scantling and joist up to 6ft..... 13 00	1¼ flooring dressed face measure ... 25 00
Scantling and joist up to 18ft..... 13 50	1 flooring dressed face measnre ... 23 00
Scant ing and joist up to 20ft 14 00	Beed sheeting 1... 28 00 to 30 00
Scantling and joist up to 22ft..... 15 00	Picks A M. Inspection..... 30 00
Scantling and joist up to 24ft..... 16 00	Three Uppers A. M. Inspection..... 40 00
Scantling and joist up to 26ft 17 00	XXX sawn st ingles per M..... ... 2 60 to 2 70
Scantling and joist up to 28ft 18 00	Sawn Lath 2 25
Scantling and joist up to 30ft 10 00	Red oak..... 20 00 to 25 00
Cutting up plank 1¼ and thicker, dry 20 00 to 25 00	White oak..... 25 00 to 30 00
Cutting up boards 20 00	Basswood No. 1 and 2..... 18 00 to 20 00
Dressing stocks... 6 00 to 18 00	Cherry No. 1 and 2 50 00 to 60 00
	White Ash No. 1 and 2..... 25 00 to 30 00
	Black Ash No. 1 and 2..... 20 00 to 25 00

MONTREAL LUMBER MARKET.

MONTREAL, July 25, 1887.

Since our last report prices in the lumber market here have been firm and well maintained, although for exportation the great competition has brought them somewhat lower. There has been an active business done at the yards for city consumption as well as for country trade, but contractors seem to be pretty well supplied for some time now. A good export trade is being done, and shipments so far this year include 1,372,200 pieces of deals, ends and battens to Europe, and 484,638 pieces lumber to South America. Rates for freight to both South America and Europe continue unchanged.

The Quebec Local Government has received another strong protest from lumbermen against their recent increase of the Provincial tax on timber. It is understood that while the Government refused to reduce the tax, they promised some modifications in regard to greater fixity of tenure, etc.

The following are the quotations at the yards here:—

Pine, 1st quality, ₱ M $00 00@40 00	Bass, run of log culls out, ₱ M.... .....$18 00@20 00
Pine 2nd " " 00 00@30 00	Oak, ₱ M..... 40 00@50 00
Pine, shipping culls, ₱ M..... ..... 14 00@16 00	Walnut ₱ M 60 00 100 00
Pine 4th quality deals ₱ M..... 10 00@12 00	Cherry, ₱ M..... 80 00 100 00
Pine, mill culls, ₱ M. 8 00@10 00	Butternut, ₱ M..... 35 00@40 00
Spruce, ₱ M ..... 10 00@13 00	Birch, ₱ M..... 20 00@25 00
Hemlock, ₱ M..... 9 00@10 00	Hard Map'e, ₱ M.... 25 00@30 00
Ash, run of log culls out, ₱ M..... 20 00@25 00	Lath, ₱ M..... 1 50@ 0 00
	Shing es, 1st, ₱ M... 2 00@ 3 00
	Shing'es, 2nd, ₱ M.. 2 50@ 0 00

NEW YORK CITY.

NEW YORK, July 25, 1887.

Trade in this city at present is rather at low ebb, but the prospects are that in a short time an improvement will be percepitble. The yards are all well stocked but distribution is slow. Sellers are talking higher prices, but the probabilities are that rates will remain about the same as at present. North Carolina pine is cutting a prominent figure in this and other eastern markets. Its growth in popularity during the last year is astonishing. Its sale has affected spruce, yellow pine and Norway pine.

Export trade is moderate. The River Platte business is now being carried on largely from Montreal. Trade with the West Indies is fair. The Australian business is in small lots. Orders for Africa are few and small. The lumber exported for the week ending July 16, amounted to 1,375,577 feet, in addition to which five lots of shingles, amounting to 171,586 were forwarded. The shipments were all small, running from 8,000 to 150,000 feet, with one exception, a lot of 240,000 feet consigned to Demarara.

Spruce is still scarce and high priced. Yellow pine is moving moderately. Eastern spruce offerings for the past week have been somewhat heavier, considerable of which comes from St. John. Northern spruce sells faster than it can be manufactured, and as a result prices are firm. Pennsylvania hemlock is active, while Northern hemlock continues to be offered in moderate amounts. Lath and shingles are fairly active. Prices are firm and the demand as good as it was last year at a corresponding date.

SPECIAL CONTRACTS.

Pine, very choice and ex. dry.....$65 00@70 00	Pine, strip plank, dr clear..... 00 32@00 35
Pine, good..... 55 00@60 00	Spruce boards dressed 00 25@00 25
Pine, shipping box.. 21 00@22 50	Spruce, plank, 1¼ inch er ch ..... 00 28@00 30
Pine, common box.. 18 00@20 00	Spruce, plank 2in each 00 38@00 48
Pine common box ⅞ 16 00@18 00	Spruce p auk 1½ inch dressed ..... 00 23@00 30
Pine, tally plank 1½ 10 in..... 00 44@00 50	Spruce plank 2 inch dressed..... 00 43@00 45
Pine, tally plank 1½ 2nd quality ..... 00 35@00 40	Spruce wall strips.... 00 15@00 18
Pine, tally plank 1½ culls ..... 00 30@00 32	Spruce timber..... 20 00@22 00
Pine, tally boards dr'd good ..... 00 32@00 35	Hemlock boards each 00 18@00 20
Pine, tally boards dressed common..... 00 28@00 30	Hemlock joist, 2½x4.. 00 16@00 18
Pine, strip boards culls ..... 0 18@00 20	Hemlock joist 3x4... 00 18@00 20
Pine, strip boards merc'table..... 00 20@00 22	Hemlock joist 4x6.. 00 40@00 44
Pine, strip boards clear 00 25@00 26	Ash, good ..... 45 00@53 00
	Oak..... 50 00@60 00
	Maple cull..... 20 00@25 00
	Cargo rates 10 per cent. off.

EXTRA SELECTIONS.

Maple good..... 40 00@48 00	Whitewood ⅝ in..... 35 00@40 00
Chestnut ..... 40 00@50 00	Whitewood ⅞ panel... 45 00@50 00
Cyprus, 1, 1½, 2 and 2½ in..... 35 00@40 00	Shingles ex. shaved pine 18 in..... 8 00@ 9 50
Black Walnut ⅞..... 85 00@100 00	Shingles clear sawed pine 16 in..... 4 50@ 5 00
Black Walnut good to choice.....140 00@160 00	Shingles cypres 24x7. 22 00@24 00
Black Walnut selected and seasoned ....150 00@175 00	Shingles cypress 20x6 00 00@14 00
Black Walnut count'r 00 22@00 28	Yellow pine dressed flooring ..... 30 00@40 00
Black Walnut 5x5.. 150 00@160 00	Yellow pine girder... 26 00@35 00
Black Walnut 6x6..160 00@170 00	Locust posts, 8 ft.... 00 18@00 20
Black Walnut 7x7..175 00@180 00	do 10ft .... 00 24@00 25
Black Walnut 8x8..175 00@180 00	do 12ft .. 00 29@00 34
Cherry wide.....100 00@120 00	Chestnut posts ..... 00 03@00 3½
Cherry, ordinary.... 70 00@80 00	
Whitewood inch..... 45 00@50 00	

OSWEGO, N.Y.

Three uppers.....$46 00@47 00	No. 2,5-4..... $ 1 80
Pickings .... 36 00@37 00	No. 1,4-4..... 1 50
Cutting up, No.1.... 26 00@27 00	Cedar, 4-4 ..... 1 70
Cutting up, No. 2.... 18 00@20 00	Pickets, 5 4 x 5-4x4,
Dressing .... 19 00@21 00	No.1..... 14 00@15 00
No. 1 Culls..... 13 00@14 00	1x3x4, No 1..... 18 00@20 00
No. 2 Culls..... 11 00@12 00	1x3x4, No 2..... 10 00
Sidings, selected, 1 in 31 00@39 00	1st and 2nd black ash, 1in .... 23 00@25 00
" 1¼ in 33 00@41 00	5-4 and thicker.... 24 00@26 00
Mill run, 1x10, 13 to 16 ft..... ..... 19 00@22 00	Culls 10 00
Dressing and better.. 24 00@27 00	Basswood, selected 4-4 and 5-4 ..... 20 00@22 00
1 x 10 shipping cul's 16 00@17 00	Strips, selected 4-4 and 5-4 ..... 16 00@18 00
Mill run, 1¼ in. strips 15 00@18 00	Culls, 4-4 and 5-4.... 11 00@12 00
Selected..... 33 00@41 00	Birch and maple 1st and 2d..... ..... 23 00@25 00
1x6 selected for clapboards .... 32 00@34 00	Moulding strips,.... ⅝x1½ R4; $6 per M. pieces
Clear butt cedar shingles, 18 in..... 2 70@ 2 80	Door panels, 6 in., 16c per door s 7 inch do 16c
Shingles, XXX, 18 in pine ..... 2 90@ 2 80	Blind slats, ½x2x4, 6c per M. piece
XXX 18 in Cedar..... 3 60@ 3 75	
XX 18 in cedar..... 2 30@ 2 40	
Lath No 1, 5-4..... 2 00	

CHICAGO.

CHICAGO, July 26, 1887.

The general opinion seems to be that the wholesale trade here is unusually brisk for this season of the year. Distribution from the yards is larger than at a like time last year, and there are indications that the demand is to continue. Possibly the most unfavorable condition of the business now is the universal scarcity of dry lumber, which does not seem to exist in any considerable quantity at a single point in the northwest. This condition of the market is creating no little alarm among the trade, as the cutting season does not reach very far into the future. The effect of this scarcity will at least tend to keep prices very firm for some time to come.

The load of piece stuff has been heavier for the market to carry this week than at any previous time since May. The demand for medium and picked common inch is in excess of supply. The demand for shingles is active and the tendency of prices is to advance.

The most notable feature of the week's market was the receipt and sale, by McLaren & Morris, of a cargo of mill run lumber from the mouth of Spanish river, Ont., consigned by Bushwell & Co., who are running a mill at that point. This cargo was certainly the first one to come to Chicago from the Spanish river district, and was said to have been the second one shipped from that locality. It had to pay a duty of $2 a thousand, and a freight rate of $3. As it must have sold at a price somewhere between $15 and $17 a thousand, the manufacturers could not have made a great profit on it. It is expected, however, that more lumber will be received here from Spanish river.

The following are the ruling quotations at present :—

RECEIPTS FOR WEEK ENDING JULY 21.

	Lumber.	Shingles.
1887	63,848,000	31,356,000
1886	6 ,681,000	22,461,000

RECEIPTS FROM JAN. 1, TO JULY 21, INCLUSIVE.

	Lumber.	Shingles.
1887	800,308,000	250,402,000
1886	703,428,000	338,137,000

STOCK ON HAND JULY 1, INCLUDING SOUTH CHICAGO.

	1887.	1886.
Lumber	343,630,071	405,794,826
Shingles	220,226,700	294,112,125
Lath	21,364,158	40,077,975
Pickets	1,176,671	1,291,497
Cedar posts	101,578	266,942

FINISHING LUMBER ROUGH.

1st and 2d clear, 2 inch..	$47 00	A select, 2 inch	$40 00
1st and 2d clear, 1½ and 1¾ in	46 00	B select, 1½ in	30 00
1st and 2d clear, 3 inch	48 00	B select, 1 in	30 00
3d clear, 1½, and 2 inch.....	43 00	Clear and select 2x4..	26 00
3d clear, 1½ inch	43 00	2x6	32 00
A select, 1 inch	38 00	2x8	34 00
A select, 1½ inch	39 00	All one length $1 extra.	

STOCK BOARDS.

12 in. A, 12 to 16 ft.	$41 00	12 in. 20 ft	22 00
12 in. B	37 00	10 in, A	27 00
12 in. C	32 00	10 in, B	30 00
12 in. D, 12, 14 and 16	22 00	10 in. C	26 00
12 in. D, 18 ft	21 00		

FLOORING—DRESSED AND MATCHED.

A flooring	$33 00	B flooring 4 in	29 00
B flooring	32 00	C flooring, 4 in	25 00
C flooring	24 00	Norway clear and A	22 00
Fencing flooring	16 00	B, 4 or 6 in..	19 00
Clear and A, 4 in	32 00		

SIDING—TIED.

1st and 2d clear, 12 ft	$21 50	B siding	18 00
1st and 2d clear, 14 and 16 ft	22 00	C	18 50
A	20 50	Fencing	10 00

BEADED CEILING—TIED.

Clear, ⅜x4@6 in	$22 00	C ceiling, ⅜x6 in	14 50
A, ⅜x6 in	21 00	Clear and A, ⅜ or ¾x6	32 00
B, ¾x6 in	19 00	B, ⅜ or ¾x6 in	29 00

COMMON BOARDS—ROUGH.

Com. boards, 1 in. 18 to 20ft	$14 00	12, 14, 16 and 18 ft	14 00
10, 12 to 16 ft	14 00	1¼ and 1½ common	13 50

FENCING—DRY.

No. 1 all lengths	$14 50	4 in. common	12 50
No. 2, 12, 14, 16 & 18ft	11 50	Norway	14 00

TIMBER AND DIMENSION—DRY.

Joist and scantling, 2x4, 12, 14 and 16 ft	$12 00	12, 14 and 16 ft	$13 00
2x6, 2x8 2x10, 12, 14 and 16 ft	12 00	2x4, to 8x8, 18 ft	13 00
Timber, 4x4 to 8x8 inclusive?		2x4, 4x4, 20 ft	14 00

ALBANY.

Pine, clear, ₱ M	$55 00@60 00	Black walnut, good, ₱ M	$95 00@120 00
Pine, fourths	58 00@60 00	Black waluut, ⅝ inch.	75 00@80 00
Pine, selects	50 00@54 00	Black walnut, ¾ inch.	80 00@85 00
Pine, good box	22 00@33 00	Scaymore, 1-inch	26 00@29 00
Pine, common box	13 50@16 00	Scaymore, 2-inch	21 00@28 00
Pine 10-in. plank, each	00 45@00 47	White wood, 1-inch and thicker	32 00@38 00
Pine, 10-in. plank, culls, each	00 24@00 27	White wood, ⅝-inch	28 00@30 00
Pine boards, 10-in.	00 30@00 32	Ash, good, ₱ M	38 00@42 00
Pine, 10in. boards, culls	00 16@00 20	Ash, second quality, ₱ M	25 00@30 00
Pine, 10-in. boards, 16 ft., ₱ M	28 00@32 00	Cherry, good, ₱ M	65 00@80 00
Pine, 12-in. boards, 16ft	28 00@32 00	Cherry, common, ₱ M	25 00@30 00
Pine, 12-in. boards, 18ft	28 00@32 00	Oak, good, ₱ M	40 00@43 00
Pine, 1¼in. siding, select	40 00@43 00	Oak, second quality, ₱ M	20 00@25 00
Pine, 1¼-in. siding, common	15 00@18 00	Basswood, ₱ M	25 00@30 00
Pine, 1-in. siding, select	40 00@42 00	Hickory, ₱ M	38 00@40 00
Pine, inch siding, common	13 00@15 00	Maple, Canada, ₱ M	25 00@30 00
Spruce, boards, each	00 00@00 17	Maple American, per M	26 00@28 00
Spruce, plank, 1¼-in., each	00 00@00 20	Chestnut, ₱ M	38 00@40 00
Spruce, plank, 2-in., each	00 00@00 30	Shingles, shaved, pine, ₱ M	0 00@ 6 50
Spruce, wall strips, each	00 00@00 12	shingles 2nd quality	0 00@ 5 00
Hemlock, boards, each	00 00@00 14	" extra, sawed, pine	4 15@ 4 25
Hemlock, joist, 4x6, each	00 00@00 32	shingles clear, sawed	2 50@ 3 00
Hemlock, joist, 2½x4, each	00 00@00 14	" cedar, mixed	0 00@ 2 00
Hemlock, wall strips, 2x4, each	00 00@00 11	" hemlock	2 00@ 2 00
		Lath, hemlock	0 00@ 2 00
		Lath, spruce,	0 00@ 2 25

SAGINAW VALLEY,

EAST SAGINAW, July 20.—A large quantity of lumber has been sold in a quiet way during the past 10 days. Opinions differ as to prices. Much of the stock sold has not been reported, and details of sales are daily suppressed. Buyers invariably claim that the valley pine lumber holders have made concessions, and I am inclined to believe this holds good as to the better grades, but common stock is firm. There is likely to be some trouble in moving by water lumber that has been recently sold and which will be wanted for the fall trade at the east. One vessel man informed me that he could keep a tow

of 2,000,000 feet capacity busy until navigation closes, and this in addition to the present available tonnage, Sibley & Bearinger have sold 7,500,000 feet to Noyes & Sawyer, of Buffalo ; 2,000,000 to Lay, Hurlburt & Co., Sandusky ; 1,000,000 to Craig, of Rochester, and 1,500,000 feet to other parties. The prices ranged from $10.50 upward. This stock is cut at East Tawas and on the Saginaw river. In addition to the foregoing I hear of sales of 200,000 feet at $8.50, $17 and $37 ; 400,000 feet at $9, $18 and $38 ; 300,000 feet of box at $10,50 ; 1,400,000 feet at $19 straight ; 1,300,000 feet at $16.50 straight ; 300,000 feet at $8.50, $17 and $36 ; two lots, one of 700,000 the other 800,000, at price not reported ; 200,000 feet at $9.50, $19 and $38. Good lumber is picking up a few friends who are inquiring as to its health. Box lumber is in urgent request ; norway strips are quoted at $11 with a fair inquiry Shingles are firm with a good inquiry. Quotations are $2.15 to $2.35 for clear butts, and $3.15 to $3.35 for the XXX grade.

The yard lumber trade keeps up well, the movement being large for the season of the year. Prices are firm. Lath are held at $1.35.

CARGO QUOTATIONS.

Shipping culls	$ 8 00@10 50	Under straight Measure	10 00@25 00
Common	15 00@21 00	Shingles, XXX	3 00@ 3 25
3-uppers	38 00@40 00	Shingles clear butts	5 00@ 2 23
Bill stuff	8 50@10 60	White pine ath,	1 40
Norway bill stuff	8 60@10 50		

YARD TRADE.

3 uppers wide and thick	44 00@46 00	Fencing, coarse common	8 00
Do. 1 in	43 00@45 00	Fencing, mill culls	4 00@ 6 00
Selects	35 00@36 00	No. 1 stock 12 in	14 00@15 00
Fine common	28 00@31 00	No. 2 stocks	11 00@12 00
1, 1½, 1½, 2 in. cut ups	00 00@32 00	Wide common	12 00@15 00
No. 1 base, 7, 8 and 9 in selects	40 00	Piece stuff and timber	9 00@10 00
No. 2 do. (fine common)	30 00	12, 14, 16, 18 ft	9 00@12 00
No. 1 floor strips	40 00	Do. do. 20 ft	12 00
No. 2 "	35 00	Lath	1 40@ 1 75
No. 3 "	29 00	Lath No. 2 (cul)	1 00
Fencing	12 00@15 00	Shingles XXX	3 15@ 3 23
		Clear butts	0 00@ 2 23

DRESSING.

Surfacing	1 00	Making drop siding	2 25
Dressing and matching	2 00	Making bevel siding and ceiling	3 00

TONAWANDA.

Prices unchanged as follows:—

CARGO LOTS—MICHIGAN INSPECTION.

Three uppers	$46 00@47 00	Culls	12 00@13 00
Common	20 00@25 00		

YARD PRICES—CAR LOTS.

3 uppers, inch	$43 00@45 00	Dressing stocks	18 00@22 00
3 uppers, plank	45 00@46 00	Dressing sidings	19 00@22 00
Pickings, inch	38 00@40 00	Common stocks	12 50@13 00
Pickings, 1¼ in. to 1 inch	39 00@40 00	Common sidings	15 00@17 00
Fine Common	32 00@34 00	Common box	12 00@13 00
Fine Common, thicker	34 00@40 00	Shingles, XXX, 18 in. sawed	3 40@ 3 50
Cutting up	25 00@28 00	Do. clear butts, sawed	2 40@ 2 45
Shelving, 12 in. and up	27 00@30 00	Shingles, XXX 16 in. cut ₱ sq	@ 3 00
Coffin boards, 12 in. and up	16 00@18 00	Do. XX do	@ 2 75
		Lath	1 90

DETROIT, MICH.

Uppers, 4x4	$45 00	Siding, clear	21 50
5 " 6x4 & 8x4	45 00	A	20 50
3 & 4in	50 00	B	18 50
Selects, 4x4	37 00	C	13 50
5x4, 6x4 & 8x4	39 00	Bill stuff ordinary sizes :	
Shop, 44	22 00	12 to 16 ft	11 00
5x4x 6x4 & 8x4	25 00	18 to 20 ft	12 00
Fine common, 4x4	31 00	22 to 24 ft	13 00
5x4, 6x4 & 8x4	33 50	26 to 28 ft	14 00
Stocks, 1x12 & 1x10, No 1	19 00	30 to 34 ft	16 00
1x12 & 1x10, No. 2	16 00	Ship culls	12 00
1x12 & 1x10, No. 3	13 00	Mill Culls	10 00
Flooring, select common	22 00	Shingles, clear, 18 in	3 25
No, 1 common	18 00	10 in. clear, 18 in Ex	2 30
No. 1 fencing	16 50	6 in. clear, 18 in	2 20
Ceiling, select common	25 00	6 in stocks clear, Ex	4 00
Ceiling, No. 1 common	22 00	5 in. " "	4 80
No. 1 fencing	20 00	Lath, per M pcs	2 50
Roofing, D. & M	16 00	Add for S. 1 or 2.	$1 ₱ M

GENERAL NEWS NOTES.

—Inquiries are brisk for shingles in the city of New York.

—St Louis is still shipping considerable black walnut to Germany.

—The hardwood trade throughout the country has been exceptionally good this year.

—North Carolina pine is selling freely in New York, and is constantly increasing in favor.

—High grade hardwood lumber is in good demand in every prominent market in the country.

—The total amount of lumber shipped this season from Manistee up to July is 80,500,000 feet.

—Trade is fair at Buffalo and Tonawanda. Shipments into the interior of New York have been heavy.

—Judging by the reports from the east there is not much activity in the white pine demand in the seaboard cities.

—During the high water the boom at the mountain mill, west of McLeod, Alberta, gave way, and let loose about 15,000 logs.

—The great lumber manufacturers of the Ottawa are unanimous in favoring commercial union.

—The recent rains have raised the Pine river, Michigan, so that 5,000,000 feet of logs will be run into St. Louis to be cut this summer.

—A Tonawanda N. Y. firm recently shipped 195,000 feet of lumber on a canal barge, said to be the largest load ever sent out by canal.

—Prices of lumber are making some progress toward a higher plane than they have rested on for some time past, but the movement is slower than is universally agreeable.

—The E. B. Eddy Manufacturing Co. of Hull, Que., are putting a new sheet iron roof on their factory at Hull. The former roof was of shingles, and less safe from fire.

—One of the grandest sights ever seen in the river St. John was to be witnessed a fortnight ago at Grand Falls, where there were 15,000,000 feet of logs jammed.

—A recent report of the Forest Administration of the Madras Presidency, India, shows a net profit to the Government of 22 per cent., chiefly items from the sale of timber, fuel and bamboos.

—Mr. H. W. Petrie, of Brantford, Ont., manufacturer of wood-working machinery, has recently filled a large order for such machinery for a ship-building concern at Liverpool, N.S.

—The sash, door and blind manufacturers and dealers of Chicago have organized a local association as an annex to the Wholesale Sash, Door and Blind Association of the Northwest.

—The United States covers 1,856,070,400 acres and of this surface 486,280,000 are covered with forest—about one-fourth. And yet there are plenty of people who are crying about a lumber famine.

—The Hart Emery Wheel Company, Hamilton, Ont., of which Mr. Samuel Briggs is manager, are operating their works full time, being full of orders. Their emery wheels are in strong demand.

—Good pine stumpage, accessible to the streams of Michigan, can hardly be bought for less than $7 or $8 per M. In 1866 this same stumpage could have been bought for $1 or $1.25, and in 1885 for $4.50 or $5.50.

—The Ashland News figures out that of the 200,000,000,000 feet of pine in the United States, Wisconsin has 20 per cent. and of that Douglas, Bayfield and Ashland counties have two-thirds and over half of this two-thirds is tributory to Ashland bay.

—Gilmour & Co. have about 20,000 saw-logs hung up in the Trent. The Rathbun Company have a small number of logs stuck in the Trent and a very large quantity in the Deer River. Both concerns have, however, a sufficient number of logs to keep their mills running throughout the season.

—Sales have lately increased in Saginaw valley. It is hinted that there has been some relaxation of grip on the part of holders. Transactions have been quietly effected, and have been larger and more numerous than appears on the surface. The car load trade from Saginaw has been heavier this season than ever before.

—The Treasury Department at Washington has decided that sawed elm boards 16½ feet in length and 1½ inches in thickness, the edges of which follow the natural shape of the tree, used in the manufacture of hoops, are dutiable at the rate of $2 per thousand feet board measure under the tariff provision for sawn elm lumber.

—George Van Dyke, a big New England lumberman, is this year handling the largest drive that ever went down the Connecticut river, containing over 90,000,000 feet of spruce logs. He is said to have had 600 men and 80 horses employed in camp, at an expense of over $2,000 a day. His four mills saw about 500,000 feet of lumber daily.

—The large amount of building going on in New York, Boston and Philadelphia, is causing a continued active demand for eastern and northern spruce, the supply being scarcely equal to the requirement. The demand for dimension gives opportunity for the working in of hemlock, and sales of that kind of lumber are larger than in former years.

—A large number of logs intended for supplying the mills on Lake of the Woods are in a very precarious shape, and it is feared that about 15,000,000 feet will be "hung up" if there are not heavy rains. Logs cut in the Riding Mountains, which were "hung up" on the Little Saskatchewan, Bird Tail and other streams in Northwestern Manitoba last summer, have been successfully floated this summer.

—A lumber firm of West Bay City, Mich., has an immense pine log en route in a raft, and which it was intended to have in the 4th of July procession, providing it had reached Bay City in time. The log scales 3,800 feet and, as will be readily understood, is a monster in size. The idea of a single log which, when converted into timber, would possibly obtain a value of $200 is astonishing, even in these days of high stumpage.

—Fully a third of the band of Stonies, at Wolf Creek, near Edmonton, have died since last autumn, probably from the effects of exposure too quickly following an attack of measles. They are said to be very troublesome now, and are firing the timber limits near the mountains, in order, as they say, to kill the spirits that are killing them. They are also said to be very unruly in their behavior towards the Indian Department officials.

—At the foot of Granville street on the shores of False Creek, Vancouver, B.C., a wharf has been built and the frame of a window blind, sash and door factory and planing mill is in course of erection. The machinery to run this establishment is here and the proprietors, Messrs. Bell, M'Kay & Co., intend to rush the work so that they can have the benefit of the summer months' trade, both local and eastern, a large trade in their proposed wares being expected from the Northwest.

—We learn from the Calgary *Herald* that Mr. J. J. Dalton, of that town, has received the plant for the saw mill belonging to the Colonization Company which is to be placed on the Red Deer River as soon as possible. At the same time the men for the saw mill owned by the Alberta Lumber Company have arrived. This mill will have a 100-horse power, and with a circular saw will cut 50,000 feet daily, but by means of a gang it will average 100,000 feet. This mill will be placed on the Little Red Deer River.

—East Saginaw mill employes are quietly working to secure, in whatever manner they can, the exclusion of the French Canadians, who come over during the winter to work in the woods, at which time men can only find work in the lumber camps. In many cases these Canadians are brought in response to advertisements for men published by the local lumbermen in Canadian papers. This looks to the laboring men here very much like a violation of the statute prohibiting the importation of foreign contract labor.

—The St. Croix river is a disputed boundary line between Maine and Canada. It was recently reported to the Treasury Department at Washington, by Special Agent Moore, that the mills on the above named stream, near Calais, Me., were owned by both Americans and Canadians, and that a former collector of customs at East Port, Me., had followed the rule of considering some of the mills American and some Canadian in the matter of customs, and the Special Agent questioned the legality of the proceeding. Secretary Maynard's reply was that by the treaty of 1783 the boundary line was fixed definitely, and it is simply a question of fact as to whether a mill is on one side or the other, though it is understood to have been the practice to consider mills as Canadian when they were subject to Canadian taxation, and *vice versa*.

—A recent writer has made some interesting compilations as indicating the large amount of lumber handled at Buffalo and Tonawanda markets, in the course of which he says : "Many of Buffalo's lumber merchants run, or are interested in, yards at Tonawanda, where the receipts of lumber last year amounted to 505,426,000 feet or a total of more than 900,000,000 feet valued at $30,000,000, for Buffalo and Tonawanda together. Mere figures convey a very inadequate idea of what a prodigious quantity of lumber this is. With it a fence might be built as high as that which encloses the Olympic base-ball grounds, that is, nine feet high, and 19,000 miles long, or three-quarters of the way around the world. Or, if it would be piled up in a solid wooden monument, 100 feet square, its summit would be fourteen miles from the ground. It would be sufficient to put a wall clear around Buffalo, six inches thick and 200 feet high, and then cover the whole with a roof two inches thick.

—The following is a list of the mills at the mouth of the St. John River, together with the names of the owners and the capacity of each :—Randolph & Baker, 2 gangs, sawing capacity, 18 to 20 million feet ; George Barnhill, capacity 8 to 15 million ; Hayferd & Stetson, 6 shingle machines, capacity, 10 million ; Miller & Woodman, 2 gangs and single saw, capacity, 20 million ; Andrew Cushing & Co., 2 gangs and 2 single saws, capacity, 20 million ; Clark, 2 gangs, capacity, 10 to 12 million ; Hayferd & Stetson, 1 gang and muley, capacity, 15 million ; E. G. Dunn, 2 gangs and muley, capacity, 15 to 16 million ; R. A. Gregory, 2 gangs, capacity, 12 to 15 million ; Jewett (Grand Bay) 1 gang and single saw, capacity, 8 to 15 million ; Jewett, (South Bay), 1 gang and single saw, capacity, 8 to 15 million ; Kirk & Daniel, 2 gangs and single saw, capacity 15 million ; Hilyard Bros., 1 gang and single saw, capacity, 10 million ; C. Hamilton & Co., 1 gang and rotary, capacity, 12 million ; Warner & Purvis, 1 gang and rotary, capacity, 12 million ; R. Connors, 1 gang and rotary, capacity, 15 million ; Moses Cowan, rotary, capacity, 2 million ; Hayferd & Stetson, 2 gangs and single saw, capacity, 16 to 18 million ; Jewett (Milledgeville Mill), 1 gang and muley, capacity, 10 million. Seven of the operators mentioned in the above list are Canadians, while the balance are recorded as Americans.

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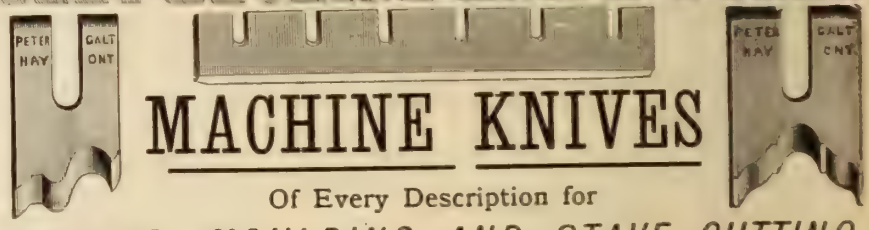

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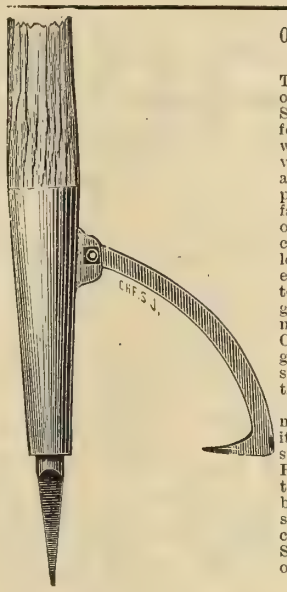

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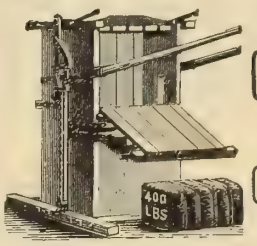

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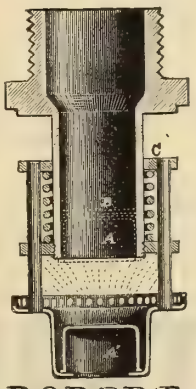

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THE SPANISH RIVER DISTRICT.

A correspondent writing to *The Timberman* from Detroit, says :—Now that pine in Michigan is being more and more controlled by wealthy corporations and syndicates, those who have exhausted their supply are turning their attention elsewhere. Many of our Michigan men have invested in Canada, especially in the Georgian Bay region. Buswell & Co., formerly of Wyman, Buswell & Co., Grand Haven, have a very large limit on the Spanish river and are now manufacturing there, having taken their mill from Grand Haven to that point. This firm controls by purchase all the available room for mill sites at the mouth of Spanish river. But Mr. Buswell says that any one purchasing on that stream and wishing to manufacture, can secure a site of them at much less cost than theirs. They have and will cut about 7,000,000 feet of lumber this season which runs from thirty-five to forty per cent. better than common. I find that lumber from this part of the country has a good class of common.

The Cutler and Savidge Lumber Co., Spring Lake, owns an extensive limit adjoining that of Buswell & Co. The Spanish River Lumber Co., owned by Albany and Bay City parties, has been operating at that point for some years, marketing their lumber at Albany, Buffalo and Ogdensburg.

Timber on that stream, as well as on other streams, is sold at auction at so much for a limit or the privilege of cutting. An additional charge of seventy-five cents a thousand is made as crown tax when the timber is cut and in the water. The gentlemen operating on Spanish river speak well of the treatment received from the government, and say that there is enough timber on this stream to keep all the mills in Muskegon sawing for the next ten years. One of the best harbors in the country is at this point, being sheltered by numerous small islands, and at the same time having an abundance of water. The running of the logs in the stream is said to be comparatively easy.

Spanish river is also the name of the Canadian Pacific railway station where you take and leave the cars going to and from the Buswell and Spanish River Co's mills. Since the railroad has been completed logging is much cheaper. I was informed that lumber, which sells readily in the Chicago market for $17 and $18, is put in pile there at a cost not to exceed $9.

THE EXPORT BUSINESS.

Shipments to the River Platte for the first half of the present year show a marked increase over exports of last year. In detail the figures are as follows :—

	1887.	1886.
White pine.....	27,816,000	8,015,000
Spruce.....	17,550,000	12,232,000
Pitch pine.....	36,768,000	23,750,000
Oak and ash....	645,000	370,000
Other woods....	2,906,000	1,319,000

There are now one cargo afloat, loaded at the port of New York, with 575,000 feet bound for Buenos Ayres. At Portland, seven vessels are loading, and will carry out about 4,650,000 feet. At Boston, five vessels are loading, and the total amount to be shipped is not far from 2,600,000 feet. The shipments from Montreal are increasing, and June 10 there were 17 vessels loading, with a carrying capacity of about 11,575,000 feet. One vessel is loading at Quebec with about 1,000,000 feet; two at Calais with a total of 825,000 feet ; one at St. Margaret's bay with 375,000 feet, and one at Bridgewater with 325,000 feet. In southern ports, two vessels are loading at Brunswick with 825,000 feet ; 12 at Pensacola with 7,025,000 feet ; one at Tacoma with 975,000 feet, and one at Port Moody with 555,000 feet. Almost the entire list enumerated is destined for Buenos Ayres ; a few cargoes going to Montevido and Rosario.

—For months past the demand for bill stuff has been something phenomenal. Interior mills, accessible to the right kind of timbers have been filling bill stuff orders since away back last fall, and to all appearances they are as full of business as ever.

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ATTENTION—THREE HUNDRED ACRES timber land—one mile from station North Simcoe railway—will sell cheap or exchange for good general store and stock ; timber will pay for property twice over. Box 16, LUMBERMAN office.

LUMBERMEN and Speculators Attention—For Sale—half interest in fifty square miles timber limit on Turtle Lake, near Battleford ; North-Western railway will pass the property ; timber estimated at twenty-five million feet ; to raise money ; will sell cheap or take other property in Ontario for part. GEO. COOTE & SON, Dundas.

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Deputy of the Supt. Gen'l.
of Indian Affairs.

Department of Indian Affairs,
Ottawa, 2nd June, 1887.

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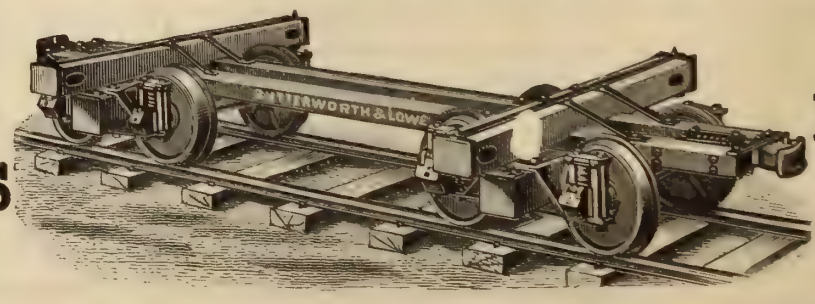

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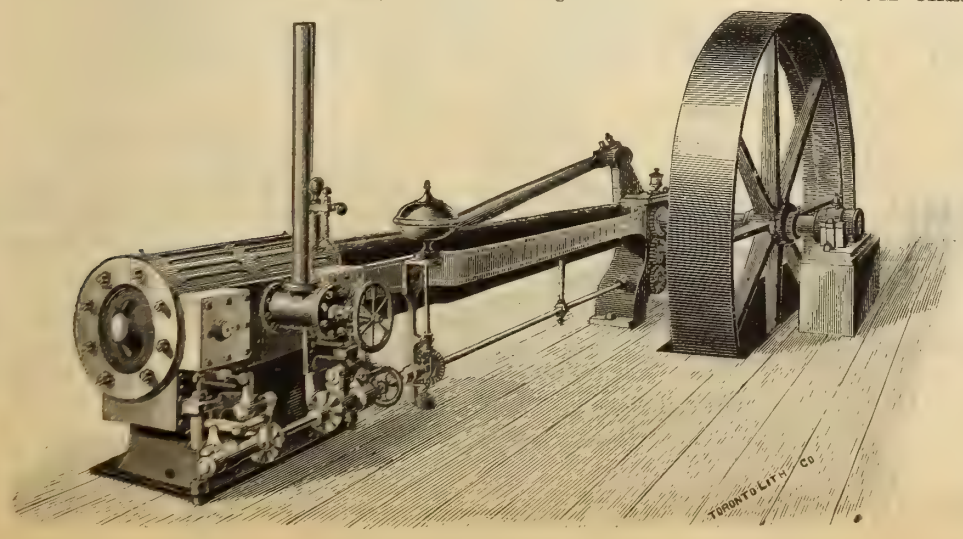

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Plans and profiles will be open for inspection at the Office of the Chief Engineer and General Manager of Government Railways at Ottawa, and also at the head Office of the Cape Breton Railway, at Port Hawkesbury, C. B., on and after the 6th day of June, 1887, when the general specification and form of tender may be obtained upon application.

No tender will be entertained unless on one of the printed forms and all the conditions are complied with.

By order.
A. P. BRADLEY,
Secretary.

Department of Railways and Canals.
Ottawa, 27th May, 1887.

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***THE LUMBERMAN** respectfully solicits correspondence from the wholesale Lumbermen from all points in Canada, who are desirous of making their business known through the classified list of Lumbermen's Cards in this Journal. The lowest rates promptly furnished on application to*

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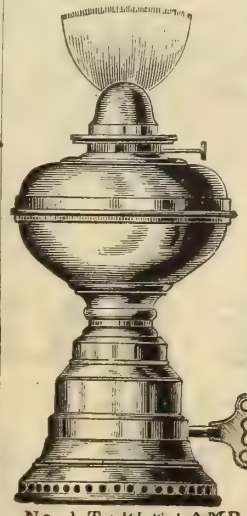

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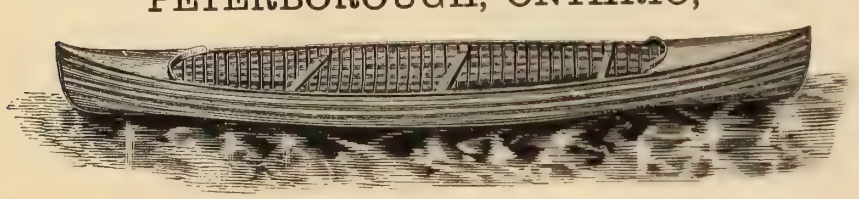

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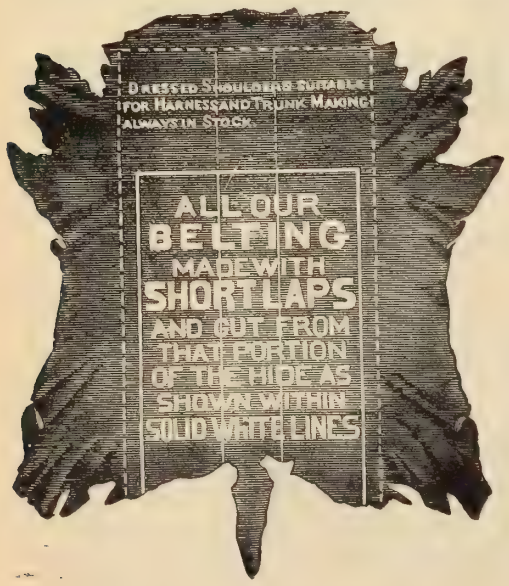

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PUBLISHED MONTHLY By A. G. MORTIMER. | *The only Newspaper devoted to the Lumber and Woodworking Industries of the Dominion.* | SUBSCRIPTION $1.00 PER ANNUM

VOL. 7. PETERBOROUGH, ONT., SEPTEMBER, 1887. NO. 9

The Canada Lumberman

DEVOTED TO THE LUMBER AND WOOD WORKING INTERESTS OF THE DOMINION.

PUBLISHED MONTHLY BY

A. G. MORTIMER, PETERBOROUGH, ONT.

Terms of Subscription:

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One copy, six months, in advance 0 50

Advertising rates furnished on application.

All communications, orders and remittances should be addressed and made payable to A. G. MORTIMER, Peterborough, Ont.

Communications intended for insertion in the CANADA LUMBERMAN, must be accompanied by the name of the writer, not necessarily for publication, but as a guarantee of good faith. Communications to insure insertion (if accepted) in the following number, should be in the hands of the publishers a week before the date of the next issue.

Advertisements intended for insertion in any particular issue should reach the office of publication at least six clear days before the day of publication, to insure insertion.

The CANADA LUMBERMAN is filed at the Offices of MESSRS SAMUEL DEACON & Co , 154 Leadenhall Street, London, England, who also receive advertisements and subscriptions for this paper.

PETERBOROUGH, ONT., SEPTEMBER, 1887.

EDITORIAL COMMENT.

THE evil results of the labor troubles in the building trades at Toronto have not been confined to the immediate locality or to those directly concerned. The amount of building in hat city has been greatly reduced by this obstacle with the effect that there has been an appreciable reduction of the consumption of timber and lumber.

* * *

ELSEWHERE in this issue we publish full details of the examination of Stewart Bros., insolvents, which took place in the London courts during the past month. Ever since the Maritime Bank failed in New Brunswick, in which this firm was implicated, no small amount of criticism and censure have been lavished on the Messrs. Stewart. From the evidence taken it now appears that Mr. Registrar Linklater was perfectly satisfied with Mr. R. A. Stewart's explanations to the questions put, and Mr. John Stewart having replied to the only question put to him the examination closed. Those who have endeavored to make a mountain out of a mole hill will now have time to reflect on the old maxim: "Be sure you are right, and then go ahead."

* * *

THE big Nova Scotia raft is again assuming its natural proportions, and the owners have made up their minds that it is going to be launched some time this month. The length of the structure has been increased 160 feet, and it has been entirely rebuilt. The ways will be made of pitch pine, imported from Pensacola, and an experienced launcher will be brought from New York to guide the raft in the bay. Mr. Robertson, the inventor, it is said, feels certain of success, and the owners are laying out large sums to test the merits of the invention. If this one proves successful there are several places on the bay that have been spotted for like ventures by the same parties. The owners of coasters are naturally much concerned at the progress made in rebuilding the raft, and it is said that several offers have been made to Mr. Robertson, making it worth his while to forgo the project.

* * *

THE Chaudiere lumbermen holding limits in the province of Quebec have appointed a committee to wait upon the Quebec Government with a view to arriving at some satisfactory understanding in reference to the increase in the ground rents recently made by the Government. The object of the lumbermen is said to be principally to make some arrangement or agreement by which they may know what advance in crown dues and ground rents they may expect for a certain number of years. *L'Electeur*, of Quebec, publishes the semi-official announcement that Premier Mercier is at last disposed to favorably regard their representations asking that the ground rents be reduced from $5 to $2 per square mile. The lumbermen were represented by Mr. Lemieux, Q.C., a warm personal friend of the Prime Minister.

* * *

THE Dominion Exhibition is to be held at Toronto from the 5th to the 17th of September, in conjunction with the Industrial Fair, and the two exhibitions combined will without doubt be one of the grandest things of the kind we have had in Canada. The prizes offered amount to $30,000. The Toronto people are marking great preparations, and although their exhibition grounds and buildings are regarded as the most extensive in the country, they are adding $40,000 worth of additional buildings. Large special prizes offered for horses, cattle, sheep and pigs, to be shown during the first week of the exhibition in addition to the regular prizes to be awarded the second week. Superior special attractions will be distributed throughout the entire time, so that the show the first week will be equally as attractive as during the second. Cheap railway rates and excursions will be given and every one will be afforded an opportunity of visiting the show.

* * *

THE Montreal *Witness* says:—"One effect of Unrestricted Reciprocity would be a decided and beneficial change in the lumber trade. At present the forest products of Canada are mainly exported in the roughest state compatible with cheap shipment, as the American duty on rough lumber is much lower than the duty on dressed lumber and the manufactures of wood. The removal of the American duties would enable our saw mills to combine the business of sawing with that of planing and dressing lumber, the manufacture of mouldings, beadings, doors, window sashes, and several other kinds of finished woodwork, all of which can be made more economically direct from the log than they can from the standard lumber. The increase in the number of men who would be employed in this natural and legitimate industry, of which Canada is now largely deprived by tariff laws, would alone probably more than counterbalance the decrease in the number employed in these hot-house industries which would suffer from the lack of protection."

* * *

IF the Mercier Government carry out their proposal to increase the ground rents on timber limit holders the new arrangement will come into force on the first of September. The rise in the ground rents from $2 to $5 may be wise or it may be otherwise. If the rise in the ground rents is a matter of reform there are other reforms in connection with the forests which are pressing on the attention of the public, and amongst these is forest protection. In all the vast territory on the Quebec side of the Upper Ottawa the lumbermen say they never see a fire ranger. The whole country is left to the mercy of chance. This is a matter that concerns the limit holders primarily, but it goes further than that. The forests are the chief wealth of this part of the Dominion, and all in the lumber business and out of it are interested in the preservation of the forests from fire. Ih 1870 over ten millions of dollars' worth of timber was destroyed by fire in Michigan and Wisconsin, the igniting spark in this case being the remains of a camp fire fanned by the wind. Such a conflagration is liable to break out in the woods of the Upper Ottawa at any time. This season has been one of protracted draught, and the woods are like tinder. If the months of September and October are as barren of rain as the summer months that are gone, the danger will remain until the snowfall. It is a matter of the most vital importance that the great staple of this country should receive adeqate protection, by the appointment of fire rangers in sufficient numbers to reduce this danger to a minimum. It is opportune that the lumber manufacturers, whose interest are directly at stake, should urge this matter on the Mercier Government now that the increased prices are about being levied.—*Ottawa Journal*

* * *

THE Gilmour-Paradis case, or rather series of cases, for there seems to be no end to the proceedings in which the two parties, or one or the other of them, are concerned, have attracted much attention from the general public, and especially from those interested in operations in the forests of the Province of Quebec. As the various disputed questions of property are now or will shortly come before the courts, we reserve any discussion regarding them, for we believe that it is neither expedient nor right that matter *sub judice* should be prejudged. It would have been well if all had loyally observed this rule, but, unfortunately, some individuals, and especially certain journals, either from being too impetuous or from a desire to obtain lhe applause of the unthinking, have improperly imported into the case questions of race, tongue and creed. Now the Messrs. Gilmour have a high reputation for fair dealing, and for an honorable impartiality never influenced by such considerations. They have done much to develop the resources of the Province, and have given employment to thousands of French Canadians. They certainly might expect to escape any imputation of being unfairly actuated by prejudices of race and creed; not only, however, have they been thus assailed, but even their counsel has been attacked for daring to act for them. It would be a bad thing for the trade and for the Province itself should lumbermen or others be subject to such charges whenever they may appeal to the law courts to determine rights of property. Besides the Gilmours other English speaking lumbermen are large operators in the Quebec forests and public as well as private interests would suffer, if they were exposed to having such prejudices excited against them. We do not believe, however, that the people of Quebec as a body will sanction the unjustifiable outcry raised by some hotheads, but will give fair play to all without bringing questions of race or creed into the determination of legal rights.

THE war cloud, or clouds, in the old world, appear to have blown over for a time, and each day peace seems more likely to endure for this year at least, as the season grows more unfavorable for commencing warlike operations. There is thus little prospect of the increased demand for timber, coupled with a diminished supply from some European localities, that had been anticipated to arise from a conflict between some of the great powers.

* * *

LUMBERMEN throughout the country are already engaging men for the shanties, and the big hiring boom will be on by the first of October. Wages are likaly to range from $16 to $22 per month. From present indications it would seem as if there is likely to be a dearth of men, and the large operators will, it is thought, experience some difficulty in this regard. So tar as can be loarned at this early date the prospects are that the cut of logs the coming winter will be one of the heaviest on record.

* * *

HERE is a hint which might be noted with profit by many concerns. The manager of a large southern company says: "By dressing and drying we reduce the weight of our lumber from 4,800 to 2,600 pounds per thousand, which gives us a big advantage in freight. Besides, we save insurance, rehandling and wharfage, and gain dispatch, which is oftentimes a big item in shipping by car. All things considered, we can put dressed yellow pine into your northern markets as cheaply as can otherwise get there, in less time."

* * *

THE Montreal *Minerve* does not place implicit confidence in the disinterestedness of those in the United States who favor annexation or commercial union. It says:—"Our forests are disappearing much too fast, and it has become necessary and urgent to find some means of conserving them. Our neighbors who have ruined this portion of their capital, would not be sorry to come into our Provinces in order to find again new resources which they would not fail to work to complete extinction." There are at least two sides to every question."

* * *

THE general opinion of the people of Buffalo appears to be voiced in the following editorial paragraph from the *Commercial Advertiser* relating to the proceedings of the Canal Convention at Rochester some time ago:—"The Convention over-reached itself when it called upon the Canadian Government to abolish the tolls upon its canals. If the Convention wants to intensify the competition for business on the Erie it is a good idea to induce a reduction of expense by the Canadian route, not otherwise. The Champlain lumber business from the Ottawa river might be benefitted a very little by an abolition of Canadian tolls, but that is all.

* * *

THE editor of THE LUMBERMAN invites communications on any subject which will interest those engaged in the lumbering or wood-working branches of trade. Nearly every one of our readers could, if he would, contribute something of interest, be it either a suggestion or item of news, and while it entails but little work to each individually, taken together such items would make a paper of which the trade would justly feel proud. We have to thank several readers this month for "first contributions," and hope that scores of others may follow the good example, as the invitation is intended for *all*. So many people think that they cannot write anything suitable for publication, and perhaps, to a certain extent this is true, for it takes years of hard study and practical experience to become an adapt as a newspaper writer. But one thing *all* can do, and that is to give us the benefit of their *practical* ideas, and the editor will readily do his share towards not only making it readable but interesting. How many of our readers will send in something for the next issue?

* * *

FROM all over come reports of extensive forest fires, and although a limited amount of rain has fallen in some localities, the destruction has been but little checked. While the public are calling out against the hasty denudation of our forests by the lumbermen, would it not be as well also to give a share of attention to the disastrous work of the fiery element which every year destroys such a fabulous amount of our wealth, and see if something cannot be done to stop its progress? The damage they do is beyond calculation, as the property destroyed is that which carries no insurance. Much of this destruction at the present season of the year is attributable to the carelessness of campers, landlookers, surveying parties and those who build fires without regard to the consequences which may ensue. Some stringent meaures should be adopted, calculated to put a stop to what is now considered everybody's privilege to build fires when and where they like, and until this is done the present rapid destruction will continue. But we fear that by the time the slow-moving law makers of the country get around to the subject of forest protection there will be little left to care for.

A CERTAIN commercial journal is credited with having said that R. A. & J. Stewart, of St. John, New Brunswick, are reported to have arrived at a satisfactory understanding with their friends in Great Britain. The *Montreal Trade Journal* takes exception to this statement and retorts as follows:—"So far from Messrs. R. A. & J. Stewart having arrived at a satisfactory understanding with their creditors in Great Britain, it is a notorious fact that the latter have been waiting a long time for the promised appearance of Mr. R. A. Stewart on the other side, who, according to Mr. John Stewart, knows everything and will explain the whole matter to them, which by the bye up to the present is a puzzle. Whilst Mr. John Stewart in London has been promising the creditors that his brother Robert would be over to straighten matters the latter has postponed his trip to England on the ground that more important business of the firm's affairs required his presence on this continent. We are therefore authorized to contradict in the most positive terms the statement above referred to."

* * *

THE International Exhibition will open in Melbourne on August 1st, 1888, to celebrate the centenary of the founding of New South Wales, the first Australian Colony. Aside from the growth of America there is nothing more remarkable than the growth of Australia in all that relates to population, production and the general distribution of wealth. From a penal colony it has developed into a great nation, in which the arts, commerce and education are in hopeful process of development. Some slight idea of its marvellous growth may be gained when it is known that during the year 1885 Australasia, with a population of 3,500,000, imported from Great Britain alone goods to the amount of $165,000,000; that the aggregate length of railroads opened for traffic amounts to 7,700 miles, and that when the lines of rail now in course of construction shall have been completed they will reach a total length of 10,000 miles. Australia is a large purchaser of Pacific Coast supplies and communication between this country and Australia is also rapidly growing, and a number of Canadian industrial and manufacturing establishments have now agencies in its chief cities; so that the proposed exhibition will doubtless be taken advantage of by many of our manufacturers as offering an opportunity for making the people of the antipodes better acquainted with our natural resources and with the products of our inventive skill and general progress.

* * *

MANY of our exchanges are at the present time advocating a conservation of our forest wealth, being of the opinion that the present rapid destruction will so denude our forests that in a few years we will lack enough timber to supply the needs of our growing population. THE LUMBERMAN has on more than one occasion referred to this matter and considers it a question worthy of the closest consideration. There are many, we have no doubt, who hold the opinion that it would be detrimental to those engaged in the lumber business to legislate in favor of checking the unnecessary denudation of our timber land. But in this we do not agree. We believe that the lumbermen, as well as the public at large, are anxious for the preservation of our forests, realizing the fact that before a very great lapse of time a maintenance, to say nothing of an accelleration, of the present system must result in an absolute scarcity. The history of the past year goes to show that the lumbermen holding large limits and having large capital invested in them, have been compelled, through the hasty legislation of our governments in imposing exorbitant ground dues, to enter into a hasty slaughter of our timber lands in order to save themselves from bankruptcy. This high tax was levied for the purpose of replenishing the provincial exchequers, but while it may have its desired effect for a few years, the country will suffer to a far greater extent in the future. So long as our Provincial Governments legislate in such a way as to force the lumbermen to strip their limits, with the utmost possible rapidity, instead of encouraging them to exercise a wise providence, we may expect the cry against forest denudation to continue.

QUEBEC GROUND RENTS.

A MEETING of limit holders in the Province of Quebec has been held in order to appoint a deputation to wait upon the Provincial authorities and endeavor to obtain a reversal of the Order-in-Council increasing the ground rents of timber limits, or at least to secure a reduction of the amount. This deputation has had an interview with the Commissioner of Crown Lands, before whom the case was plainly laid, but he gave them distinctly to understand that the Government would not change its policy.

This adherence to a mistaken step is greatly to be regretted. From every point of view except that of an immediate, but temporary increase of receipts in the Provincial Treasury from this source, it is a mischievous change. The lumbermen of the Province of Quebec are by no means deriving such enormous profits from their business as to be able to afford to deduct from them the amount of this special class taxation. It must to a serious extent tend to hamper and cripple them in their operations, and force upon them parsimonious reductions, which they will be loath to adopt. Thus the great army of their employees will share with them in the loss, this being the only source from which the imposts can be borne, since profits are not great enough to bear it, and the price of lumber cannot be raised except for local sales. In some localities the local consumer can be called upon to shoulder part of the burden by paying more for his lumber, but though unpleasant for the home purchaser this will not greatly aid the lumberman, who must seek a distant market for much of his cut.

From the point of view of the public interest the change is no more to be approved. This heavy increase of ground rent will in many cases force the limit holders to hasten prematurely their operations in portions of their limits, stripping them as quickly as they can and thus releasing themselves from the burden. Those who are now conserving their timber as much as possible will thus be coerced into the opposite policy. It is not in the interest of the community to hasten the depletion of our forests, but rather the contrary, so this step is decidedly retrogressive in that respect.

Even from the Treasury point of view the prospective gain is quite fallacious. It is true that for a brief period the receipts from ground rents will be augmented, but this cannot continue. The lumbermen, eager to terminate the burdensome rental, will hasten to strip portions of their limits, thus terminating as quickly as possible their liability, and at the same time the Treasury receipts of rent. In any future sales of public lands the increased rental will be discounted, for bidding will be lowered in consideration of it, and thus no gain will be effected. The Government is simply killing the goose to obtain at once some golden eggs.

It will be seen on reflection that this increase of ground rents is a mistaken policy from every point of view. The bad effects will not be confined to the limit owner, though they strike him in the first place and most severely. We must say that in this treatment of the limit owners the Government is acting most inequitably. Their property is suddenly depreciated and they are subjected to a special class impost, after they have in good faith invested their capital in their business and have acquired public property on the conditions asked by the Government and which were with good reason understood to be permanent. The increase may be legal but it cannot be defended morally or equitably, any more than if the Government were to rack rent a tenant of public land as soon as he had built a factory on it and could not refuse to submit, except at the sacrifice of his capital and his prospects.

We yet hope that the Quebec Government may see the impolicy and injustice of its course, and yield to the remonstrances of an industry which is one of the most important in the Province and does so much for its development. A reduction of the increased rental would be both just and expedient.

THE FORESTRY CONGRESS.

THE annual meeting of the American Forestry Congress is to be held at Springfield, Illinois, from the 14th to the 16th of September. This is practically an international organization, and there should be a good representation from Canada. Sometimes it is supposed by lumbermen that forestry associations with their desire for the conservation of forests are in more or less direct conflict with the interests of the trade. That such an idea is erroneous is proved by the fact that leading lumbermen show a warm interest in forestry, and took an active part in the proceedings of the congress when it was held at Montreal. Many lumbermen indeed would gladly see better provisions made for the preservation of the forest, and regret any governmental management or regulations tending to induce a hastened cut. Unfortunately in more than one Province recent changes have had an increased tendency in this direction.

There is one branch of information certain to be offered to the meeting at Springfield which cannot fail to be interesting and useful to our lumbermen. Estimates of the extent and probable duration of the forests of this continent, especially in the United States, give valuable indications for the guidance of Canadian lumbermen, throwing light upon the question of the expediency of forcing lumber into the market or sparing the limits as much as possible. It is undoubtedly the fact that the forests are rapidly diminishing, while the manufacture of lumber and the demand for it are steadily increasing.

One subject that is sure to be discussed, with the result of yielding increased information on a debateable question, is the suggestion of reciprocal trade, as it may effect the lumber interests, and the economy of forest wealth. The discussion of this point alone should be sufficient to induce the attendance of representative Canadians and to compensate them for the time, trouble and expense of a visit to Springfield.

AN AMERICAN VIEW OF COMMERCIAL UNION.

THE Chicago *Timberman* of a recent date says :—Canadian newspapers are stirring up the subject of reciprocity with the United States with considerable persistence, which is not surprising considering that that so many of their readers are in full sympathy with the project and are anxious that it should be carried out as early as possible. The interest which the Canadian lumbermen has in commercial union is frequently pointed out, and the advantage there would be to him in a free market on this side urged as a reason why he should give his influence to securing this result. The argument is made, though perhaps unnecessarily in his case, that besides opening a larger outlet for his mill products, free trade would also give the lumber producer prices considerable higher than he can now get, which is assuming that the unrestricted importation of lumber would not make that commodity any lower, or at least not much lower, here than it is now. Probably this view of the case is measurably correct. At any rate it is not generally thought by lumbermen here that any possible inflow of stock from Canada could prove sufficient to overstock the American markets. This contingency used to be something of a bugbear, and years ago it was common for Michigan and Pennsylvania manufacturers to spend their money and time rather freely in fighting the notion of re-establishing reciprocity between the two countries. But pine timber has so strengthened in value, and is becoming so evidently scarce in proportion to the constantly increasing demand for it, that this possibility has no longer the frightening power it once possessed. Doubtless a good many mill men whose stock of pine is drawing near its end would rather welcome an arrangement that would enable them to stock their mills from the Canadian forests, and so obtain the means of continuing the lumber business that they cannot secure on sufficiently advantageous terms on this side. The number of these is increasing all the time, and it cannot be many years before they will form an eminently respectable proportion of the whole. As they are forced from time to time into new fields, they will be compelled to go south or west or north, and, other things being equal, there is not much question but that a good many would prefer operating in Canadian white pine, under conditions to which they are accustomed, than to striking out wholly afresh where not only the timber, but the conditions of the trade, the markets, and indeed everything pertaining to the business is to them entirely new and unfamiliar."

The *Northwestern Lumberman* says :—"Just why so many people would be pleased to have the *Lumberman* commit itself on the tariff question as relating to lumber is an enigma. It is difficult to understand how such an opinion, whether for or against free lumber from Canada, would affect favorably or otherwise a single individual. Southern operators do not want the duty removed ; on the other hand they would like it to be made higher than it now is. They argue that they are but getting fairly established in business, that their markets must be largely in the north, and that competition with free lumber from Canada would work to their detriment. Michigan lumbermen, with the exception of a few who are largely interested in Canadian stumpage are not for free lumber. Many of the Wisconsin and Minnesota operators would be willing the duty should be removed, providing the Canadian laws were so changed that these operators could put lumber free of import duty in Canadian territory. The spruce men of Maine would of course fight tooth and nail any movement to admit spruce from the mills of Canada into the eastern seaboard markets free. The Pacific coast lumbermen, so far as we are informed, have not, as yet, bothered their heads over the question. Very briefly, such is the standing of the American lumbermen on the subject.

"Seeing that it would evidently be some sort of satisfaction to a hundred and one correspondents to know how the *Lumberman* regards the subject, it will repeat, in effect, what has before been said in these columns. Frankly, it does not pretend to know much about it. This free trade question has been handled by politicians mostly, who by one stroke of the pen, or one oratorical flourish, have settled the whole thing. But in the minds of thinking people they have not settled it. There are two sides to nearly every question. The subject of protection is one which covers a good deal of territory, and although the lumber side of it is but a small portion of the whole, without doubt the experiment of free lumber would have to be made before any mortal man could tell what the result would be.

"The *Lumberman* has expressed the opinion that if the duty on Canadian lumber were removed the lumber business of America would not go to eternal smash by any means. There might for a time be an unsettling of values to some extent, but the ultimate result would be an advance in the price of Canadian stumpage. This opinion is given for what it is worth ; the *Lumberman* asks nobody to tie to it.

"One correspondent is wrong in his statement that if lumber from Canada were admitted free the lumber trade of the northwest would languish. If free trade were declared, and as a result the price of Michigan, Wisconsin and Minnesota white pine lumber were to decline in price, the lumber business would go right on as of old. This phase of the subject is to be looked at from a business standpoint. If the American lumberman had to compete with free lumber from Canada he would do it. The merchant who has his warehouse full of goods, and those goods decline in value, he is not going to shut up shop. The business man accepts the inevitable. He likes to obtain good prices. but, if unable to do so, he gets the best prices possible. If free lumber materially affected the price of American pine lumber there would be business failures, but the saw mills would not be shut down permanently by any means."

THE H. S. SMITH LUMBER MACHINE.

A FEW days ago the Canadian Lumber Cutting Machine Company of Toronto (whose offices are at Room 7 No. 49 King street east), made a public test of their new lumber cutting machine at the works of the John Abell Engine and Machine Works in this city. This machine consists of a large steel plate with knife-like edge, accompanied by a compressing roller and ingenious appliances to serve the log and remove the lumber when cut ; all operated by steam power. The log is held in a stationary horizontal position, and the knife, which should be operated to make from forty to sixty strokes per minute, strikes the log at an angle of forty-five degrees, passing through the entire length of the log at each stroke, and cutting off a board or veneer of any desired thickness, of perfectly smooth surface and uniform throughout. It is capable of cutting veneers perfectly true and uniform, the hundredth of an inch thick, and it is claimed for them that they are surperior in all respects to any made on rotary or other machines.

At the exhibition the cutter was operated on ash and elm logs, the lumber sliced off being perfectly smooth and solid. The power is applied to the knite directly from the cylinder of the machine, the knife being arranged to work between guides, and acts as a cross-head to the piston rod, the motion being steadied and regulated by a suitable balance wheel, and there is neither wheel, belt, crank, or pulley, nor any other contrivance intervening between the steam cylinder and the cutting knife, the simplicity and effectiveness of the arrangement being perfect.

For certain sorts of work, such as making barrel staves, etc., where curved forms are required, a dryer is used in connection with the cutting machine. This dryer consists of a series of suitably shaped hollow castings, so arranged that the lumber can be introduced and subjected to a tremendous pressure, causing it to conform to the shape of the castings. Steam at a high pressure is then introduced into the hollow castings, the effect of which is to season the lumber, which, when removed, retains its shape and is ready to be made into barrels, saving the necessity of steaming, seasoning and firing, the dryer shown accommodating about 300 staves at a time, and the operation consuming about fifteen minutes. The dryer can be enlarged and modified to meet any requirement as to capacity and shape.

Both the lumber cutter and dryer are the invention of Mr. H. S. Smith of Geneva, N.Y., who obtained patents on them only a few months ago. The Canada Lumber Cutting Machine Company have obtained the right to manufacture and operate these machines in Canada, the provincial directors being Messrs. Robert Hay, David Blain, Hon. J. B. Robinson, John Abell and J. W. Hughes. It is proposed that the Company manufacture staves, boxing, veneers and other material ; also construct the machines and sell or lease them, subject to royalty.

The process of sawing and planing by the present method of manufacturing lumber, independent of the labor expended, entails a loss of material varying from 37½ per cent. in the production of half inch lumber, to 233⅓ per cent. in lumber one-sixteenth of an inch thick. This percentage of loss, as well as the labor involved in planing, is saved in the use of this cutting machine, as no sawdust or other loss of material results from its operation, and planing is unnecessary, for the boards cut with this machine are perfectly smooth.

In view of the enormous saving of material here alluded to, it is claimed that this lumber cutting machine will quickly supersede the use of saws and planing machines in the manufacture of such lumber as it is best calculated to produce ; and as such lumber is estimated to comprise two-thirds of all that is manufactured, it would seem that those who control this machine will soon have a monopoly of this branch of the lumber cutting business.

The magnitude of such a monopoly cannot be overestimated. The manufacture of barrels for containing flour, sugar, oils and other liquids, and for all other purposes ; of packing and other boxes, and of veneers for all purposes are a few of the industries which will be largely affected by the introduction of this far reaching invention. Succcessful competiton by means of the present most improved machinery would seem practically hopeless. In the manufacture of barrel staves for instance, the best machinery now in use can produce only about 2,000 staves of certain dimensions from each 1,000 feet of lumber, while with the Smith machine here alluded to the same quantity of lumber can be made to produce over 4,000 staves. Packing and other boxes can be produced by the use of the Smith machine for one-half the cost of similar boxes made in the ordinary way. In almost all other manufactures the relative cost of production will be about as here indicated.

A tabular statement has been prepared by which it is shown that the average loss in material by saw kerf in sawing and planing is as follows, the stuff being dressed on two sides : Half-inch stuff, 37½ per cent.; ⅜ inch, 50 per cent.; ¼ inch, 77⅞ per cent.; ⅓ inch, 116⅔ per cent.; 1⁄16 inch, 233⅓ per cent.; all of which is saved in the use of the Smith Lumber cutting machine, and there is also saved the cost of planing which amounts to from $1.50 to $2 per thousand feet.

The vast saving in time, labor and material effected by the use of this machine will be more fully appreciated by observing the facts that a single machine adapted to cutting lumber of certain deminsions will cut in a working day of ten hours, 37,500 feet of inch boards or 60,000 feet of half-inch or 80,000 feet of quarter-inch boards.—*Canadian Manufacturer*.

THE DEBT OF THE DOMINION OF CANADA.

The total gross debt of the Dominion of Canada on June 30, 1887, amounted to $270,200,373.

Against this there were assets, including investments for sinking fund, etc., province accounts and banking accounts, amounting to $45,173,611, leaving the net debt on that date at $225,025,762. The statement in detail is as follows :

Funded, payable in England	$171,763,439
Funded, payable in Canada	18,675,102
Note circulation	14,975,999
Savings banks	38,996,751
Trust funds	6,948,994
Province accounts	17,303,456
Miscellaneous and banking accounts, &c.	1,496,735
Total gross debt	$270,200,373
Assets.	
Investment for sinking funds	$18,968,532
Other investments	8,761,816
Province accounts	7,522,468
Micellaneous and banking accounts	9,919,796
Total assets	$45,173,612
Net debt	$225,026,762

The decrease in the debt during June was $450,185. The statement of expenditures for the year to the same date was :

Public works, railways and canals	$3,899,876
Dominion lands	147,066
Subsidies to railways	1,364,103
Total	$5,411,015

The Dominion of Canada began business for itself in 1867. The bulk of its debt has been incurred in aiding the construction of railways and other public works.

CLASS OR TRADE JOURNALS.

In these days of systematic, distinctive work, says the *Manufacturers' Gazette*, the newspaper has found its proper place. There is the daily newspaper, which gives the current news of the world ; the religious newspaper, which is devoted to its own peculiar creed ; the scientific journal which treats of the mysteries of nature and art ; and so on through the entire list. But as every study or profession requires a text book, so does every part of technical industry require a medium of information that shall bear the same relation to the engineer, the machinist, the cotton or woolen manufacturer, the wood-worker, etc., that the text book bears to the student. The industrial journal has become a necessity ; no artizan or mechanic who would improve upon his present knowledge can afford to do without such a medium of information. It is only the best in anything that succeeds in these days, and those who excel in their various callings are those who are always in demand and at the highest rates of pay. The mechanic or artizan who makes up his mind that he "knows it all," and refuses to even consult an industrial newspaper that is devoted to his special calling, will find himself left in the great race for profit or fame. This is an age of tremendous progress and material improvement. New conditions and new demands are as continuous as the revolution of the earth itself. It is also an age of intense competition, and the margin for profits is comparatively slender. The general demand, whether it be for a locomotive engine or a lead pencil, is for the best—and the best must be afforded at a price as low as an inferior article. Hence the necessity for taking advantage, by brain power as well as by mechanical or machine power, of the things which men have to do with. It is now acknowledged that the newspaper devoted to this, that or other department of industry, as the case may be, is as much of a necessity with the mechanic or artizan as is the tools with which he manipulates his work.

THE GILMOUR-PARADIS CASE.

The Gilmour & Co. *vs.* Father Paradis case, and the counter charge of Paradis *vs.* Gilmour, owing to the intricate nature of each, have caused an unusual stir for upwards of a month past. The exhaustive nature of the evidence, or at least statements, *pro* and *con*, affecting this case, precludes anything like a full reprint of the same in THE LUMBERMAN, but sufficient will be given to enable our readers to form at least a substantial opinion of the cases now before the courts.

The contention first arose through the Messrs. Gilmour charging Father Paradis with having defaced certain marks on a large quantity of saw-logs belonging to them and situated in Egan township.

For this the rev. Father was arrested, and also on another charge preferred by one Michael White, accusing him of having forged his name on a cheque for $450. It seems that in 1885 Michael White made certain improvements on colonization roads in the township of Ammond. The cheque for $450 to indemnify him was sent by the Government to Father Paradis, who had been appointed general superintendent of the various colonization works in that region. Without consulting White, it is held, Father Paradis wrote that person's name on the back of the cheque (which was payable to White or order) and sent it to Ottawa to be placed to his own credit in a certain wholesale house there. White denies that Father Paradis was in any way authorized to sign his name or to appropriate the amount of the cheque. Thus the action.

Before the public had time to thoroughly understand the situation a still greater surprise presented itself, in the shape of a counter charge and the arrest of Messrs. John Gilmour and Allan Gilmour, jr. upon a warrant issued at the instance of a man named Anisi Brouillard, an employee of the Rev. Father Paradis. Brouillard, it appears, was arrested along with Rev. Father Paradis upon the warrant issued at the instance of Gilmour & Co., charging Paradis with cutting the Gilmour mark off saw-logs and replacing it by that of another man. The Saturday following his arrest he swore out a warrant in Hull accusing Messrs. John and Allan Gilmour of stealing logs from a man named Adam, of Gatineau Point, and upon this warrant both lumbermen were arrested. They were at once released on bail.

As the trial has been postponed from time to time, and is now set down for Sept 2nd, we are not in a position to publish the legal phase of the case in this issue, but will give the defence set up by each side so that our readers may determine for themselves the justice of the respective charges as they present themselves.

FATHER PARADIS' VERSION.

Rev. Father Paradis, on being interviewed by a *Journal* reporter, said: Many mis-statements have been published with referenee to the trouble that the Messrs. Gilmour have precipitated. There has been a systematic plan—a conspiracy I may call it—to drag me down and stuff it into the public ear that I am an unprincipled man, but I will tell the whole story without any varnish.

"The whole trouble is situated in the township of Egan, on the Sixth concession line, in Ottawa County. The seven settlers who came in April, 1886, have taken up lands. This land, Messrs. Gilmour have cut timber and logs on themselves for twelve years, and when they found it getting scarce of timber they gave the saw-log cutting into the hands of jobbers because it did not pay the concern to cut. The jobbers, who undertook to get logs out on the lands, instead of making money invariably made debt, so that you can see there was very little good timber on the land.

"Well, the seven settlers came in and took up land in this place, being duly entered in the Crown Land Office. I got a free grant from the Quebec Government of fifty acres of land for a church and bought fifty more. The price paid for all the lands taken up both by me and the settlers was 30 cents an acre, payable in six instalments.

There was no trouble until the Cormier-Rochon election. Then Mr. Donnelly, Messrs. Gilmours' agent, came to me and asked me to give my support to Rochon, saying that poor settlers or nobody else would ever get fair play or justice from such a rotten government as the Ross government. I am a Conservative myself, although I take no active part in politics, and when Mr. Donnelly came to me and solicited me to do what I could for Rochon, I put him off as quietly as I could, as I did not want to offend him. The Messrs. Gilmour supported Mr. Cormier also. When any settler asked me about the vote I always gave my views in support of the Conservative candidate. Well, Cormier was elected, and the township of Egan gave him over eighty of a majority, which was an astonishing thing, and the Messrs. Gilmour gave me great credit saying that the large vote for Cormier was all due to my influence among the people. But although the Gilmours were pleased, my action in the election annoyed Mr. Donnelly very much, and it seems he determined to make trouble, for he immediately wrote his firm stating that some very valuable timber was on the lots taken up by the settlers.

"This was last fall. The firm, of course, are guided by his advice, and consequently last fall they put a concern shanty, a thing never before thought of on the place, with twenty men in it, and these men began cutting down the bush in all directions. Myself and the settlers served a protest on Mr. Donnelly and also on the foreman of the shanty, stating that the land belonged to the settlers, and was private property, and that the firm had no right to cut down the timber, which would be of service to the settlers. No attention was paid to the protest and the havoc went on. Of course there were some logs on the land, and the settlers, acting on my advice, cut them and placed them on rollways. We offered to sell these logs to the Messrs. Gilmour, and Mr. Donnelly came to see them. Some time after Mr. Gilmour came up himself, and showed a paper which purported to be a notification from the Government that the settlers' entries on the land had been cancelled, although the document, which was written on a telegraph blank, was written by one of Mr. Gilmour's shanty clerks.

"This discouraged the people very much, and I went down to Quebec about the matter. I waited on Mr. Cormier and stated the case. He gave me a letter to the Hon. Mr. Lynch and I laid the case before him. He said the cancellation had not taken place. The thing evidently embarrassed the Minister of Crown Lands, as both parties in the dispute were supporters of the Government. Mr. Lynch said he would enquire into the affair, and we heard no more from him."

"In the meantime the Messrs. Gilmours hammer marked all the settlers' logs with their registered mark. The settlers were and are very poor, but there was a principle involved and we determined to fight the matter in the courts. People questioned the wisdom of this, saying 'Oh, the Gilmours are wealthy; even suppose you are right they will bring it from court to court and ruin you with expense.' But we determined to fight for our rights. The logs, however, were what is known as perishable goods, and it would never do to leave them in the bush. There was a change of government in the meantime, so I went down to Quebec and saw the Hon. Mr. Mercier and laid the whole matter before him, showing him that if the logs remained in the bush much longer they could not be drawn, as the snow was fast going away. This was last April. Mr. Mercier assured me that justice would be done to the poor settlers and casually intimated that it was a common occurrance for rich lumberman to take advantage of the poverty of settlers who had taken up lands near their limits that they might buy their goods at their own prices. As the matter was in dispute in the courts with regard to the ownership of the logs, it was necessary to give security to the court for their full value, and as the settlers were too poor to give security themselves, the Hon. Mr. Mercier caused an Order-in-Council to be passed giving $5,000 as security for the logs, in the event that the decision of the Court would be against us. With this security deposited in the Court we proceeded to draw our logs out of the bush to the river. We negotiated and sold the logs to Mr. Adam, of Gatineau Point, guaranteeing him against all loss should there be any further trouble with the Gilmours. About two thousand logs were drawn to the river.

"Now all the logs were with Gilmour's registered mark on their butts and tops, and of course it would never do to launch them into the water in that way, for there was nothing to prevent them from getting mixed with Gilmour's logs and Mr. Adam would have no way of identifying his property. Therefore as the culler measured the logs he chopped off Gilmour's mark although in all cases leaving the mark placed on them by the Court official, and Mr. Adams' mark was put on. I was present when this was going on and one of the logs was still with Gilmour's mark on when Mr. Donnelly happened to come around. He pointed out not to take the mark off, and I ordered the culler to take it off, and for that I was arrested."

"What were the Messrs. Gilmour arrested for?"

"Why for taking our logs. When the logs were put in the river Messrs. Gilmour directed his men to run them into his mills, and they were sawn up, and not only ours but eighty belonging to Mr. Adam. When they found that these eighty were not of our bunch they made restitution to Mr. Adam. I had them arrested for theft, as they stole the logs and turned them to their own uses although we had first the prior right of ownership, and secondly, we had bought them from the court by giving the Mercier Government $5,000 order-in-council."

"The Gilmour's," continued the Rev. Farther "are trying to over-awe us with their wealth, but there is a principle at stake, and we will fight the battle to the bitter end. Remember, I have no financial interest in the matter, but as I am organizer and director of the colony I am obliged to take the principal part in the transaction. Another thing, I have the assurance of the premier of the province that justice will be done to the colonists, as he told me both verbally and by letter that he would protect the poor man against the oppression of the rich. The Messrs. Gilmours know they are in the wrong, but a pride I do not understand, makes them think they would lose their *prestige* in the Gatineau country if they did not fight.

"How about the charge of forgery against you?"

"Oh, that's all nonsense. Mr. White does not make any such charge directly. When the trial comes on I have documents in my possession to set that matter in its proper light. I am the overseer of colonization roads in six townships and Mr. White is one of the men under me who is to see that the colonization money is to be devoted to road building. I'll throw day light on the nonsense they talk about forgery when the case is on in the court. It is only another item in a systematic effort to drag me down in public estimation. The whole point to be settled in the dispute is does the lumber occupied by a settler belong to him or does it belong to any outsider who likes to claim it? If the court decides that the settler has no right to the lumber on his land, then the sooner colonists and intending colonists know it the better. But to do the Gilmours justice, I do not think there would have been any trouble with them had it not been for Donnelly, who determined on revenging himself some way because I did not support Rochon in the election.

MR. DONNELLY'S REJOINDER.

"It was not my intention to add anything to what has already appeared in the French and English press concerning the Gilmour-Paradis *emeute*, but after reading the statements made by the Rev. Father Paradis in your issue of the 4th inst. I could not allow them to pass unchallenged because they are a tissue of falsehoods from beginning to end. In the first place the public will perhaps be astonished to learn that the "seven poor settlers" who duly entered their names in the Crown Lands office exist only in the imagination. There is not now and there never has been a single *bona fide* settler in the part of the sixth range of Egan that is here referred to. At the time of Father Paradis' advent in that locality there was one squatter there, the now notorious Francis Brouillard. This man squatted there in the midst of a thick pinery, and as this proceeding was against the interest of the firm as well as against the law of the land, as it now stands, it was our intention to take legal means to have him removed, but as he was not clearing the land to any extent, and as he was selling the firm all the logs he made, they decided to let him pass. All the other "poor settlers" who "duly entered their names" are bogus from beginning to end.

The whole trouble arose in this way: Father Paradis has a brother whom he wishes to establish in a woodenware business in the adjoining settlement. To do this successfully he must have a reserve of timber, and the most successful way of securing it was to obtain possession of some good timbered lands near by. But there must be no partnership in the business. He wanted the timber for his brother only, and the land could not be bought from the Government with conditions of settlement in the legitimate way. Accordingly our enterprising missionary borrowed the names of men on whom he could depend for this purpose, such as the priest of the adjoining parish, several members of the order of Christian Brotherhood, his own brothers, etc., and duly "entered their names for a block of 1,700 consecutive acres, upon which were standing about 25,000 saw logs. This block of land was all on the limits of Messrs. Gilmour & Co., and the location tickets were applied for in the last days of April before the annual renewal of licenses, so as to proclude the possibility of the timber being cut by the lawful owners. Father Paradis pretends that there was no timber left on the lots in question, and that we had no intention of working on them the past winter, until he refused to be guided by me at the last elections, and that the sending of men to work on them at all was an afterthought, and only a measure of retaliation; but the fact that a depot was built there in March, 1886, and a large quantity of supplies stored there with the view to cutting the timber during the following autumn will be sufficient refutation for this statement. I did not know the lots were sold until the jobbers were at work in the woods in October. I did not know it because the selling of lands in that locality was altogether illegal and I never suspected it would be done by the Quebec Government.

With the real settlers we have no trouble. On the contrary we get on very well together; they want employment and a market for their produce, and the firm wants all the logs they can cut, but when the manipulator comes along the case is different. There is a conflict of interests and trouble begins, and Father Paradis is a manipulator. As regards the election canard, I can only say that during the last elections I remained strictly neutral, as I did not consider myself authorized by the firm to interfere in the matter. I did not vote myself, neither did I solicit a single vote. Father Paradis' explanation of the reason why he was arrested does not contain a word of truth. He employed a gang of men to deface the marks and replace them with his own marks on 1,250 logs belonging to Gilmour & Co. that were cut outside of the disputed land altogether; and a more outrageous proceeding I never heard of, and it was for trying to recover possession of these 1,250 logs, with another man's mark on them, that Messrs. John and Allan Gilmour have been arrested. The penalty described by law for doing what he did on this occasion is 7 to 14 years in the penitentiary. During my connection with the firm of Gilmour & Co., which now dates back about 41 years, it has been my lot to come in contact with the Roman Catholic clergy in many ways, and during all that time I fail to remember a single instance where our intercourse has been attended by the least unpleasantness, and I think the exception only proves the rule. With regard to the forgery business I know nothing, but I do know that a good deal of money that has been granted lately by the Quebec Government for colonization roads has not been spent on the roads, and of this any resident on the Gatineau has a right to complain.

GILMOUR'S ATTORNEY SPEARS.

"As these cases, which being in litigation before the courts should until finally decided have been exempt from comment from the press, have nevertheless been made the subject of articles extremely unfair to Messrs. Gilmour, I deem it my duty as their attorney in all the civil cases and one of their counsel in the criminal charges to ask your insertion of a correct statement of the facts which gave rise to the present difficulties. Every person acquainted with the lumber business knows that on the confines of the settlement there has for many years existed a class of persons who might not unappopriately be called timber sharks. These people make a practise of obtaining, under pretense of settlement, location tickets for the best timbered lots they can find in a limit. Having thus obtained for a trifle, say an instalment of six cents per acre, possession under a title which gives them legal possession and enables them to exercise the rights and actions of proprietors, they ostensibly for the purpose of clearing the land, slash down all the pine they can find, and after having in a year or two cut and sold all the merchantable timber they can find on the lots, having completely spoiled them, and made a veritable tinder box and perennial source of danger to the surrounding country, abandon and then take up other lots and repeat the same proceedings. In order to put a stop to this systimatic devastation of public domain, the Legislature of the Province of Quebec in the session of 1883, passed an Act authorizing the Leutenant-Govenor-in-Council to set apart as a forest reserve all the ungranted lands of the Crown under license to cut timber, except such parts as are destitute of timber and fit for cultivation, and that from the date of the publication of such order in the Quebec Official Gazette no lands included in such reserve should be sold or appropriated for settlement until after the expiration of ten years. Under the authority of this act an Order-in-Council was passed on the 10th of September of the same year and published in the Official Gazette on the 22nd of that month setting apart as forest reserve certain territory defined in the Order-in-Council. In the month of October, 1886, the Rev. C. A. M. Paradis, the Rev. Hector

Maurais and seven others of whom two belong to the Christian Brotherhood and one or two others are theological students, obtained writs of injunction to restrain Messrs. Gilmour & Co. from cutting timber on a dozen lots of land on the south range of the township of Egan, some of the most richly timbered lots in the limit. The complainants based their damand on location tickets obtained from the Crown Land Agent at the Desert in the month of April previous. These lots were within the boundaries of a timber berth, then and now held under license by Messrs Gilmour & Co,, and were also within the boundaries of the forest reserve. The petitioner alleged that they had had the lands inspected by a bushranger and they fyled the report in which he stated that their was a large quantity of merchantable pine growing on the lots and that about 35 per cent of the land was fit for cultivation.

Being consulted by Messrs. Gilmour & Co., I gave it as my opinion that, as the law said the land in the forest reserve could not be sold for settlement the location ticket was null; but foreseeing that there would probably be an expensive batch of law suits I told my clients that in a matter involving such serious consequence I would like them to take additional advice, and it was agreed to get the opinion of the Hon. Mr. Irwin, Judge of the Vice-Admiralty Court of Quebec. Mr. Irwin was as decidedly as I was of opinion that the sale was null, and Gilmour & Co. had the right to cut the timber, and I accordingly contested the injunctions. It was admitted by the petitioners that the lots were within the boundaries of the forest reserve. At the hearing Judge Wurtell raised a question as to whether the act should be construed as depriving the Government of the power of selling or merely as giving directions for the observence of which they were responsible to Parliament, upon this point however I found a decision of the Privy Council which settled that question in our favour, but the judge discovered a technical reason on which he based a judgment in favor of the petitioners, viz., that as the Order-in-Council excepted from the forest reserve such lands as might thereafter, on the examination of competent and authorized persons, be found destitute of timber and fit for cultivation; this was a question of proof and therefore, although the lands in question were admitted to be clothed with timber, the sale was not null, although possible annullable on the seal of the Crown.

Mr. Irwin, as well as I, failed to see the force of this reasoning, and the cases are now before the Court of Appeal in Montreal.

The Ross Government had given notice that the location tickets would be cancelled, but Mr. Mercier refused to carry it out.

The saw logs, the marks on which the Rev. Mr. Paradis is accused of defacing, where not cut on the lots in dispute, but on other lands, and it is for taking these very same logs out on lots with respect to which there is no dispute that Messrs. Allan and John Gilmour have been arrested on a charge of larceny on the information of one of their vexatious litigants. And although I have heard of many strange cases I cannot recollect any case of a man being arrested for the larceny of property, off his own property, in his own possession. If there be anything in the facts above related to justify the opprobium which certain journals have attempted to cast on Messrs. Gilmour & Co., I must confess I am unable to see it.

CORRESPONDENCE.

THE CHANGE OF EIGHTY YEARS.

MADAWASKA, N. B., August 10th, 1887.

To the Editor of the Canada Lumberman:

DEAR SIR,—I begin to feel a streak of guilt for not reporting before this, but the fact of the matter is that there is so little new to report from these parts that I imagined that anything I could say would be insignificant.

In my travels a few days ago I chanced to fall in company with an old respected gentleman by the name of Clark, a resident of Andover, Victoria County, and was much interested in hearing him relate his experience as one of the pioneers of this Province. The old gentleman is now in his 88th year, but is still quite robust, and has a very retentive memory. Thinking that your readers might feel an interest in reading the reminiscenses of the past eighty years as related to me, I will, as near as possible, use Mr. Clark's own words. He says:—

"Samuel Lee came out to this country from England about the year 1792, and located at Restigouche, where he engaged in the salmon fishing business. Shortly after he went back to the old country and brought out a few more with him, who also started in the same business. My father comprised one of the party. I was born in the year 1800.

"Alexander R. Ferguson was the first man who did any lumbering on the Restigouche. His lumber business at that period was considered large. He was also engaged in shipbuilding. Frank Peabody was the first man who shipped lumber out of the Miramichi. Then Gilmour & Rankin came from Glasgow and opened up a large business, and, strange to say, one Dick McLauchlin, who was formerly a hostler for Peabody, got into Gilmour & Rankin's good graces, and they employed him to get out lumber for them. He was freely supplied with money and for a time did well, but finally overshot the mark. His last year's operation was a noted one and excelled any of his previous efforts. He put forty span of horses and 150 yoke ot oxen in the woods. On Christmas day he brought out all the horses from the woods and hired 60 span more, and loaded them up with 400 pounds of corn meal, 300 pounds of pork, and 300 pounds of flour. When they got all ready for a start he mounted his grey charger with the Union Jack floating in the air, and called on the rest to follow. With three cheers they moved forward their long cavalcade for the camps. McLauchlin had forty parties in the woods, and in all they got out 60,000 tons of timber.

"My father was appointed a Magistrate, and for 20 years he had to tramp on snow shoes to Fredericton, a distance of about 300 miles, and report to the Government. He would take his pack of possessions, and sometimes he employed an Indian to go with him. I remember well going to Montreal 77 years ago, when only ten years old. I saw a little steamboat try to go through the rapids at Moson's Brewery. She was compelled to drop back five or six times and at last had to give up the attempt. One week after this five or six yoke of oxen were attached to it and succeeded in taking it through. This was the first steamer that ever run the St. Lawrence. In 1832 I was there again, and saw a tug take two brigs through at once without the slightest trouble. In 1833, I, with some others, went up the Restigouche in canoes, and struck the Grand River which empties into the St. John. When we got to Grand Falls there were only two log houses with two old couples to occupy them; children there were none. From there we went to Tobique. I stopped at Murphies, which at that time consisted of but four families. Not one stick of timber had been cut above this at that time, or above Grand Falls either, except at Baker Brook. John Baker had an old-fashioned saw mill those days which had dropped into his hands through marrying the widow of his deceased brother. The lumber and other product of this mill was floated down to Grand Falls, a distance of fifty miles, and from there hauled to Fredericton."

I shall intrude here and add the following taken from the Bangor *Whig*, which will, doubtless, be of interest:

"Mrs. Sophia Baker, who recently died at Fort Fairfield, at the age of 89 years, had a somewhat interesting history. Sixty years ago a party left the town of Moscow, in Somerset County, consisting of Nathan Baker, his wife Sophia Baker, and Mr. Simpson, for the purpose of lumbering on the river St. John. Their journey was through a wilderness country, a distance of two hundred and fifty miles. They carried their household goods in ten birch bark canoes, crossing lakes and carrying their canoes on their backs from river to river and from lake to lake, until they reached what is now called Baker Brook, on the north side of the St. John river, some six miles below Fort Kent. They were 15 days on the journey, having no other shelter than a tent. Some years after Mr. Baker's settlement the boundary question created considerable excitement, and as he lived on the disputed territory he naturally became very much interested in it. He and his wife believed they were on United States land, and Mrs. Baker was determined to stand by her supposed rights. On the approach of Independence Day she went a long distance in a canoe to procure material for a flag, and with her own hands fashioned a banner bearing the stars and stripes of her beloved country. When the fourth of July came she flung it to the breeze, notwithstanding the threats of her neighbors who were under the King. For this act Mr. Baker was arrested and confined in jail for a year, and the story is that when they came to arrest Mrs. Baker she drove them off with a broom. The boundary having happily been settled by the Ashburten Treaty, Mr. Baker was released, and with his wife continued to reside for many years at the place where they suffered persecution for the sake of patriotism. Mrs. Baker spent the last year of her life with her daughter, Mrs. Slocomb, of Fort Fairfield village. Several years ago ex-Governor John D. Long, of Massachusetts, wrote a poem on Mrs. Baker, suggested by an article in the *North Star*, entitled: "The Barbara Fritchie of Aristooke."

Now we will again take up the thread of Mr. Clark's reminiscensis where we left off. He says:

"I went to Frederickton and engaged to run a raft to St. John, and on the completion of this undertaking returned on the first steamer that ever run from St. John to Fredericton. If my memory serves me right this boat was known as the 'Old St. George.'

"Tom Gardner was then in his prime, and considered the strongest man in New Brunswick. I was well acquainted with him. We happened to meet one day in Indiantown, and he told me there were three Yankees who had sent him a challenge to wrestle, one at a backhold, one at collar and elbow, and one at arms length. He had accepted the challenge and invited me then to accompany him. I went with Tom to the place chosen, and there was quite a large crowd gathered. When the Yankees saw Tom they asked if he was the man to face them. He said he was. They told him to step out, and a large raw-boned Yankee, looking as smart as a steel trap, stepped back and looked at Tom, and said: 'Well, I guess that will do me,' and the rest dared not take hold of him. This little experience had the effect of putting a stop to any further crowing on the part of the three worthies referred to. Why I have seen Tom Gardner take a barrel of flour under each arm and walk off with them without a struggle.

"In the year 1825 I was present at the laying of the corner stone of the new Government House. After the deposits had been placed into the hole in the stone cut for the purpose I threw in a seven-pence half penny, commonly called a york shilling. Then Sir Howard Douglas took his wife's hand and kissed her, then assisted her to lay the stone. About this time was issued about the first paper money I had ever seen. It was handed me as part payment for wages. I asked what it was and was told paper money. I shoved it back and told the man that I would not take anything else but gold or silver, and I got it too.

"I worked on Tobique river in the year '23 for Mr. Greenlow, who was engaged in lumbering. No timber but red pine was allowed to be cut. Mr. Greenlow purchased ten tons of hay in Woodstock to be delivered to his camp, for which he paid the handsome sum of £10, or $40, per ton. I remember seeing a fine white pine close to the stream, and intimated my intention of cutting it, when Mr. G. said no, it was worth £1 and red pine was worth £1.7.6; but towards spring I [illegible] and made five tons of timber out of it, all sound as a nut too. Whether he put it in or not I never knew.

In 1835 a company was formed, and several large mills were erected at the red rapids on the Tobique, but they failed and were soon destroyed. This was a death blow to Tobi[illegible] Sir John Caldwell also built extensive mills at Grand Falls, in which he sawed nothing but pine deals. He floated them to St. John and shipped to England. He had a large number of men in his employ, who settled above the Falls, many of whom are yet living."

The above brief history shows how rapidly our lumber resources are leaving us. I can recollect about 36 years ago I came to Madawaska, and at that time there was nothing but pine timber cut above the Grand Falls. Now, but little, if any pine timber is left, and nothing but small sized spruce. For the last few years Americans have taken the cream off of our cedar to manufacture into shingles on the American side. But at last it seems as if our Government had awakened—Rip Van Winkle like—from a long sleep, and discovered that there was an export duty on cedar, and had made up its mind to inforce it. But how are they going to do it? As I mentioned in a former communication it is simply folly to tax cedar logs at the rate of $1.50 per cord of 128 cubic feet, instead of cutting the same into shingle bolts on the Canadian side and taxing the same as so much per cord. Now I suppose Brother John [illegible] with our Ministers' consent, will have our cedar for telegraph poles, posts, wharfing, etc., as usual free of export duty, for another year at least.

Where can be our officials excuse for not collecting export duty on our spruce and pine logs? I suppose by the same token there is no duty on clapboard logs—its only on spruce and pine logs for boards. The wisdom (?) of our officials is something extraordinary.

Inside of 25 years our lumber business will be one of the things of the past, and we will have to import instead of export.

Yours truly,

P. O. BYRANE.

LONGFORD MILLS, Ont., Aug. 19—Our mills are both running to their full capacity, 125 thousand per day. Bush fires in the vicinity of our limits in Longford are well under control. Fire has done a large damage in townships of Dalton and Rama, reducing many poor settlers to penury, sweeping away all their crop and buildings in many instances. Fully fifty families have suffered more or less in these two townships.

LONGFORD LUMBER CO.

THE Montreal *Herald* attacks the lumbermen of the Province of Quebec with much asperity, accusing them of fraud, dishonesty, blustering and greed. It especially charges them with aiming at fixing for themselves the amount of the dues payable by them on mileage and stumpage. It remarks:—"The Government will not be [illegible] Province if they fail to secure a proper return for the immense quantity of timber that is yearly stumped from the public lands." The lumbermen are not fixing the amount of rental, but are protesting against an arbitrary increase of the amount already fixed. This amount has been considered to be stable, so that limit-holders have been able to sell their property in the limit or pledge it as security to the banks, but those who have thus acted in confidence that the Government would observe good faith, now find their property or security suddenly depreciated. This great industry has contributed very largely to the revenue and to the development of the Province, so the *Herald's* censure is undeserved. As to stripping timber from the public lands, nothing could do more to hasten this than the heavy increase of rental.

THE NEWS.

ONTARIO.

—A large furniture factory is to be erected at Burlington, Ont.

—Van Allen & Son purpose moving their planing factory from Aurora to North Bay.

—R. Hurdman & Co., of Ottawa, are making arrangements for the construction of a new circular saw mill.

—The water in the Ottawa river is said to be lower than for years past. The drives on all the small streams are completed.

—The Rathbun Company are slackening speed at their Campbellford mill, having got through the heaviest part of the season's cut.

—The Berlin, Ont., council, at a late meeting, decided to exempt Mr. Kaufman's planing factory from any higher taxes for ten years.

—The Terra Cotta Lumber Co., of Deseronto, are enlarging their works to keep pace with the increasing business of the establishment.

—Mr. Henry Cargill, of Cargill, Ont., informs the LUMBERMAN that the price of lumber in Bruce county is firm, with a very active demand.

Mr. Chas. Vickery has opened a lumber yard in Whitby for J. M. Irwin, of Peterboro'. The lumber will be shipped from the latter's mills at Nassau.

—Mr. Robert Bickle has commenced the manufacture of cheese boxes in Peterborough, his works having a capacity to produce 2,000 boxes per week.

—Messrs. Hurdman & Co., lumber merchants, Ottawa, have exchanged limits with Messrs. Gilmour & Co., receiving from the latter their Kippewa limits.

—Messrs. G. A. Grier & Co., Ottawa, have just completed one of the finest mills on the continent, and are now turning out a superior quality of lumber in splendid style.

—An apprentice boy opened one of the valves of the steam pipes too fast on starting up in Dorman's mill at Mitchell, and in consequence a general smash-up occurred.

—Mr. Hurdman, the Ottawa lumberman, is already send-up a large number of men to work on his Kippewa limit, seventy have been sent there in one day recently.

—A considerable quantity of lumber was burned at Chew's mill, Midland, August 19th. The fire spread to the railway station and baggage room, which were entirely destroyed.

—Suttaby's steam joining and planing mills at Gravenhurst, Ont., were destroyed by fire on Sunday July 17th, together with a large quantity of lumber. The loss ranges from $5,000 to $8,000.

—The water in the Ottawa river at Ottawa is lower than it has been at the sam etime in any previous year for the past seven years, and the bargem n find considerable difficulty in avoiding the sawdust banks.

—Mr. J. M. Irwin, proprietor of the "Red Mills," Nassau, near Peterborough, has plans ready for the erection of an extensive and costly residence at that point. Mr. Irwin's new mill is now running in good shape.

—There is now in the Ottawa Improvement Company's works, between Des Joachims and Ottawa, a million and a quarter of saw logs, which will be supplemented later on by the Madawaska river drive which is not yet out.

—The lumbering firm of Hurdman & Co., have purchased from Messrs. Gilmour & Co., their fine pine limit on the Kippawa for $186,000. Messrs. Hurdman & Co. intend working this new limit extensively this winter, and expect to nearly double their cut.

—All the logs have been released from the upper boom at Buckingham, but large numbers still remain on the river's banks, and the river is still gorged. Two or three weeks more will about see the end of the sawing season. The Pulp mill is still silent.

—The outlook for lumber at Ottawa is said to be very favorable. There has been a gradual advance in prices during the past couple of months. An outside dealer states that three-inch deals now sell at $7 per thousand, being an increase of one dollar.

—The Upper Ottawa Boom Company are making extensive improvements in their booms and works on the Upper Ottawa. Some four miles of new boom is being put in near the Schyan. The addition will very much lessen the difficulty in passing the logs through the company's booms in stormy weather. As it is now, rafts of logs have to wait a considerable time in stormy weather until the water is calm, and the logs can be passed into the boom without danger of scattering.

—McLachlin Bros. have a large drive hung up in the Madawaska for the winter and part of the last drive on that river which is about 30 miles up will also have to be tied up, but on the other streams and main river there are very few more logs than usual stuck.

—Messrs. Tutton & Sons, of the Orillia foundry, have received the contract for building a new engine and supplying the entire machinery to refit Chew's mill, Gravenhurst, lately destroyed by fire. The whole work is to be done within six weeks from the time it was undertaken.

—The tail of the timber drive on the Ottawa river is now a few miles below Fort Eddy, and the Upper Ottawa Improvement company expect to have the tail into the booms at the Chaudiere by the 1st of October. The timber is moving very slowly owing to the shallowness of the water.

—The Gatineau Valley railroad is now located definitely as far as the Peche and ready to have the work of construction tendered for. The road runs in a direct line with the macadamized road as far as the Peche, at which point the company already have eighteen or twenty thousand ties.

—Nearly all the square timber to be sent out of the North Bay district this season has been loaded and shipped. There are, however, about 2,000 pieces yet, 800 of which will be loaded at North Bay. There is a large decrease each year in the quantity of square timber which is being taken out.

—Messrs. J. Hadden & Sons, of Foxmead, write that the lumber trade in that section is very brisk this season. They state that they have been unable to supply the demand for long length bill stuff, of which they make a specialty. Next fall they intend adding three-quarters of a mile to their logging railway.

—Messrs. Dean & Baptie of Three Rivers, have commenced the construction of extensive mills opposite the village of L'Original where they expect to turn out an annual cut of 25,000 feet of lumber. The former limits are situated on the Nation River. The mills will not be ready for operation before next spring.

—A gentleman who has recently returned from the Gatineau district says :—"There is one thing I noticed up the Gatineau: whiskey selling seems to be the chief occupation of a large number of people, and the Maniwaki Indians are suffering from it. The Government ought to take some steps to prevent the sale of liquor to these Indians."

—The statement has been published that there is a difficulty between the lumbermen and the settlers on the Gatineau, but this is authoritively stated to be untrue. It is simply a difficulty between the firm of Gilmour & Co. and Father Paradis, and not with settlers. The other lumbermen and the settlers are taking no action in the matter.

—The cut of square timber in the Ottawa district this season has been small, and a large quantity of this has been shipped by the Canadian Pacific Railway from points between Mattawa and Sudbury to Papineauville and from there taken by water to Quebec. In all some two million feet have been manufactured. The principal shippers by rail have been Barnet and Mackay, Timmins & Gorman and Alex. Fraser.

—The tail of Bingham's big drive has passed out of the Gatineau into the Ottawa river. There was an accident last spring which somewhat delayed this drive. A large pier in what is known as the Big-Eddy twenty miles above the Desert on the Gatineau river and which was used to direct the logs out of the eddy gave way, and all the logs had to be pulled out by hand. The pier will be rebuilt this fall.

—The timber limit berths, 2 and 4, township of Laurier, in the Nipissing district, owned by Mr. Thomas Mackay, of Ottawa, were recently auctioned at the Russell House in that city by I. B. Tackaberry. There was a fair attendance of of lumbermen ; amongst those present were Thomas Mackie, Robert Booth, Thomas Hale, and Robert Gorman. The limit is conveniently situated on the line of the Canadian Pacific Railway, and the lumber cut can be taken to market either by the Georgian Bay route or down the Ottawa. The dimensions of both berths are 34¾ square miles, held under license from the Ontario Government. The bidding was not at all lively. The first figure offered was $30,000, and after that it climbed by a slow process upward, until it reached $60,000, when the limit was knocked down to Mr. John Mackay, son of Wm. Mackay, of Renfrew. Lumbermen present were chary of bidding, as many of them believe the territory was run over by fire. The purchaser, Mr. Mackay, has saw mills on the Amable du Fore river, and within convenient distance of the limit.

—A large raft of white pine from the Petewawa, the property of Mr. Barnard, commenced running the rapids at Britannia a fortnight ago. The job was a troublesome one for the raftsmen, as the water is now less than two feet deep in some places, and thus the cribs stick in their descent. The men on this raft are of Indian, French, Irish and in one case, African origin. When the timber "hangs" on the rocks, the men take to the water to get it off and considerable fun for the boys, and girls, too, who take passage down the run-way, follows, for there is a medley of loud language among the hardy raftsmen as they ply their oars and handspikes, standing in the water to their waists or shoulders.

—The Pembroke *Observer*, of August 12, says :—"The cut of square timber this season has been small and a large portion has been shipped per Canadian Pacific railway from points between Mattawa and Sudbury to Papineauville and from thence taken down to Quebec by water. Some 2,000,000 feet in all have been manufactured. The principal shippers by rail have been Barnet & Mackay, Timmons & Gorman and Alex. Fraser. Mr. Richard White's square timber drive on the the Du Moine has been 'hung up' for the want of water, owing to the unusual want of spring and summer rain and the great length of the drive. Within the last two or three weeks the water diminished very fast in the Du Moine which caused the timber to stick."

—The Peterboro' *Review* furnishes the following figures showing the rise and fall of the lumber business in the Peterborough district. Speaking of the Midland railway it says that in its early history the chief staple for shipment was lumber. In 1858 12,000,000 feet was taken from Peterborough ; in 1860, 15,000,000 ; in 1863, 34,000,000 ; in 1865, 46,000,000 ; and in 1868, the amount had risen to the large figure of 72,500,000. At this time the Midland was operating about 100 miles of road and it was paying well. Each year the receipts swelled larger and larger. In 1873, on Mr. A. Hugell's appointment to the Presidency of the road misfortune overtook it. Owing to the lumber crisis there was only a small increase over the earnings of the previous year. In 1874 the lumber trade was in a bad condition and a decrease in the earnings of $14,000 was shown. The running expenses as compared with the receipts rose as the receipts fell. In 1875 there was a further decrease in the earnings of 19,000 and in 1876 of $11,000 more. These decreases were caused principally by the falling off in the lumber trade, from 142,000,000 in 1871 to 58,000,000 in 1876. From that time to the present, although the road has been doing a prosperous business the lumber shipments have not been nearly as great as during the years above mentioned.

—The Yard Department of the Rathbun Company are having a very busy season and have already got through an amount of work most creditable to all concerned. More work has been accomplished than during any former season. Some idea of the work performed may be gained from the fact that the steamers *Resolute* and *Reliance* have been each making four trips a week to Oswego, for the greater part of the season. The *Resolute* carries on an average 300,000 ft. of lumber and the *Reliance* about 200,000 feet each trip. The loading of these vessels, it can be easily seen, involves a very great amount of labor. In addition to these steamers a large number of barges, schooners and other craft are loaded every week for Oswego, Charlotte and other ports, and heavy shipments are made daily by the Bay of Quinte and Grand Trunk railways. As a specimen of the rapid despatch which is made by the department, we may mention that on Monday night the *Reliance* was loaded with 4,576 railway ties in the short space of five hours and ten minntes, and that by a crew consisting largely of green hands. It is doubtful if this feat was ever equalled on the lakes. Michael Marrigan and three hands also accomplished the feat the other day of loading the barge "Anglin" with 125 cords of woods in two hours and forty-six minutes. The department intend some of these coming cool nights to beat the record in loading the *Resolute* and *Reliance* and thus for once satisfy Capts. Gowan and Bartley who still pace the quarter deck muttering at being delayed so long in port. Each of these mariners will remain discontented until he can make daily trips to and from Oswego.—*Deseronto Tribune.*

QUEBEC.

—A man named Deslaurier, residing in Hull, and employed in Messrs. G. A. Grier's new mill on the Chaudiere, had one of his fingers taken off by an edging saw.

—The E. B. Eddy manufacturing company of Hull are making numerous improvements and putting a considerable amount of new machinery into their sash factory.

—The rumor is current among the lumbermen at the Chaudiere that the new iron bridge to replace the present Suspension Bridge across the Ottawa River just below the Chaudiere Falls, will be commenced early next spring.

—J. F. Tessier, proprietor of *Courier Federal*, has been arrested charged by Thos. P. Foran, advocate, with criminal libel. Tessier, who is a Catholic, acted as counsel for Gilmour & Co., in an action against Father Paradis. The article complained of said Foran sold his services to priest-eaters.

—Reports from Three Rivers state that most of the drives being in things are taking on a lively appearance.

—A. Baptist's mill has commenced sawing on both pine and spruce logs, and it is estimated that the cut will amount to 150,000 to 200,000 Quebec standards 3 in. pine, and from 60,000 to 75,000 3-in. spruce, besides about 250,000 feet of red pine, principally 11-in. × by 3-in. This mill would have begun to run sooner, had not the Government booms stopped the logs to pick out a small quantity for an up river mill, and in consequence of which, owing to the falling of the water, a considerable number were hung on the banks, necessitating their having to be rolled off at great expense.

NOVA SCOTIA.

—There has been a big jump in the price of lumber in the West Indies, and two Cubans are now in Nova Scotia making extensive purchases.

—W. J. St. Clair, of Bridgetwon, N. S., has sought a compromise with creditors at 50 cents, payable in eight months and unsecured.

NEW BRUNSWICK.

—Leithead Bros., a saw mill firm of West River Station, have assigned.

—Most of the mills at St. John are cutting deals for the American market. Very few charters are being made for England.

—A. L. Wright & Co., Salisbury, N.B.are building a large steam power mill on the Cloverdale River, near that place. This mill is being fitted with the best maehinery of Canadian manufacture.

—Hayford & Stetson, of St. John, stand in the front rank of spruce manufacturers, and have a reputation of the old school conservative order. An opinion from such a firm is worthy of respect, and in commenting upon the spruce market they say, "The supply of logs in the St. John river this season is very light. On account of deep snow the cut was about 30 per cent. less than estimated, and although there was a flood of water early in the driving season it soon ran off, and as no rain fell for about three weeks we have 25,000,000 feet of logs hung up. If the demand which has prevailed for the last few months continues, we do not see why spruce lumber will not bring as high prices in New York as it did in 1882, when it sold for $17 to $21. There is a heavy demand all along the coast, and all the information we get points to the fact that yard dealers have been buying sparingly, and that stocks on hand are light and must soon be replenished. These comments refer to logs cut on the American side of the St. John river.

MANITOBA AND THE NORTHWEST.

—The new mill of the Eau Claire company has been completed.

—Badgley & Hamilton has opened a lumber yard at Emerson, M.T.

—A lumber yard will be opened in Emerson, Man., by Messrs. Badgely & Hamilton.

—Davis & Co., lumbermen, with headquarters at Winnipeg, have been succeeded by the Manitoba Lumber and Fuel Company.

—Davis & Co., wholesale and retail lumber merchants of Winnipeg, Man., has been succeeded by the Manitoba Lumber and Fuel Co.

—Lumbermen on the North Saskatchewan are said to be having considerable trouble in floating their rafts this season, owing to low water.

—The new C.P.R. Hotel now being erected at Banff, in the Canadian National Park, will require about 1,000,000 feet of lumber, which will mainly be supplied by the mountain mills.

—Already it is said the business which the Rat Portage and Keewatin mills had in shipping lumber to the far west, has been considerably curtailed, by the competition from the mountain mills, and the former are now being confined to Manitoba and the eastern portion of the territories.

—The latest news from the Lake of the Woods is to the effect that the Rainy Lake mill has been obliged to close down, having run out of logs. It is not likely that the mill will be put in operation again for some time, perhaps not this season. A new mill will be established in the Lake of the Woods district by Hughes & Kennedy. They have selected a site on the Rainy River, whence the lumber will be carried by water to the railway at Rat Portage, awaiting shipment. From Calgary comes the news that S. J. Hogg & Co., lumber dealers, have brought suit against the Calgary Lumber Company for breach of contract, claiming damages for $1,200.

—The Minneapolis lumbermen are at present making very vigorous kicking about lumber rates to the Southwest. They point out that lumber is taken from Chicago to Omaha, 500 miles, for 20 cents a hundred; while they are charged to the same place, 380 miles, 22 cents. On the C.P.R. from Keewatin to Winnipeg, 130 miles, the charge is 15½ cents per hundred and for 504 miles 33 cents.

—The Rainy Lake mill at Rat Portage has resumed cutting, but will not be run regularly in all probability. Enough logs had been got together, however, to commence operations. There are about 3,000,000 feet of logs belonging to the estate yet to be cut, but the difficulty is that they are scattered about the lake, the booms in which the logs were confined having been broken away by the spring freshet and the logs carried down to the lake.

—Mr. Peter McLaren, of Perth, Ont., arrived in the city on Saturday. Mr. McLaren was for many years one of the largest lumbermen in the Ottawa Valley carrying on an extensive business on the Upper Mississippi. He became widely known as one of the litigants in the famous suits of Caldwell vs. McLaren and *vice versa*. Some time ago he sold his entire Ontario limits for $900,000. He owns the Mountain mill near Maclead, operated by his brother-in-law, Mr. Lees, and he left Sunday morning to pay a visit to that district. He is accompanied in his trip by Miss McLaren, Miss Lees and John G. Haggart, M.P. for South Lanark. Banff and possibly the Pacific coast will be visited before they return.—*Winnipeg Free Press.*

BRITISH COLUMBIA.

—British Columbia advices state that considerable valuable timber is being destroyed by fire in that Province this season.

—The recent rise in the price of rough lumber at Vancouver, B. C., including building, wharf and street planks, was 25 per cent. The advance on dressed flooring, rustic and double-dressed finishing lumber was from 5 to 10 per cent. Shingles and lath are 10 per cent higher.

—Messrs Buchanan & Ferguson, of Illecillewact, have a large number of men employed in their mill at present getting out material for the construction of snow sheds on the railway. Altogether about three miles of snow sheds will be built in the mountains this season, requiring 7,000,000 feet of timber, and giving employment to 2,000 men.

—It is rumoured that the Hastings Saw Mill at Vancouver will be started to work again in a very short time and that negotiations between the owners and the late lessee have ended in a combination between the two parties, and after a thorough repair has been made the mill will be kept running to its utmost capacity. Sidings are to be run in to connect with the railway.

—The Vancouver *News* says:—There appears to be good grounds for expecting that the next twelve months will witness the development of a large trade from Vancouver in the shipments of manufactured articles such as sashes and doors, and other goods of a like nature. One factory of this kind is already in operation here, and another one is now in course of construction.

—Fred Robinson has just about completed a new saw mill at Beaver, in the Selkirk range of mountains. It is 70x30 feet, and will be run by water power. About all the mills in the mountains are supplied with water power from the many rapid streams with which the region abounds. The water for the new mill mentioned has a fall of 27 feet. The mill will have a capacity of 30,000 feet, to which is added lath, shingle and planing machinery. Mr. Robinson owns another mill at Beaver, which he intends moving to another point further west.

—It is quite common to fell trees in British Columbia, yielding 15,000 feet, board measure, or a log 50 feet long and four feet square at the small end. These immense trees are sawed down, wedges being used to make them fall in the desired direction, and the sawyers become so expert that two of them will in one hour cut down a tree six feet in diameter. When downed, three men with single saws cut it up into lengths from 16 to 40 feet, or longer as required. A saw mill man from Columbia told me that trees six feet through showed an average of 175 rings or annual growths.

—A considerable lumber industry has been established on the line of the C.P. Railway in this province during the past two or three years. These mills have been mainly utilized in preparing material for the construction of the road, such as bridging, and cutting lumber and timber for snow sheds on the railway. There has also been a considerable local demand for lumber for building up the numerous little towns which have sprung into existence of late. Lumber from the mountain mills has been shipped eastward as far as Calgary, at which place yards have been established to handle the product of these mills.

UNITED STATES.

Thirty million feet of logs are hung up in the tributaries of the Tittabawassee.

Muskegon mills are afflicted with a scarcity of men, especially for night crews.

It is said that there are many people at Sault Ste. Marie who have never seen a train of cars.

—A lot of saw mill machinery was lately shipped from Bangor, Maine, to Valparaiso, Chili.

—Canal freights on lumber have touched bottom, viz.: $1.50 to Albany and $2 to New York from Tonawanda.

—Joseph Campain, a Canadian, was drowned while working on Butters & Peters' boom, Ludington, Mich., August 4th.

—The price of stumpage in Michigan is causing to be thrown on the market several tracts of pine which have been held for years.

—Saginaw and Detroit parties are reported to have bought 30,000,000 feet of standing timber on the Point River, Menominee district.

—The Calkins planing mill at Tonawanda, N. Y., disposes of its surplus shavings by pressing them into bales, in which shape it finds a market for them at some eastern point.

—The New York lumbermen embraced in what [illegible] as the New York Lumber Trade Association, are making a heroic endeavor to prevent the jobber from selling to the consumer within a radius of 20 miles from New York.

—A Chicago lumber firm has contracted to furnish a bill of over 9,000,000 feet of lumber for a single building—a grain elevator to be built by Armour. The contract price for the material furnished by the company is over $100,000.

—A raft of logs from Au Train, Lake Superior, reached Bay City recently, in tow of the tugs "Gladiator" and "Mockingbird." It contained 8,000,000 feet, and is said to be the largest raft of pine logs ever towed in the world.

—The aggregate movement of lumber and shingles from Saginaw River ports from the opening of navigation to August 1, was 236,553,627 feet of lumber, 34,993,000 shingles and 13,666,000 lath, a decrease of about 10 per cent. over 1886.

—The Duluth mills are busy at work, and are finding all they can do to keep up with the demand. The five mills running are turning out lumber to their full capacity, and at present have about half finished their prospective cut for the year.

—One of the most prominent timber land buyers in the South says that take the South all through, meaning the yellow pine belt, the timber will average not more than three thousand feet to the acre. He thinks the timber very freely cut in Alabama.

—The receipts of lumber at Tonawanda by lake for the first three months of the season—May, June and July—foot up the handsome total of 229,689,000 feet. With four months yet to hear from, it is very probable that she will reach last year's astounding figures.

—The mills of M. & J. O'Donell, of Jersey City, N. J., situated east of Brigden, Ont., on the St. Clair branch, were ignited by brush fires August 9th, and all the sheds, together with two million feet of matched staves, were burned. The loss is $150,000.

—The burning of John G. Owen saw mill, at Saginaw, Mich., takes 14,000,000 feet out of the sawing capacity of that historic lumber producing section. It is undecided whether the mill will be rebuilt, but the probability is that if reconstructed at all, it will be much smaller than the old one.

—Reports from Boston say there is a scarcity of small light-draught vessels, and rates on lumber from St. John N.B., are well maintained at the advance last reported. At Eastern ports the advance in freight rates is well sustained. From St. John, N. B., the rate is $1 per ton higher than a year ago, and vessels are very scarce.

—During the first half of the last four years, beginning with 1887, the number of buildings erected in New York were repectively 2,923, 2,458, 1,804 and 1,739, and the sums invested were, in round figures, $47,000,000, $38,000,000, $27,000,000 and $29,000,000. This year's investments are 28 per cent. ahead of last year.

—A deal is now being consumated by which Henry C. Jewell, Seymour Hollister, and Senator Sawyer, of Oshkosh, and other local parties, will come into possession of land containing about 75,000,000 feet of pine in the Province of Ont., near Sault Ste. Marie, the purchase price being $150,000, one-half to be paid on delivery of deeds and one-half when the timber is cut, which will be shipped to Quebec as lumber, because the $2 duty operates against marketing it in the United States.

TRADE REVIEW.

TORONTO.

TORONTO, Aug. 19th.

Appearances point to a good trade to be done this fall. Buildings, which have been in an unfinished state since the strike began, are now being hurried to completion, and an increased activity is to be seen in the building line, over the city.

The scarcity of long lengths of bill stuff is greater as the season advances, in fact bill stuff of even short lengths is getting more and more scarce. As a consequence prices are well maintained by the mill men, necessitating an advance in the retail line. The diversity of prices among retailers is something passing the ken of ordinary mortals, yards a few blocks from each other differing from 50c. to $1.00 per thousand, in price, all things apparently equal. It is useless to quote prices but while not altering the usual quotation it is safe to say that these prices may be understood to be not less than 50c. per thousand higher in some, if not the majority, of yards. Shingles XXX are quoted in one yard at $2.75 per thousand, and in another not over three blocks away at $2.60. Whence the difference? That there is an advance in prices all must admit.

The strike has ended, lasting10 weeks. *Cui bon?* Not the strikers, not the employers, except the negative one of not having to pay large amounts in wages. Some must benefit by strikes. Who are they? Possibly the rank speculation of the impecunious dealer in real estate may have received a check. It is to be hoped that such is the case, and that fewer compromised accounts will stare at the lumber dealer from the pay office ledger. The speculative builder is, as a rule, a very unsavory mortal, and should the strike just ended be the means of preventing any more buildings of the class usually erected by the speculative creature, being offered for sale, that if nothing more would be a decided gain to this city— the foundation whereof is sand.

With the remarks above borne in mind the quotations are as follows :—

Mill cull boards &scantling	$10 00	Dressing stocks	14 00@15 00
Shipping cull boards, promiscuous widths	12 00	Picks Am. inspection	30 00
" stocks	13 00	Three uppers, Am. inspection	40 00
Scantling and joist, up to 16 ft	13 00	B. M.	
" " " 18 ft	14 00	1½-in flooring, dressed	25 00@30 00
" " " 20 ft	15 00	1½ " " rough	14 00@15 00
" " " 22 ft	16 00	1½ " " dressed	23 00@25 00
" " " 24 ft	17 00	" " undressed	14 00
" " " 26 ft	18 00	" " dressed	16 00@20 00
" " " 28 ft	19 00	" " undres'd	12 00@14 00
" " " 30 ft	20 00	½Beaded Sheeting, dressed	18 00@20 00
" " " 32 ft	21 00	Clapboarding, dressed	12 50
" " " 34 ft	22 50@22 50	XXX sawn shingles, ℔M	2 75@2 90
" " " 36 ft	24 00	Sawn Lath	2 25
" " " 38 ft	27 00	Red oak	20 00@25 00
" " 40 to 44 ft	30 00	White "	25 00@30 00
Cutting up planks 1½ and thicker dry	25 00@26 00	Basswood, No. 1 & 2	18 00@20 00
" boards "	18 00@20 00	Cherry, No. 1 & 2	50 00@60 00
		Whitcash 1 & 2	25 00@30 00
		Black ash 1 & 2	20 00@25 00

HAMILTON.

The following are the quotations of the yards here :—

Mill cull boards and scantlings	$ 9 00 to $10 00	1½ flooring, rough	16 00 to 18 60
Shipping cull boards, promiscuous widths	10 00 to 12 00	1½ flooring, rough	16 00 to 18 00
Shipping cull stocks	13 00	1½ flooring, dressed face measure	32 00
Scantling and joist up to 6ft	13 00	1¼ flooring dressed face measure	25 00
Scantling and joist up to 18ft	13 50	1 flooring dressed face measnre	23 00
Scantling and joist up to 20ft	14 00	Beed sheeting 1	28 00 to 30 00
Scantling and joist up to 22ft	15 00	Picks A M. Inspection	30 00
Scantling and joist up to 24ft	16 00	Three Uppers A. M. Inspection	40 00
Scantling and joist up to 26ft	17 00	XXX sawn shingles per M	2 60 to 2 70
Scantling and joist up to 28ft	18 00	Sawn Lath	2 25
Scantling and joist up to 30ft	10 00	Red oak	20 00 to 25 00
Cutting up plank 1½ and thicker, dry	20 00 to 25 00	White oak	25 00 to 30 00
Cutting up boards	20 00	Basswood No. 1 and 2	18 00 to 20 00
Dressing stocks	6 00 to 18 00	Cherry No. 1 and 2	50 00 to 60 00
		White Ash No. 1 and 2	25 00 to 30 00
		Black Ash No. 1 and 2	20 00 to 25 00

MONTREAL LUMBER MARKET.

MONTREAL, 25th Aug,

Business in the lumber market in Montreal has slackened off somewhat since our last report ; no great importance however need be attached to this fact, as it is usual at this season of the year. The amount of business done so far this month shows a decrease over that done in the corresponding period of last year, and dealers do not expect much improvement until next month. A large number of contracts are being given out for this fall's work, and contractors will naturally be on the outlook for supplies. Prices still remain firm, bur they may tend towards an increase soon, in view of the bright prospects in the building line. The tendency towards an advance in prices seems general, as the stocks throughout the country are small on account of the cut of logs being lighter than usual. While receipts have been large, especially in spruce and hemlock, shipments have been comparatively light.

The following are the quotations at the yards here :

Pine, 1st quality, ℔ M	$00 00@40 00	B ss, run of log culls out, ℔ M	$18 00@20 00
Pine 2nd " "	00 00@30 00	Oak, ℔ M	40 00@50 00
Pine, shipping culls, ℔ M	14 00@16 00	Walnut ℔ M	60 00 100 00
Pine 4th quality deals ℔ M	10 00@12 00	Cherry, ℔ M	80 00 100 00
Pine, mill culls, ℔ M	8 00@10 00	Butternut, ℔ M	35 00@40 00
Spruce, ℔ M	10 00@13 00	Birch, ℔ M	20 00@25 00
Hemlock, ℔ M	9 00@10 00	Hard Map'e, ℔ M	25 00@30 00
Ash, run of log culls out, ℔ M	20 00@25 00	Lath, ℔ M	1 50@ 0 00
		Shing es, 1st, ℔ M	2 00@ 3 00
		Shing'es, 2nd, ℔ M	2 50@ 0 00

OSWEGO, N.Y.

OSWEGO, N.Y., Aug. 27.—Trade is good for this season of the year. Prices show but little change.

The following are the quotations of the yards here :

Three uppers	$45 00@46 00	No. 2, 1½	$ 1 70
Pickings	36 00@37 00	No. 1, 4-4	1 50
Cutting up, No.1	26 00@27 00	Cedar, 4-4	1 70
Cutting up, No. 2	20 00@22 00	Pickets, 5 4 x 5-1x4, No.1	14 00@15 00
Dressing	19 00@21 00	1x3x4, No 1	18 00@20 00
No. 1 Culls	13 00@14 00	1x3x4, No 2	10 00
No. 2 Culls	11 00@12 00	1st a d 2nd b'ack ash, 1 in	23 00@25 00
Sidings, selected, 1 in	31 00@39 00	5-4 and thicker	24 00@26 00
" 1¼ in	33 00@41 00	Culls	10 00
Mill run, 1x10, 13 to 16 ft	19 00@22 00	Basswood, selected 4-4 and 5-4	20 00@22 00
Dressing and better	25 00@27 00	Strips, selected 4-4 and 5-4	16 00@18 00
1 x 10 shiplng cul s	16 00@17 00	Culls, 4-4 and 5-4	11 00@13 00
Mill run, 1¼ in. strips	15 00@18 00	Birch and maple 1st and 2d	23 00@25 00
Selected	33 00@41 00	M ulding strips, ⅝x1¼ P4; $6 per M. pieces	
1x6 selected for clapboards	32 00@34 00	Door panels, 6 in., 15c p r door s 7 inch do 16c	
Clear butt cedar shingles, 18 in	2 80@ 3 00	Blind slats, ½x2x4, 6c per M. piece	
Shingles, XXX, 18 in pine	3 60@ 4 00		
XXX 18 in Cedar	3 60@ 3 75		
XX 18 in cedar	2 30@ 2 40		
Lath No 1, 1¼	1 80		

NEW YORK CITY.

NEW YORK, August 23rd, 1887.

The back-bone of the torrid wave seems to be broken, and already new life has been instilled into the market. Around the yards the dealers have braced up and evince a disposition to push trade for all it is worth. Taking the market as a whole it probably consumed as much lumber during June and July as last year, but somehow the average dealer expects such succeeding season to yield a distinct increase of business over the previous one, and if it falis to materialize they cry, "dull times."

To all appearances trade this fall will be heavy. In the upper part of the city there is an immense amount of building going on, and the same statement applies to Brooklyn. The situation at Long Island points is encouraging, while the New Jersey trade, although persistently drummed, is still in good shape. At points along the Hudson River, as far as Peekskill, there is a steady demand, and not only the yards but manufacturers are preparing for an active fall demand. A casual glance at many yards would give one an idea that stocks were large and complete, but a careful inventory would show that few are in condition to stand much of a drain without speedy replenishment. Undoubtedly many dealers have more or less stock purchased which is yet to arrive, but it is by no means probable that enough lumber is thus secured to meet the demand likely to arise ; hence purchases will have to be made, and already we hear of dealers and large manufacturers making enquiries, that undoubtedly mean heavy purchases in the near future.

Aside from poplar, the market is not at present overstocked with consignments. Mill men, jobbers and brokers are straining every muscle to secure orders for direct shipment ; failing in that endeavor, we may then expect to see an avalanche of consignments, the result ot which can only prove detrimental to the interests of all concerned, except the final purchaser.

The general disposition of visiting as well as local wholesalers is to sustain values ; but in the face of a restricted consumption, purchases being made only as against future demand, it is an easy task to convert buyers to the ideas of sellers, and that phase of the business will not undergo much change until the demand becomes imperative.

Walnut continues in the same old rut. The market does not present favorable opportunities for disposing of good stock in regular widths.

Poplar is consumed in large quantities, and the new uses to which the wood will be put are almost numberless.

Ash is steadily increasing in sale. Arrivals on the market are small, and all such stock is readily absorbed. The call is principally for boards and 1¼ inch. Thick stock is not in active demand.

Oak, both plain and quartered, is destined to sell in large amounts before the snow flies.

Cherry shows up better as the season progresses. Few dealers have complete stocks, and as the wood is still popular with architects, it must be had. There is a small request for common and culls, due to a revival of small manufacturers. In good stock, the call for plank is better than boards. Strips sell fairly well.

Balusters remain unchanged. The best trade is in walnut. Ash are a close second ; but cherry are slow. Poplar squares have a moderate sale.

Miscellaneous woods are fairly steady. In a general way, we can advise steady shipments of really good stock, as such will always sell ; but off color stock had better remain at the mill.

Logs are quiet, from the fact that good stock is a minus factor.

Mahogany is beginning to show life, and our local dealers are well prepared to meet any emergency.—*N. W. Lumberman.*

The following are the quotations :

SPECIAL CONTRACTS.

Pine, ver, choice and ex. drv	$65 00@70 00	Pine, strip plank, d clear	0 32@00 35
Pine, good	55 00@60 00	Spruce boards dressed	00 25@00 25
Pine, shipping box	21 00@22 50	Spruce, plank, 1½ inch each	00 28@00 30
Pine, common box	18 00@20 00	Spruce, plank 2in each	00 38@00 48
Pine common box	16 00@18 00	Spruce p ank 1½ inch dressed	00 25@00 30
Pine, tally plank 1¼ 10 in	00 44@00 50	Spruce plank 2 inch dressed	00 43@00 45
Pine, tally plank 1½ 2nd quality	00 35@00 40	Spruce wall st ips	00 15@00 18
Pine, tally plank 1¼ cu ls	00 30@00 32	Spruce timber	20 00@22 00
Pine, tally boards dr'd good	00 32@00 35	Hemlock boards each	00 15@00 20
Pine, tally boards dressed common	00 28@00 30	Hemlock joist, 2½x4	00 16@00 18
Pine, strip boards culls	0 18@00 20	Hemlock joist 3x4	00 18@00 20
Pine, strip boards merchtable	00 20@00 22	Hemlock joist 4x6	00 40@00 44
Pine, strip boards clear	00 25@00 26	Ash, good	45 00@53 00
		Oak	50 00@60 00
		Map'e cull	20 00@25 00
		Cargo rates 10 per cent. off.	

EXTRA SELECTIONS.

Maple good	40 00@48 00	Whitewood ⅝ in	35 00@40 00
Chestnut	40 00@50 00	Whitewood ⅝ panel	45 00@50 00
Cyprus, 1, 1½, 2 and 2½ in	35 00@40 00	Shingles ex. shaved pine 18 in	8 00@ 9 50
Black Walnut good to choice	140 00@160 00	Shingles ex. sawed pine 18 in	5 75@ 6 00
Black Walnut ⅞	85 00@100 00	Shingles clear sawed pine 16 in	4 50@ 5 00
Black Walnut selected and seasoned	150 00@175 00	Shingles cypres 24x7	22 00@24 00
Black Walnut count're	00 22@00 28	Shingles cypress 20x6	00 00@14 00
Black Walnut 5x5	150 00@160 00	Yellow pine dressed flooring	30 00@40 00
Black Walnut 6x6	160 00@170 00	Yellow pine girders	25 00@30 00
Black Walnut 7x7	175 00@180 00	Locust posts, 8 ft	00 18@00 20
Black Walnut 8x8	175 00@180 00	do 10ft	00 24@00 25
Cherry wide	100 00@120 00	do 12ft	00 29@00 35
Cherry, ordinary	70 00@80 00	Chestnut posts	00 00@00 00
Whitewood inch	45 00@50 00		

ALBANY.

The quotations are as follows :

Pine, clear, ℔ M	$55 00@60 00	Black walnut, good, ℔ M	$95 00@ 0 00
Pine, fourths	58 00@60 00	Black waluut, ⅝ inch	75 00@ 0 00
Pine, selects	50 00@ 0 00	Black walnut, ¾ inch	90 00@ 0 00
Pine, good box	22 00@23 00	Sea more, 1 inch	26 00@ 0 00
Pine, common box	13 50@16 00	Scaymore, ⅝-inch	21 00@25 00
Pine 10-in. plank, each	00 45@00 47	White wood, 1-inch and thicker	32 00@35 00
Pine, 10-in. plank, culls, each	00 24@00 27	White wood, ⅝-inch	28 00@30 00
Pine boards, 10-in	00 30@00 32	Ash, good, ℔ M	38 00@42 00
Pine, 10in. boards, culls	00 16@00 20	Ash, second quality, ℔ M	25 00@30 00
Pine, 10-in. boards, 16 ft., ℔ M	28 00@32 00	Cherry, good, ℔ M	65 00@80 00
Pine, 12-in. boards, 16ft	28 00@32 00	Cherry, common, ℔ M	25 00@30 00
Pine, 12-in. boards, 13ft	28 00@32 00	Oak, good, ℔ M	40 00@43 00
Pine, 1¼in. siding, select	40 00@43 00	Oak, second quality, ℔ M	20 00@25 00
Pine, 1¼ siding, common	15 00@18 00	Basswood, ℔ M	25 00@30 00
Pine, 1-in. siding, select	40 00@42 00	Hickory, ℔ M	38 00@40 00
Pine, inch siding, common	13 00@15 00	Maple, Canada, ℔ M	25 00@30 00
Spruce, boards, each	00 00@00 17	Maple American, per M	26 00@28 00
Spruce, plank, 1¼-in., each	00 00@00 20	Chestnut, ℔ M	38 00@40 00
Spruce, plank, 2-in., each	00 00@00 30	Shingles, shaved, pine, ℔ M	0 00@ 6 50
Spruce, wall stripe, each	00 00@00 12	shingles 2nd quality	0 00@ 5 00
Hemlock, boards, each	00 00@00 14	" extra, sawed, pine	4 15@ 4 25
Hemlock, joist, 4x6, each	00 00@00 32	shingles clear, sawed	2 50@ 3 00
Hemlock, joist, 2½x4, each	00 00@00 14	" cedar, mixed	0 00@ 2 60
Hemlock, wall stripe, 2x4, each	00 00@00 11	" hemlock	2 00@ 2 00
		Lath, hemlock	0 00@ 2 00
		Lath, spruce,	0 00@ 2 25

DETROIT, MICH.

DETROIT, Aug. 27.—The market here is generally quiet, with prices steady and fairly firm. The lower grades are chiefly called for, and are the firmest items on the list, upper grades being in plentiful supply and a little inclined to weakness. Thick selects, it is said can be got for something less than full list prices, and so can clears, but shop stock, common and cull lumber are stiff, and it is claimed in some cases even higher. Most of the yards here are getting in lumber rapidly, and the present outlook is that they will go into the fall season with a pretty fair stock in pile.

The following are the quotations :

Uppers, 4x4	$45 00	Siding, clear	21 50
5 " 6x4 & 8x4	45 00	A	20 50
3 & 4in	50 00	B	18 50
Selects, 4x4	38 00	C	13 50
5x4, 6x4 & 8x4	40 00	Bill stuff ordinary sizes :	
Shop, 44	22 00	12 to 16 ft	12 00
5x4x 6x4 & 8x4	25 00	18 to 20 ft	12 50
Fine common, 4x4	31 00	22 to 24 ft	13 00
5x4, 6x4 & 8x4	33 50	26 to 28 ft	14 00
Stocks, 1x12 & 1x10, No 1	19 00	30 to 34 ft	16 00
1x12 & 1x10, No. 2	16 00	Ship culls	12 00
1x12 & 1x10, No. 3	13 00	Mill Culls	10 00
Flooring, select c mmon	22 00	Shingles, clear, 18 in	3 75
No, 1 common	18 00	10 in. clear, 18 in Ex	3 00
No. 1 fenci g	16 50	6 in. clear, 18 in	2 75
Ceiling, select common	25 00	6 in stocks clear, Ex	4 00
Ceiling, No. 1 common	22 00	5 in. " "	4 80
No. 1 fencing	20 00	Lath, per M pcs	2 50
Roofing, D. & M	16 00	Add for S. 1 or 2	$1 ℔ M

TONAWANDA.

TONAWANDA, Aug. 27.—The past week has held its own, the record, as far as can be ascertained, being just about the same as that of the seven days previous. Car trade is active, and shipments by canal have been a little in advance.

The table of receipts shows an increase of about 4,000,000 over last week. A brisk demand continues for lumber of all common grades, for shingles and for lath. Norway is very popular with many buyers, and really seems to grow more in favor each year.

Prices unchanged as follows:—

CARGO LOTS—MICHIGAN INSPECTION.

Three uppers	$46 00@47 00	Culls	12 00@13 00
Common	20 00@25 00		

YARD PRICES—CAR LOTS.

3 uppers, inch	$44 00@46 00	Dressing stocks	16 00@20 00
3 uppers, plank	45 00@47 00	Dressing sidings	19 00@22 00
Pickings, inch	38 00@40 00	Common stocks	12 50@13 00
Pickings, 1¼ in. to 1 inch	35 00@52 00	Common sidings	15 00@17 00
Fine Common	30 00@40 00	Common box	12 0 @13 00
Fine Common, thicker	34 00@40 00	Shingles, XXX, 18 in. sawed	@ 4 00
Cutting up	25 00@28 00	Do. clear butts, sawed	2 40@ 2 45
Shelving, 12 in. and up	27 00@30 00	Shingles, XXX 16 in, cut ₱ sq	@ 3 25
Coffin boards, 12 in. and up	16 00@18 00	Do. XX do	@ 2 50
		Lath	1 90

SAGINAW VALLEY,

SAGINAW, MICH., Aug. 28.—The cargo market is by no means active, although sales are made in a quiet way daily. There is a fair request for common grades, and Norway strips are firm at $11. Box stock is quoted active at $10.50, and a number of mills are cutting on contracts made some time ago at the quotation named. There has been some speculation as as to the probable effect of the long draught on the consumption of lumber, but the idea obtains that all the lumber will be sold that lake and rail transportatiou can provide for. Some mill docks are pretty well cleared of stock that is in the market, and this strengthens the situation here. No changes in values have taken place, nor is any likely to take place.

Shingles are active, and good brands sell readily at $2.50 for clear butts and $3.50 for XXX. Mills in the interior are selling stocks at $2.20@2.25, and $3.20@3.35. Really choice country made shingles may bring a slight advance on these figures. Some mill men expect that there will be a scarcity of logs the rest of the season that will restrict production.

The yard lumber trade is fairly active, and dealers report a good inquiry.

Prices are as follows:

CARGO QUOTATIONS.

Shipping culls	$ 9 00@10 00	Under straight Measure	16 00@21 00
Common	15 00@19 00	Shingles, XXX	3 00@ 3 50
3-uppers	36 00@38 00	Shingles clear butts	2 50@ 2 60
Bill stuff	8 50@10 00	White pine lath,	1 40
Norway bill stuff	9 00@10 50		

YARD TRADE.

3 uppers wide and thick	44 00@46 00	Fencing, coarse common	8 00
Do. 1 in	43 00@45 00	Fencing, mill culls	4 00@ 6 00
Selects	35 00@37 00	No. 1 stock 12 in	14 00@15 00
Fine common	30 00@32 00	No. 2 stocks	11 00@12 00
1, 1½, 1¼, 2 in. cut ups	00 00@33 00	Wide common	12 00@15 00
No. 1 base, 7, 8 and 9 in selects	30 00	Piece stuff and timber	9 00@10 00
No. 2 do. (fine common)	32 00	12, 14, 16, 18 ft	9 00@12 00
No. 1 floor strips	40 00	Do. do. 20 ft	12 00
No. 2 "	35 00	Lath	1 40@ 1 75
No. 3 "	29 00	Lath No. 2 (cul)	1 00
Fencing	12 00@15 00	Shingles XXX	3 15@ 3 23
		Clear butts	0 00@ 2 23

DRESSING.

Surfacing	1 00	Making drop siding	2 25
Dressing and matching	2 00	Matching bevel siding and ceiling	3 00

CHICAGO.

The Timberman of the 27th August, referring to the cargo market says: The slight promise of improvement which this market held out a week ago has not been fulfilled. There has been no gain made, and in fact the commission men have not been able to do more than hold it steady. At present there is no prospect of an early reaction of prices.

Piece stuff is a sale and also a purchase at $10 for short lengths, 18 feet and under. About all the average No. 1 stock has moved at this figure, but lots not quite up to the grade, and without any 18 or 20 feet lengths to improve their average, have been sold at $9.87½. It has not been learned that any standard cargo has sold at this, while there have been a good many transactions at $10. A sale was made by a Muskegon manufacturer at $10 and $12.50 for the short and long respectively, dividing on the 20 feet length. Long lengths, however, are not in quite so good demand as they were.

Inch lumber is selling about a $1 a thousand lower than it ruled before the break. It is said to take some careful figuring to get $12 for common stock that sold for $13 and even $13-25 earlier. One cargo of Manistee stock with some of the best lumber taken out, the load running well to strips, however, went at $14.25. The same lumber is said to have sold to Chicago parties at the mill this season at $12.50 which with $2 freight would make it $14.50 here. It is to be said, though, that at that time it could have been sold at $15.25 at the market, so it is evident the buyer made what was then a good trade. The character of the demand for inch lumber has not changed. The better the quality the less anxious the dealers are to take it, and therefore No. 1, choice and selected cargoes are the hardest to place, and relatively the lowest in price.

Shingles are weak, but there seems to have been no further drop in them, although it was rumored that some standards had sold at $1.87½. The report was not confirmed, however, and handlers of the regular brands of standards say they have uniformly refused to name any price below $1.90. Some makes that have sold as high as $2.10 are nominally still held at that, with $2 bid and no sales. Some of the producers have confidence enough in the value of shingles to stand by them, and are refusing to sell at the lower figures which buyers demand, stacking them down at the mills in preference. There is a good deal of inquiry for shingles, and those arriving have sold readily when the price has not been too high. Extra shingles are not so much talked of, and are held fairly firm at quotations. Lath are in demand and as firm as anything on the list in price. Dry lath sell up to $1.70 for white pine, and $1.65 was paid during the week for dry mixed.

Lake freights are nominally unchanged, though there is a rather easier market for vessels, and probably occasional concessions that do not see the light of day.

The following are the ruling quotations at present:—

RECEIPTS FOR WEEK ENDING AUG. 25.

	Lumber.	*Shingles.*
1887	51,493,000	19,850,000
1886	45,199,000	24,370,000

RECEIPTS FROM JAN. 1, TO AUG. 25, INCLUSIVE.

	Lumber.	*Shingles.*
1887	1,085,078,000	344,924,000
1886	937,719,000	469,375,000

STOCK ON HAND AUG. 1, INCLUDING SOUTH CHICAGO.

	1887.	1886.
Lumber	439,024,384	503,725,368
Shingles	310,895,750	405,352,750
Lath	33,585,056	48,668,841
Pickets	875,242	1,791,808
Cedar posts	159,728	189,580

FINISHING LUMBER ROUGH.

1st and 2d clear, 2 inch	$46 00	B select, 2 inch	$32 00
1st and 2d clear, 1¼ and 1½ in	46 00	B select, 1½ in	30 00
1st and 2d clear, 3 inch	48 00	B select, 1 in	30 00
3d clear, 1¼, and 2 inch	43 00	Clear and select 2x4	26 00
3d clear, 1½ inch	43 00	2x6	34 00
A select, 1¼, 1½	38 00	2x8	36 00
A select, 2 inch	40 00	All one length $1 extra.	

STOCK BOARDS.

12 in. A, 12 to 16 ft	$41 00	12 in. 20 ft	22 00
12 in. B	37 00	10 in. A	37 00
12 in. C	32 00	10 in. B	33 00
12 in. D, 12, 14 and 16	22 00	10 in. C	26 00
12 in. D, 18 ft	21 00		

FLOORING—DRESSED AND MATCHED.

A flooring	$33 00	B flooring 4 in	29 00
B flooring	32 00	C flooring 4 in	25 00
C flooring	24 00	Norway clear and A	22 00
Fencing flooring	17 00	B, 4 or 6 in	19 00
Clear and A, 4 in	32 00		

SIDING—TIED.

1st and 2d clear, 12 ft	$21 50	B siding	18 00
1st and 2d clear, 14 and 16 ft	22 00	C	13 50
A	20 50	Fencing	10 00

BEADED CEILING—TIED.

Clear, ⅜x4@6 in	$22 00	C ceiling, ⅜x6 in	14 50
A, ⅜x6 in	21 00	Clear and A, ⅜ or ¾x6	32 00
B, ⅜x6 in	19 00	B, ⅜ or ¾x6 in	29 00

COMMON BOARDS—ROUGH.

Com. boards, 1 in. 18 to 20ft	$13 50	12, 14, 16 and 18 ft	13 50
10, 12 to 16 ft	13 50	1½ and 1½ common	14 00

FENCING—DRY.

No. 1 all lengths	$15 50	4 in. common	13 00
No. 2, 12, 14, 16 & 18ft	13 00	Norway	15 00

TIMBER AND DIMENSION—DRY.

Joist and scantling, 2x4, 12, 14 and 16 ft	$12 25	12, 14 and 16 ft	$13 00
2x6, 2x8 2x10, 12. 14 and 16 ft	12 25	2x4, to 8x8, 18 ft	13 00
Timber, 4x4 to 8x8 inclusive,		2x4, 4x4, 20 ft	14 50

CORRESPONDENCE.

MUSKOKA MILLS, AUG. 12th, 1887.

To the Editor of the Canada Lumberman:

DEAR SIR,—No doubt there are a great number of your readers who do not know where the Muskoka Mills are, and for the benefit of such permit me to inform them. The mills are situated on the North shore of the Georgian Bay, at the mouth of the Muskoka river, about eighteen miles from Penetanguishene. The entire place is owned by the Muskoka Mill and Lumber Co., of Toronto, A. H. Campbell, Esq., being the President. They own at this place three mills, the principal one being the lumber mill which has two large stock gangs, one pony and a large circular, one band mill, two sets of trimmers, double edger and slab table. They use the electric light when the days are short in the fall. The timber mill is used for cutting bill stuff only; they are able to cut a stick 60 feet long and almost any size. The demand for bill stuff at the present time is very great. The shingle mill has a 14 block machine and does good work. The mills cut from 12 to 15 million feet each season. All the lumber is shipped by the Company's own vessels. The following vessels comprise the fleet: Tug "Wales," barge "L. Hotchkiss," barge "Wales," barge "Minnie," schooner "Otonabee." The capacity of the barge "Hotchkiss" is 1,400,000 feet of dry lumber; she is 1,001 tons burthen. The fleet generally goes to Buffalo or Oswego. The firm also own the tug "Tender" which carries supplies to the mills and tows scows to Penetanguishene and Muskoka. The vessels are loaded by the Indians from Christian Island. It takes from three to three-and-a-half days to load the whole fleet. The company generally has from 40 to 50 braves at work for which they pay them $1.50 per day. The Indians are under the directorship of J. M. Bird, who possesses great skill in handling the "noble red men.

The staff of officers is as follows: A. H. Campbell, jr., manager; F. W. Wilcox, salesman; J. M. Bird, shipper; James Wood, foreman; D. J. Carmichael, book-keeper and paymaster.

The mills have been running steady since May and will continue to run till cold weather. The driving on the river is nearly finished. There have been no logs hung up on the Muskoka river. The principal part of the driving was done by the M. M. & S. Co., under the superintendence of Mr. Webster who always does his work well, and is one of the oldest veterans in the business. Several bush fires are raging and if we do not get rain soon great damage will be done.

An accident occurred here last week. Joseph Pozey foolishly undertook to cut a rubber belt in two on one of the lath saws. As soon as the belt touched the saw it jerked his hand on to the saw and he lost two fingers of the right hand. Dr. Campbell was speedily summoned and dressed the wound and the patient is now doing well.

Yours truly,

SAWDUST.

UTTERSON, Ont., Aug. 15.—I have been in receipt of your valuable publication for a month or two now, and as I recognize its value in the object you desire to attain, I do not wish to benefit by it without paying the small price of subscription, therefore please find enclosed one dollar the price named. I am engaged here in the manufacture of a good quality of shingles, the only kind I will put upon the market, and situated in the centre of a large tract of valuable pine limits I am enabled to do so. My capacity is from 45 to 50 thousand per day of eleven hours, and am cutting both 16 and 18 inch shingles for the Canadian and American markets respectively and find a ready sale for all my cut.

I contemplate enlarging my capacity at an early date.

Yours Respectfully,

L. WILSON.

STRATHROY, Aug. 17.—There is not any pine lumber made here. We have to import all such by rail, and the community around are our only customers, and according to their prosperity ability to pay, is the demand for lumber. The very low prices for grain, the equally low prices for cattle, and the very large falling off in the production of chesse owing to the draught, and the consequent falling off of feed for cows, is seriously injuring the pockets of the farmers and their ability to build, thus lessening the demand for lumber.

R. NICHOLSON.

OWEN SOUND, Ont., Aug. 23rd, 1887.

To the Editor of the Canada Lumberman:

DEAR SIR,—Building is lively in this town and houses are going up in every direction. Dry dressing and cutting up lumber are scarce and in good demand. Messrs. Tennant & Co., Willmott & McIntosh and Donogh & Oliver are shipping from here this season. They get their lumber from the north shore of the Georgian Bay, and fetch it here by vessel and then ship on cars to different points west. There is a large quantity of freight coming here intended for upper lake points, which gives abundance of empty cars, while a yard engine is always on hand. Mr. J. R. Taylor, the Agent, is a very obliging official, and is always ready to show a favor to shippers if at all possible. Mr. Wm. Foster is also on hand at all times, with an efficient staff of assistants, to give a vessel good despatch. So taking everything into consideration this is one of the best points on the Georgian Bay to handle lumber.

LUMBERMAN.

FRENCH RIVER MILLS, Aug. 25th, 1887.

Editor Canada Lumberman:

We have little to report from this section, but I may mention that our mill has had a hand saw put in and works well. This is said to be the only hand saw that has gone off without trouble from the word go, in this country. Our mill is averaging 100 M per day. Shipments are going on lively. This place is improving fast, a large number of logs being rafted here this season for the south shore of the Georgian Bay. We have three passenger boats in and out every week, and a large fishing trade is done by an American firm who have a boat regularly running between here and Metegan every week with fish. There are two mills of a combined capacity of 150 M per day.

Yours truly,

ONTARIO LUMBER CO.

THE STEWART FAILURE.

THE adjourned meeting for public examination under this bankruptcy was held in London, Eng., on Tuesday, Aug. 2nd, before Mr. Registrar Linklater. The joint accounts which have now been filed show total liabilities £399,817, of which £160,378 are expected to rank, and assets estimated at £19,-977, leaving a deficiency of £140,400. The following is a summary of the liabilities and assets in New Brunswick, as taken from accounts forwarded by Mr. R. A. Stewart : Liabilities, £39,570 ; assets, £68,766. The separate liabilities of John Stewart are returned at £2,500, and assets £250. The following is taken from the observations of the Official Receiver, which have just been prepared :—The Debtor R. A. Stewart is stated to be in Canada, and the statement of affairs has only been sworn to by the debtor John Stewart, who has attended for examination thereon. He states that he entered into partnership with his brother, R. A. Stewart, in May, 1878, their joint capital then being about £40,000, and that, about two years ago, they entered into an arrangement with R. T. Gibbs to purchase a half share of the Llnir Valley Colliery, Glamorganshire, in respect of which they have sustained a loss of £7,663 16s. 7d. He further states that about eighteen months since his brother arranged to purchase for the firm a half share in a lumbering estate at Ottawa, Canada, a Mr. Grier, being entitled to the other half ; that last autumn the latter's share was sold to the New Brunswick Trading Company (Limited), and the business is now being carried on for the joint interest of the debtors and the aforesaid company under the style of G. A. Grier & Co., and Guy, Bevan & Co., but that the arrangement was never carried out. It appears doubtful, however, whether such business was not in fact the property of the debtors, but the statement of affairs is made out on the supposition that they were independent firms. The above is a summary of the statement of the joint affairs so far as they are disclosed by the London books, together with the Canadian assets and liabilities as shown by the accounts forwarded by R. A. Stewart. The debtor John Stewart attributes the failure partly to loss on the trading during the last three years, but chiefly to the refusal of certain Canadian bankers to honor the firm's cheques against funds in their hands, in consequence of which he states a telegram was published in the newspapers stating that the St. John's house had failed, which had the effect of cutting off their credit, causing the stoppage and transfer to other hands of cargoes coming forward to them, and also stopping negotiations then in progress for certain credits which they usually got in Canada during the winter season. The books of account produced relate only to the London business. They have been well kept and balanced, and balance sheets and profit and loss accounts prepared annually which show that at 30th April, 1883, there was an apparent surplus of £51,271 14s. 9d., namely, £22,237 9s. 2d. to the credit of R. A. Stewart, and £29,034 5s. 7d. to the credit of John Stewart. On 30th April, 1884, there was a surplus of £48,607 5s. 1d ; on 30th April, 1885, a surplus of £41,582 4s. 11d ; and on 30th April, 1886, of £46,-401 13s. 4d. The loss of that surplus, and the contracting of the deficiency of £138,124 now shown on the statement of affairs, is explained in an account furnished by John Stewart, the loss on the trading since 30th April, 1886, being put down at £12,270 13s. 9d., and the estimated loss by doubtful and bad debts at £40,156 4s. 8d. Other losses and liabilities, amounting to £23,909 8s. 1d., include an estimated depreciation of £8,000 in certain ships. The securities held by creditors treated as fully secured are stated to consist of the following :—Cargoes of timber, £6,526 13s. 2d.; liens on debtors' interest in G. A. Grier & Co., £26,041 13s. 4d.; mortgage on debtors' interest in ships and shares of freights, £25,725 ; shares in the New Brunswick Trading Company, Limited, £9,100 ; mortgage on premises in Albany Road, Camberwell, £2,000 ; and sundry bills of exchange, £725. The securities held by creditors treated as partly secured are stated to consist of a mortgage on the property at Bathurst, Canada, estimated at £10,000 ; sundry bills of exchange estimated to be worth £5,125 ; and mortgage on the debtors' interest in the ship *Nellie Wise*, valued at £1,450. The "other liabilities, £29,-022 0s. 8d., expected to rank," are stated to consist of £15,-500, in respect of guarantees, £7,522 0s. 8d., bills accepted for account of George Guy & Co., and £6,000 for liabilities on calls on shares in the North Atlantic Steamship Company, Limited (in liquidation). Mr. H. Reed, Mr. S. Woolf, and Mr. Tanner appeared in the case. It was stated that R. A. Stewart was on his way from Canada, and his arrival in England was shortly expected. It was hoped that he would have arrived before, but he had been detained by illness. A short adjournment was requested in order that the examination of the bankrupts might be proceeded with as soon as possible, Mr. Reed stating that a scheme of arrangement was pending, and that it was, therefore, desirable to avoid delay. His Honour accordingly ordered a further adjournment to Tuesday next.

LATER.

AUG. 9th.—Adjourned meeting for public examination of these debtors, was held before Mr. Registrar Linklater. The debtor, R. A. Stewart, was now present and was examined as follows :—By Mr. Tanner, on behalf of the Official Receiver : I have seen my brother's examination and am prepared to swear to the facts contained therein. The firm had an interest in a company at New Brunswick, which was the joint property of Guy, Bevan & Co., and Messrs. Stewart Brothers, and also had an interest in the North Atlantic Steam Shipping Company, but I do not know the value of the shares. The chief cause of the failure is the loss on trading during the last two years, amounting to £12,270. Since 1876 we lost a surplus of £46,400, and have made the deficiency as stated. A great many liabilities crop up when a firm is about to be wound up—things crop up that would not otherwise do so. A very large portion of the loss is partly owing to the change of policy in the Government of New Brunswick ; and the mileage charge is also increased. The causes of failure will be ully explained in a deficiency account which is about to be filed by Mr. Gore. My firm had an interest in the firm of Guy, Bevan & Co. The memorandum dated the 21st March, 1882, was written by them to me ; Mr. R. G. Guy was a partner. The proposal mentioned in the memorandum was subsequently accepted. The agreement dated 22nd March, 1882, was for the purpose of carrying on the business. The books of the firm will show that the agreements were cancelled. By the Registrar : The agreements were never acted upon ; the money mentioned in the agreement—I refer to the £10,000—was used for another purpose. By Mr. Gore : An agreement of February, 1885, was also entered into, that is the only agreement subsequent to March, 1882. The first time I communicated with Guy, Bevan & Co. was in 1884, suggesting the repudiation of the agreement. The whole thing depended on their books, and their books did not show their position. I communicated with Bevan on the 7th Febuary, 1884, suggesting the repudiation of the agreement. I have now no books at all, they were taken by the trustee. We found no money after 1882 in respect of Guy, Bevan and & Co's. liabilities. We never paid anything for them, they were perfectly solvent. The agreement of March, 1882, was not carried out because their books would not justify it. They wrote a letter, which was concealed from us, in which they said, it would be well to press us to buy them out at any sacrifice ; I never knew their position until I went out in 1885 ; they were engaged in mines, &c. We simply said it was impossible to carry out the first agreement. Mr. Richard Lee Bevan was also a party to the agreement. After the agreement I never received any assets of the firm—that is the agreement of 1882 ; I never received any assets after that date, not did my firm. I am, of course, only speaking to the best of my knowledge. By the Registrar: We never paid them interest, and never thought of taking the transfer. Mr. Richard Guy did not receive £250 a year for assistance. By. Mr. Gore : My firm had a half interest in the firm of A. Grier and Co., of Ottawa, Canada, and we assigned our share and interest in that firm to Mr. Wm. Tucker. The agreement is dated 5th April, 1886. The bill dated 17th December, 1886, is in respect of a ship, of which we were mortgagees in possession ; two of the bills were current at the time of the bankruptcy, I saw in the newspaper a statement in December, 1886, our firm had telegraphed to Holt, the captain of the ship, asking him to sign bills, forms of exchange, but I know nothing of the telegram. I know nothing of the bills dated November 16th, 26th, 24th, 29th, and December 17th. Mr. Donald was in charge there in December, 1886, and he attended to those matters. I went to Boston in November or December, 1886, and left in charge the person who endorsed the bills. Holt's bill does not appear to be accepted by the London house. I do not know anything about the matter. The cashier informed me that only one draft was filled up for the ship's account, at St. John's. My firm had made large disbursements for the Clifton, and the balance sheet shows the company owed us over £4,000. The two bills dated 30th December, 1886 (£836 and £940) I see were drawn by a young gentleman named Dill, who was but a short time in our office. The disbursement was actually made ; it was for freight and disbursements. These bills were negotiated by the Maritime Bank. The bills were for general indebtedness of the ship, and were drawn by the master of it. I know the firm of T. C. Jones & Co., of Liverpool. I can't say whether they accepted bills just before our failure. T. C. Jones & Co. were largely indebted to us. We had balance sheets made out for each year, our books are well kept. I do not think our firm would have become insolvent, as Grier & Co. were realizing us a large profit when the Maritime Bank failed. We had certain cheques dishonoured by the Bank of British North America when there was money at our credit, and that ruined our credit. The business was realizing a profit of from £12,000 to £15,000. Two days after the action of the Bank of British North America we found out that we should fail, and we are now suing the Bank for £100,000 damages, in Canada. The bill of sale given to the People's Bank was upon certain lumber and other property belonging to us—it was a lien on our Bathurst property. When the company in New Brunswick was formed, Richard Guy sent over £25,000 shares. I have not got the shares now. Guy, Bevan & Co. passed them over to the Bank ; they were given as security in order to settle with Bank of Montreal for Guy, Bevan & Co.'s indebtedness. The Maritime Bank have £15,-000 and £10,000 of shares. The examination was then ordered to be concluded.

REBUILDING THE RAFT.

St. John *Telegram* : Quietly, but steadily and surely, the mammoth raft on the Joggins shore is being rebuilt. When the public read of this venture last year, the progress made in the construction of the raft, and subsequent failures to launch it, it was thought that the scheme was impracticable, or could not be successfully carried out in that place, and under the same conditions. Winter set in and operations on the structure ceased ; but this spring the inventor of the method and superintendent of the work began again with a gang of men, not only with the intention of rebuilding the old raft but of making it larger in every way. There can be no doubt that Mr. Robertson has every faith in his invention, and that this feeling is possessed by the owner of the raft is assured, from the fact that they are spending thousands of dollars in the attempt to successfully transport lumber to the United States by this method. When work was begun this spring the prospect was a dreary one. Debris on all hands, a mass of lumber partly under water at high tide, held from the mud and earth by crushed ways and timbers, were not encouraging to a man with a handful of men to work upon. To make matters worse, the rain and melted snow of the preceding fall and winter had penetrated the raft, and every timber was embedded in and bound to its fellow by solid ice. The winter's frosts had taken less time to solidify the mass than the summer sun would to undo its work. A gentleman who has been spending some time near the raft was interviewed by a *Telegraph* reporter yesterday. He reports excellent progress being made upon the raft. When work was begun this spring, he said, it was carried on according to the original plans of Mr. Hugh R. Robertson, the inventor, which, last year were diverged from somewhat. The first thing that was built was the foundation, which was made as solid as possible—so solid, indeed, that there can be no possible sinking of the raft, or any portion of it, in its descent upon the way. Although the raft is longer by 106 feet than last year, the grade of the launching ways will only be ¼ inch to the foot or 1-16 of an inch less than at that time. Part of the additional length of the raft is placed upon its lower and part upon its upper end. One of the first jobs was the erection of a huge crane about 90 feet high and with a boom 90 feet long, capable of lifting 20 tons or more. Of course such a lift as that is rarely if ever taken, the usual load being from 15 to 20 sticks of timber. The crane erected and a powerful engine to hoist, the gang began to empty the old cradle of its logs and to place them on the brows close at hand. This took some time, June being well spent before the cradle was clear. When the logs were all out the rebuilding of the cradle was commenced, and when it was completed it had been improved in many ways from the former structure. July the 4th they began to rebuild the raft, placing 300 sticks a day in the crib at first and afterwards increasing the number to 400 and more. The crane would lift a number of the logs clear of everything and then would be guided upon a car placed upon a track laid through the centre of the raft. The moment they are secure the signal is given the engineer and the car traverses the whole length of the raft, dropping a log here and a log there as the foreman may direct. The surveyor and his assistant follow on keeping track of the unsurveyed lumber and surveying it while another load is being procured. The railroad is ascending and a car would descend the 560 feet in a short time, but the work is pushed along with such celerity that its descent is assisted, and in less than 30 seconds from the time that it stops at the upper end it arrives again at the lower portion of the structure to receive the timber already dangling in the slings ready to be placed upon it. At the present time the raft is nearing completion, and the last of this month or the first of next will probably see it finished. In order that there may be no delay in launching, such as occurred last year, the owners have taken the precaution to import pitch pine timber from Pensacola, Georgia, 12x14 inches, and in sticks fifty feet long which will be used for the ways. The intention is, if the raft goes off well, to use the pine again. A number of the lumbermen in the vicinity of Three Rivers have lumber ready to sell to fill out the raft, but want big prices for it, or they did some time ago. It was thought that they would accept a fair figure rather than lose the sale of it. There are between 20 and 30 men at work, all of which are boarded at the raft—a substantial and comfortable building being erected and a good cook obtained. The roads to the shore, which last year were practically impassable, have been improved greatly, and although the work is being done as quietly as possible, large numbers go to see the huge structure, and, of course, talk about it. The launching will take place sometime during September if the conditions are favorable.

A NEW LABOR-SAVING DEVICE.

Messrs. G. A. Grier & Co., of Ottawa, have introduced a new labor saving feature into their new saw mill at the Chaudiere which is the means of saving thousands of dollars worth of labor every year. Grier & Co's new saw mill is situated north of their old mill and there is no way of getting into it with a horse and cart except through the the old mill. In consequence of this, some device had to be thought of whereby the lumber cut could be removed from the mill after sawing to the platform south of the old mill, or to the sorting sheds where the lumber is sorted.

The method in which this lumber is removed is a simple and ingenious one. The lumber after leaving the saws is wheeled a short distance on rollers, then shoved on to a standing table which is covered with projecting iron spikes attached to three rows of iron cable, which is always revolving. The lumber, when placed on this table, is taken board by board, each board getting caught in order on these projecting spikes, and the entire cut of both mills is taken down underneath the mill on this table. After descending about 20 feet, the lumber passes on to another table of the same description, with three endless iron chains working in the same manner. This second table runs in an upward direction under the old mill where the cut from that mill is received, and the whole continues a distance of about 100 yards to the sorting sheds. Here the table extends for a distance of some 200 feet, and as the lumber moves past, each board being caught on its respective iron spike is taken of by a number of men and placed in that part of the sorting shed to which it belongs.

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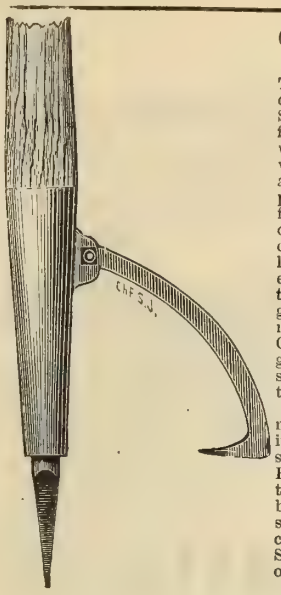

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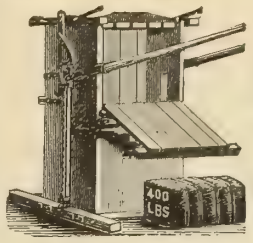

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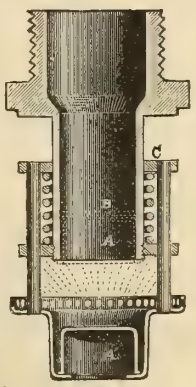

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EUROPEAN NOTES.

The mahogany trade, which the last year or two had assumed very large proportions, has latterly become dull, and business with the cabinet-makers seems, figuratively speaking, at a standstill.

During the past month there has been considerable activity in selling, especially by auctions. The quantity thus disposed of has considerably exceeded the quantity arriving. The market for all kinds has been considerably depressed; but at the last auction there was some improvement in competition and a better tone prevailing.

Amongst the passengers by the Allan liner Parisian, which arrived at Liverpool on Saturday, Aug. 6th, were Mr. J. Burstall (Burstall & Co.), Mr. C. G. Davies (agent at Quebec for Messrs. Bryant, Powis & Bryant, Limited), and Mr. R. A. Stewart (R. A. & J. Stewart). Mr. Beckett (Dobell, Beckett & Co.), who was also a passenger landed at Londonderry.

The (London) Board of Trade returns for July are as a whole satisfactory. There is an increase in the exports for July, and a decrease in imports. Turning to the department of wood goods we find that the import of hewn timber for July was 188,467 loads, as compared with 193,223 for the corresponding month of 1886, a decrease of 4,756 loads. For the seven months ending July 31st, the figures give 893,243 loads for 1887, as compared with 847,913 loads for 1886, an increase of 45,330 loads. Taking sawn timber for July, the increase is still larger, the figures being 636,897 loads, as compared with 621,114 loads for last year, an increase of 15,783 loads. For the seven months ending the 31st ult., the returns give 1,686,814 loads, as compared with 1,521,835 loads for 1386, an increase of 165,079 loads. The increase in sawn timber is mainly with Russia, Norway and Sweden. For July, staves show a larger importation than in the same month of the previous year. Mahogany on the other hand shows a lessened quantity, the importation being 2,573 loads, as compared with 3,876 loads in 1887. For the seven months ending 31st ult., the total import of the latter has been 25,824 loads, as compared with 29,906 loads for 1886, a decrease of 4,071 loads.

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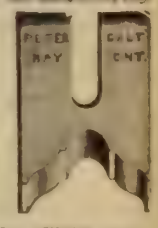

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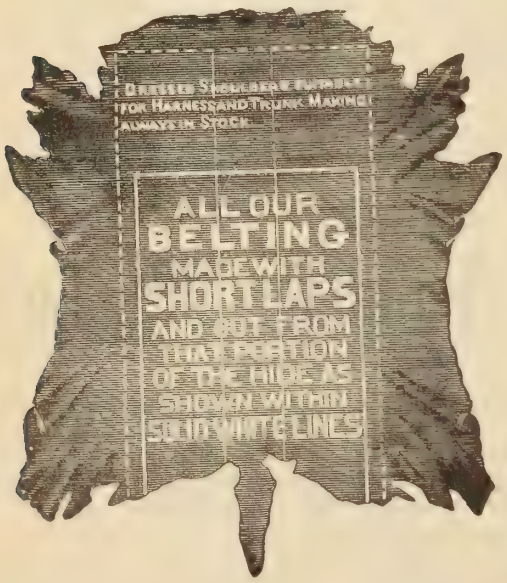

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L. VANKOUGHNET,
Deputy of the Supt. Gen'l. of Indian Affairs.

Department of Indian Affairs,
Ottawa, 2nd June, 1887.

Notice to Contractors.

SAULT SAINTE MARIE CANAL.

CONTRACTORS intending to tender for works of construction of the Canal proposed to be formed on the Canadian side of the Saint Mary's River, are hereby informed that tenders will be received about JANUARY next, and that the most favourable time to examine the locality will be between the the present time and the early part of November next.

When plans, specifications and other documents are prepared due notice will be given, Contractors will then have an opportunity of examining them and be furnished with blank forms of tender, etc

By order,
A. P. BRADLEY,
Secretary.

Department of Railways and Canals,
Ottawa, 24th August, 1887 } 3d48

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Plans and specifications can be seen at the Department of Public Works, Ottawa, and at the office of Mr. J. E. Belcher, Architect, Peterborough, Ont., on and after MONDAY, 22nd instant.

Persons tendering are notified that tenders will not be considered unless made on the printed forms supplied, and signed with their actual signatures.

Each tender must be accompanied by an *accepted* bank cheque made payable to the order of the Honorable the Minister of Public Works, equal to five per cent. of the amount of the tender, which will be forfeited if the party decline to enter into a contract when called upon to do so, or if he fail to complete the work contracted for. If the tender be not accepted the cheques will be returned.

The Department does not bind itself to accept the lowest or any tender.

By order,
A. GOBEIL,
Secretary.

Department of Public Works, Ottawa, August, 9th, 1887. 2d45

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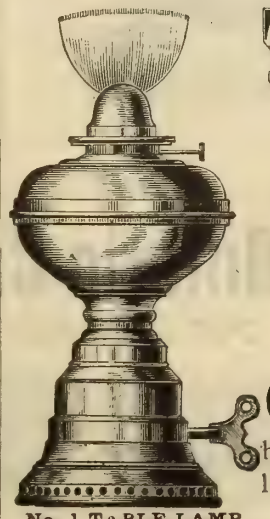

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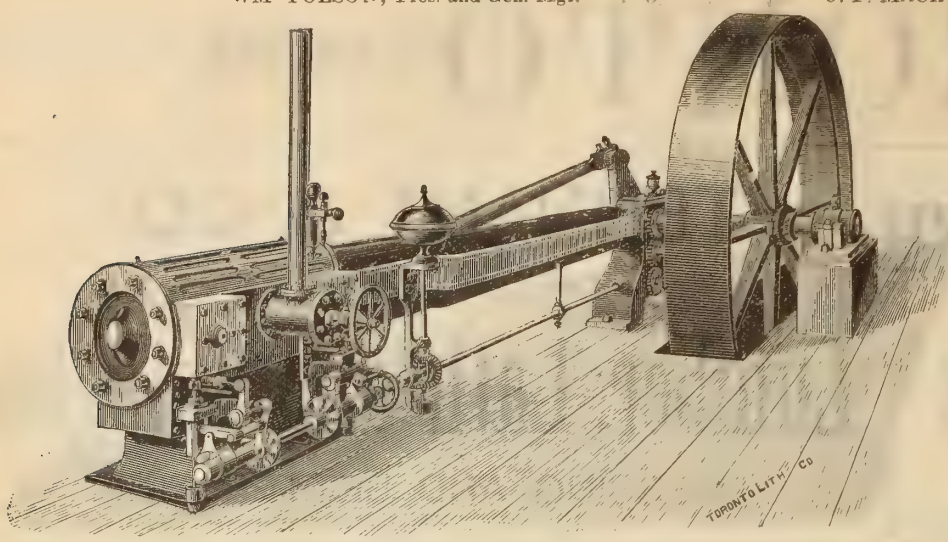

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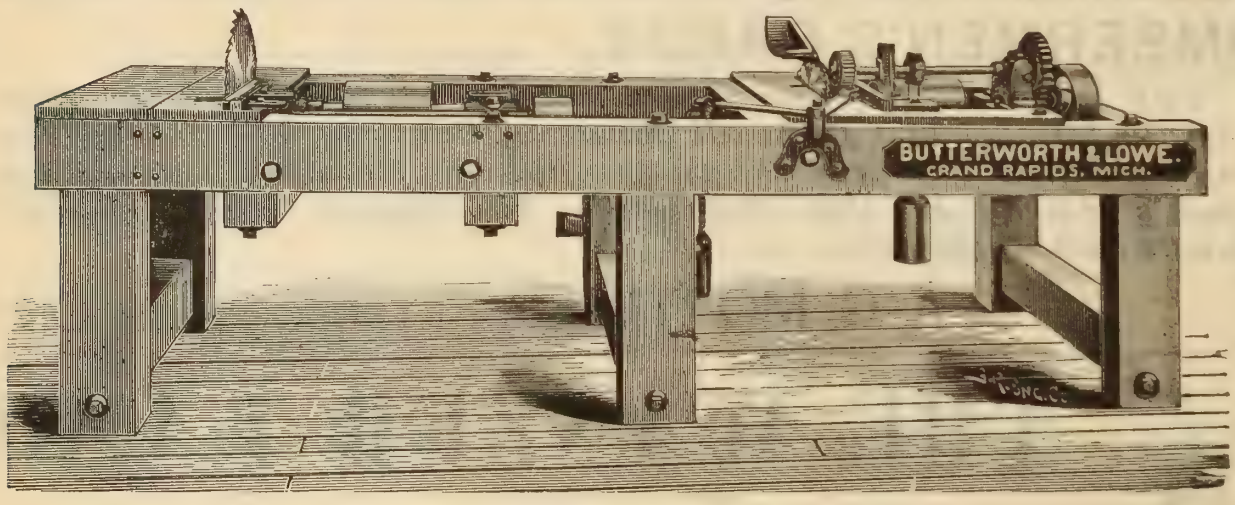

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THE CANADA LUMBERMAN.

VOLUME VII.
NUMBER 10.

PETERBOROUGH, ONT., OCTOBER, 1887.

THE CANADA LUMBERMAN
PUBLISHED MONTHLY BY
ARTHUR G. MORTIMER,
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TERMS OF SUBSCRIPTION:
One Copy one Year, in Advance, - - - - - $1.00
One Copy six months, in Advance, - - - - - 50
Advertising Rates Furnished on Application.

A RUMOR has been current in the Quebec press of the discovery of frauds in regard to cutting timber in that Province, and there is talk of an investigation. So far there is nothing to show whether there is any foundation for these reports or whether they are mere election *canards* or even empty gossip.

IN the September number of the *Century Magazine* there is an article discussing the question, "Shall we plant Native or Foreign Trees." The author, who seems to have studied the subject thoroughly, adduces a number of facts and authorative opinions in support of his contention, that however foreign trees may thrive at first, they fail after a time, either dying or becoming enfeebled and stinted, while native trees from our American forests continue to do well and to flourish.

THE agitation in favor of commercial union with the United States is still proceeding in Canada, and it is a matter in which Canadian lumbermen are naturallly much interested. More light will be thrown upon the probable fate of the movement at the next session of the United States Congress, both by their direct action in regard to the matter, and indirectly by the attitude they assume as to the fishery negotiations with which the tariff question and reciprocity may be connected.

ACCORDING to the *Northwestern Lumberman* the pine owners of the northwestern States are somewhat divided in their views as to the effect of the removal of the duties on Canadian lumber through the adoption of commercial union, the general view seeming to be that they will not be injured, prices not being reduced by the influx. The hostility of the eastern Michigan pine-owners has been mitigated by many of them having invested heavily in Georgian Bay pine. Of course if this view is correct the Canadian lumberman would obtain the benefit of the remission of the duty.

THE actual enforcement of the increase of timber land ground rents from $2 to $5 a square mile in the Province of Quebec was postponed from September 1st to October 1st, some hope being held out that the change would be reconsidered. As yet no indication has been given official of the decision in this matter. Some lumbermen have paid their rent at the higher figure subject to a return of the excess if the old rent is to be maintained. Others have not yet paid but are awaiting developments. The public feeling as to the impolicy and unfairness of the increase has been strengthened by the hesitation of the Quebec administration.

THE Toronto *Globe*, after detailing the destruction caused by bush fires, which it says swallow up far more timber than all our lumbermen put together, besides causing enormous loss to farmers, continues :—

"In most cases fire is the result of carelessness of the settlers themselves, who, regardless of the condition of things, and of the laws governing the setting of fires for clearing land, start fires with a simple regard for their own interests. If each manicipality were granted the power to regulate and even prevent the setting out of fire in times of great heat and drouth, there is little doubt the annual destruction of property would be lessened. To say nothing of the loss to the settlers of the country, the destruction of the domain, year after year, demands the attention of the Legislature at as early a date as possible."

The suggestion is an excellent one, we think. It should not be passed unnoticed.

FROM our English exhanges we learn that the shipments to that country from Canada, for the seven months recorded this year, exceed those of the same period of last year by over 4,000 standards, and 1885 by close upon 29,000 standards. It is true that the year last mentioned was an exceptional one, but with trade so depressed the large and continuous increase within the past two years must prove serious to prices in that ountry. The gossip about white pine being at such a premium is certainly not borne out by the repeated heavy shipments to Great Britain, there being nearly always more of the wood in stock than the market can digest. It is known that in London pine stocks are heavy, yet the shipments were not regulated in any way by the state of the market, the usual spring and summer fleet from Quebec and the lower ports, having gone forward as if the consuming powers of the British trade were inexhaustible.

THE prediction is being realized that Pacific coast lumber would find a market in Eastern cities. It is stated that the Puget Sound mills are getting large orders both for lumber and shingles from cities as far east as Council Bluffs. British Columbia is similiarly situated, and such shipments of lumber as have been made east got a ready sale. The prairies of the Northwest should furnish a large market for lumber, and as they become better settled no doubt they will. Much depends upon rates. The erection of mills in the eastern part of the province may be in a position to supply the demand to better advantage than those located near the coast. Still, if they can supply the rough lumber cheaper, the manufactured articles, such as sash, doors, blinds, etc., ought to be supplied from New Westminster, Vancouver and other contiguous points.

ALTHOUGH spruce is growing in favor in this country, the *Lumber Trades Journal* of London, while admitting that in comparison with its intrinsic value spruce is sold lower than any of the American woods, does not believe there is any probability of its selling for more in the European markets. This is in consequence of a wood of a similar character which is supplied from the forests of Russia and the north of Europe generally. Spruce deals have always been supplied so cheaply to builders, says the *Lumber Trades Journal*, that the real value of the wood has been underestimated, or, perhaps, overlooked, and it has merits that do not appertain to other descriptions of whitewood. It has great strength, and is, nevertheless, easily worked, and for the construction of ordinary dwelling houses, roofs, and light work it is especially adapted. The principal growth of spruce is in Lower Canada, including New Brunswick and Nova Scotia. There is little spruce west of Quebec and of the Ottawa River in Canada.

THE American Forestry Congress held its sixth annual session last month at Springfield, Illinois. A number of papers were read on different subjects connected with the preservation and reproduction of forests. A memorial was prepared to the United States Congress in favor of a bill providing among other things for the appointment of a forestry Commissioner with a salary of $5000, to have the care, management and control of the public forest lands, and four assistant commissioners with salaries of $3000. Mr. Fernow, the corresponding secretary of the Forestry Congress, who is also chief of the forestry division of the United States department of agriculture, urged arguments based on statistics to show that the cost of an organization would be amply repaid by the prevention of fires alone. He would have the government make accurate surveys of wooded lands and withdraw them from settlement, and then employ a trained staff to protect the forests. The Hon. Mr. Joly, of Quebec, was elected one of the vice-presidents.

THE Gilmour-Paradis *embroglio* in its various manifestations is still unsettled, though some progress has been made in various directions. A decision has been given in favor of Father Paradis and the settlers, but Messrs. Gilmour intend to carry the case to the Privy Council, where it is reported that Mr. Mercier will intervene against them on the part of the Province. Mr. Tache, the Deputy Commissioner of Crown Lands, has reported officially that in a conference with Father Paradis and Messrs. Gilmour he proposed that for the timbered lots in dispute those better adapted for cultivation should be substituted, and made a personal, unofficial offer to propose that the Government should assume the costs. Father Paradis declined to consent to this arrangement. The charge of forgeries seems to have fallen through, the cheque endorsed by Father Paradis being produced and being in reality payable to his order. Messrs. Gilmour's counsel has obtained a verdict giving him damages for an attack made upon him in a journal for acting against a priest.

AT a meeting of the creditors of Messrs. R. A. and J. Stewart held in London, recently, the following scheme was proposed :—The bankrupts to undertake to pay the sum of £70,000, the payments to extend over a period of five years, conditional on their (the bankrupts) obtaining their immediate discharge. No security was offered. This would mean about 5/- in the £ unsecured. Some of the creditors agreed to accept the scheme, but considerable opposition prevailed, and many refused to sign. After a certain amount of excitement and discussion the meeting terminated.

A RECENT report by M. Fabre, the agent of the Dominion of Canada at Paris, speaks hopefully of the prospects of closer commercial relations with France, and expatiates on the great advantages which we would derive. He shows that if we were placed, as we are not now, on the footing of "the most favored nation," the duties on goods exported by us to France would be greatly reduced. He especially mentions flooring, boards, battens and other partially manufactured timber as gaining by this reduction so much as to stimulate the trade. For instance, he shows that the duties on flooring deals, planed and grooved planks, &c., would be reduced 25 per cent., on iron hooped casks, empty or in staves, 60 per cent., and on wooden hooped casks removed altogether, and so with other goods. He argues that a considerable demand would be created for such goods. France, he says, would grant us this proposition in return for a reduction of our duty on light wines.

A RETURN to Parliament as to timber licenses in the disputed territory give little hope of the termination of the present conflict of authorities, so annoying to the lumbermen and mill owners of the district, till the litigation in regard to this matter ends in a final judicial decision. The present dispute is as to the rights of the Province or Dominion in view of the extinction of the Inland title. The rival authorities seem more anxious as to the maintenance of their respective claims than for the interests of those who have invested their capital and whose operations are impeded and rendered uncertain by this dispute. Why should there be any difficulty at arriving at a provisional agreement for joint action, with an understanding to abide by the decision when given, the successful party confirming titles and receiving any moneys that have been paid; At present it seems that it is the Dominion that is willing to make such a provisional arrangement so as to relieve those interested from their dubious position, while the Province appears to hesitate, probably from the fear of prejudicing its claim.

Bradstreet's, usually well informed in all trade matters, speaks of the increased export duty on saw logs as having succeeded in its objects of retaliation for the duty on our lumber, and frustrating those Michigan lumbermen, who, while enjoying this protection, bought pine lands in Canada, in order to get a cheap supply of logs. This importation of logs has, it says, now been abandoned, and it mentions a concern, which, owning one billion of Canadian pine, put in twelve million feet of logs last winter, in order to tow them to Tawas and Saginaw, a project which has been abandoned. This is satisfactory and it is still more satisfactory to learn that these logs, sold to a Boston concern, are being sawn at Midland. According to the same authority other lumbermen from the States are withdrawing from these attempts to carry off Canadian logs. *Bradstreet's*, as might be expected, is better informed as to the real position of affairs than many who are laying down the law with more confidence than knowledge. It places the responsibility on the right shoulders by remarking "meanwhile the Canadian government is ready to permit free exportation of logs whenever the United States allows free importation of lumber." And until the United States sees fit to accept our standing offer, the export duty, which seems to work as was intended, will be retained.

A FOREST DEPARTMENT.

The Gilmour-Paradis litigation and a recent return to Parliament concerning timber licenses and Crown land in the formerly disputed territory, both afford evidence of an unsatisfactory state of things in the two chief Provinces of the Dominion from the intermingling of lumbering operations and agricultural settlement. Attention is thus called to a well-known evil. The influx of settlers into timbered lands under license is not in the interest etther of the lumberman, the farmer or the general community.

It is the fruitful source of ill-will, disputes, litigation frauds on the Government and pillaging of the lumbermen by pretended farmers, distruction of property and loss of public revenue. To the lumbermen it is especially injurious for besides minor annoyances it often forces upon him inconvenient and premature cutting of timber on parts of his limit and exposes him to greater risk from fire. It is impossible to prevent the flames sometimes spreading to the forest when settlers are clearing their new land by burning in the immediate vicinity, to say nothing of increased danger trom the presence and possible carelessness of persons over whom the lumberman has no control and who have little personally at sfake if their camp fire while hunting or match when lighting a pipe should cause a devastating conflagration. In such cases the community at large suffers, for there is a distruction of the wealth of the coontry, and a loss of revenue, a share of it being borne by every individual. Nor does the settler gain by the system, for forest land is rarely so well adapted for agriculture as other portions of the public domain which are or should be open for settlement.

To remedy this evil or at least to check it, each Province and the Dominion should establish departments or sub-departments of Woods and Forests. One of these should be. in conjunction with the Crown lands department, to mark out the land to be classed as forest and the area open for settlement. No farm settlers should be allowed on the forest reserves unless they are thrown open after the timber is removed. On the other hand the lumberman might be called upon to conclude his operation upon certain portions of his limit within a reasonable time if it were held expedient to withdraw it from the forest reserve and open it for settlement, In this way the lumberman would be protected from loss and interruption, the agricultural settler would not be lured into wasting his energies on unsuitable land and the public revenue would be protected. The lumbermen would also be benefitted and the public finances improved by the forestry department ezploring, setting aside and making public by maps or otherwise the available forest land not yet appropriated, thps ensuring readier sales and increased competition. It would also facilitate the reservation, if it is not too late, of permanent forests as in the chief countries of Europe.

From every point of view the establishment of properly organized Forest Departments is advisable.

SCHOOLS OF FORESTRY.

A SPECIAL committee of the British Parliament has presented a report on the advisability of a Forest School or other means of rendering the woodlands of the Three Kingdoms more remunerative. After a thorough investigation they recommended that there should be a Board of Forestry with a responsible head reporting to some Department, the members being chosen from the societies, the two Houses of Parliament, owners of extensive woodland, &c. The Board is to manage forest schools in each of the three Kingdoms and instruction in forestry. The committee call attention to the fact that the British imports of timber from abroad amount to no less than £16,000,000 or about $80,000,000 and they hope that good management may cause a portion of this to be supplied from the home forests. The improvement in the public forests would, they say, amply repay the cost of the School, and the private woodlands are far more extensive. Official figures give the area of woodlands in the Three Kingdoms as 2,788,000 acres, England having 1,460,000, Wales 163,000, Scotland 829,000, and Ireland 330,000. They call attention to the fact that nearly every other civilized nation has forest schools and an organized system of instruction in forestry. The want of such a system in Great Britain will be called to the attention of the general public by this report, and it is expected that the Government will act upon its recommendations. It is not the first time that the want of scientific and practical instruction in forestry has been felt, for on the establishment of a forestry department in India the officials had at first, if they do not still have, to acquire the requisite knowledge in the schools of France and Germany. The same was the case when the Australasian and South African colon took steps in this direction, for it is Canada alone that has followed the Mother Country in ignoring this subject.

CORRESPONDENCE invited on all relevant topics.

CANADIAN HARDWOODS FOR CARRIAGE BUILDING.

THE following letter has been addressed by Mr. George Norgate Hooper, F.R.G.S., F.S.S., President of the Institute of British Carriage Manufacturers, and its representative in the Council of the London Chamber of Commerce, to the Canadian Minister of Agriculture at Ottawa :—

SIR,—It may be asked what induced me to make a journey to Canada when I might have enjoyed a quiet holiday with change of scene, a pleasant rest, and far less fatigue in some nearer country. To such a question I would reply, the motives were somewhat mixed. I had this year made the acquaintance of many colonists through the medium of the Colonial and Indian Exhibition, as also through the congresses, conferences, and entertainments of the London Chamber of Commerce ; I had besides promised one of my sons an opportunity of visiting Canada before he settled down in England as a land agent, and so had opened up a sort of sympathy with the colony and its people. I had also received many invitations from Americans to visit them, and in addition, believed that I might acquire some useful knowledge and perhaps be able in some slight degree to assist in promoting a friendly intercourse, and developing trade between the Mother Country and her nearest large colony. Having these views, hopes, and intentions, I left England for a few weeks with a definite plan sketched out, but at the same time one which would have to be enlarged, curtailed, or altered according to circumstances.

Provided with letters of introduction from Sir Charles Tupper, High Commissioner of Canada in London, England, to Professor Saunders, of London, Canada, from Professor Macoun to H. B. Small, Esq., of Ottawa, and from the London Chamber of Commerce to the Secretaries of the Boards of Trade at Toronto, Ottawa, Montreal, Quebec, and Halifax, I was offered opportunities of procuring information under a variety of heads.

My time, however, being limited, others moving about besides myself, some being away, and in one case too distant, and entirely out of reach under the conditions of my journey, and again the time of my calling being in some cases inopportune, my credentials were not of such assistance as under more favorable conditions they might have been.

It did not fall to my lot to see many large trees, such as I had been in the habit of seeing in England, except in the public square of the pretty town of New Haven in the United States. I ought not to say that I was disappointed, as in the States and Canada, for many years past, the settlers and farmers have looked upon timber trees as their natural enemies, and have got rid of them by every means in their power. This wholesale destruction has been carried on to such an extent that good timber trees of commercial value can now only be found in places remote from civilization ; that is to say in the primeval forests of the Dominion. Woods that we now import from our colonies and many foreign countries are really from wild or naturally grown trees that have matured without care or cultivation. Much of the timber I have seen growing in European and Canadian forests is of so inferior a quality as to be fit only for fuel, for which purpose a large proportion of it is grown in various parts of Europe. Some of our British timber trees are partially cultivated and cared for ; nowhere have I seen so good and fine an average of timber and ornamental trees as in England ; they are here planted in parks, hedgerows, and on farms, sometimes singly, sometimes in well defined rows, sometimes in groups ; but English treer are rarels planted in forests.

Planted in this open manner they are fully under the influence of light and sunshine, storm and rain, and have the benefit of plenty of fresh air ; they spread their limbs, they grow slowly, and their wood becomes hard and tough ; on the other hand, trees which grow close together in forests get little sur shine and light on their trunks, little fresh air or the bracing influence of wind, rain and storm.

I contend that with scientific forrestry timber trees can be cultivated and thereby improved in quality just as by scientific and careful cultivation flowers, fruits, vegetables and all garden and farm produce can be improved and rendered more excellent, and therefore more valuable ; the partial success that has followed partial cultivation encourages us to believe, nay, assures us, that, with better methods, better results will be obtained : *Arte natura durabit.*

The establishment of high schools and elementary Schools of Forestry in England and her colonies would render excellent service to landowners, as also to manufacturers requiring sound and fine woods for their work ; nor would the general public fail to reap a benefit, since it would get good articles of British growth and manufacture, thus keeping the money of the country to pay its own rents, rates, and taxes, instead of sending it away to pay those of other people who now profit by our distinct negligence in not turning to good account our manifold resources.

Having carefully read the evidence given before the Committee of the House of Commons in 1885-86, as to the utility of Schools of Forestry, and the advantages of establishing one or more in England or Scotland, I was prepared to believe that great waste must occur, in forests and forest products, without careful and systematic management.

I was quite unprepared, however, to see and hear of wholesale and indiscriminate waste, probably as a sort of necessary sacrifice to the production of wood, but waste for all that. It may possibly be that many trees left to themselves uncared for and uncultivated are fit for nothing but fuel ; and it may be that trees fit only for cooking and warming purposes have their value, but all unnecessary waste should be avoided as a loss to the colony. It would be conceded at once that what may be a small individual loss, when multiplied ten thousand times, becomes a heavy national loss, and it is evident that the Dominion of Canada is at present suffering in this way.

In many parts the presence of trees seems to have been looked upon with as much dread as pestilence or famine, and to be got rid of at any cost, by felling, burning, blasting, rotting, &c. ; and indeed there are districts which bear traces of a sort of hatred of trees, a hatred that leaves behind it scars, sores, and distortions on the face of the fair earth, tolerable to behold under the bright sun, but which must be gloomy, sad, and forbidding in dull, rainy, or foggy weather.

From the experience of Switzerland, Italy, France, Norway, England, and other countries, it has become evident, and has been proved, that trees are the friends of man, and not enemies to be destroyed by any means, fair or foul ; for they moderate and equalize the rainfall, the temperature, the climate, and promote the even and safe flow of rivers. They protect crops and cattle from the keenness and violence of winds and tempests, and they also afford shelter for those necessary birds and animals which keep insect life within due bounds, besides providing shade and shelter to man.

The stately trees of England grown in parks and hedgerows are not only ornamental, but give a character of beauty to the country, to say nothing of the fine quality of the timber contained in their massive trunks to which storm, sunshine, and air have free access ; their very beauty, however, is a snare for their owners unless they happen to be imbued with the mercantile spirit of the age and who are apt to delay, and do delay, felling them while in their prime, especially if there are ladies in the case who venerate the sentimental old English ballad "Woodman, Spare That Tree." This and other reasons combine to cause a large percentage of splendid timber trees to virtually rot as they stand, not ultimately to have no value whatever, not even realizing the cost of felling and removal.

Thus one passes from waste of one kind to a waste of a totally different kind in different countries, and under different conditions.

The evidence shows that by skilled management such as would become general were good forest schools established and maintained—schools which would turn out skilled foresters of various grades-districts, that cannot now be cultivated with profit as farms, might be made to afford good returns under timber, and probably fruit cultivation, with skilled and careful supervision.

If this has been put to the test by the intelligent foresight of the British Government in India, and will probably come to be considered an advantage in England, where timber cultivation has not hitherto been carried on under the best possible conditions for success, how much more would it advantage a country like Canada, that abounds in immense natural forests, which could be rendered highly productive and more profitable under scientific management.

These volumes of evidence to which I have alluded are well worthy of perusal by statesmen, members of Parliament, government officers, timber merchants, and all persons interested in the growth and improvement of trees as well as those using wood in their manufactures ; for it behooves the people of all countries to employ their national products with prudence and discretion, by avoiding waste and promoting their best possible use for the general welfare.

Finding that professor Saunders, to whom was addressed my first letter of introduction, was away from his home in London, Ontario, I rapidly retraced my way sixty miles by railway to Chatham, and visited the hardwood mills of Messrs. Van Allen & Co. there. I found fine samples of straight-grown oak being cut and squared for special purposes ; but there seemed to be a difficulty in disposing of the outside slabs and planks. These, if of good quality, might be sawn up into straight bars, packed in rough crates or cases, and sent to London, England, at a small cost, for use in many trades ; if sorted according to quality, and marked in a manner to be understood both by the seller and buyer, they would readily sell at the carriage auctions, held fortnightly at the Baker Street Carriage Bazaar, London : if they could be sent sound and seasoned so much the better : but in any case the timber should be of good marketable quality, fit for manufacturing pusposes, and well worth cost of

packing and freight. American makers send seasoned spokes to the English market, which command a good price, and I see no reason why this waste timber, which is at present unproductive, should not in a similar manner find its way into our factories.

Various timber yards were visited at London, Chatham, Ottawa, Aylmer, Hull, and New Edinburgh, but at only one (Mr. Cormier), at Aylmer, did I see hard and tough timber suitable for carriage building purposes, although large quantities would have to be very carefully examined, selected, and sorted by competent persons in order to secure woods of fine and suitable quality.

Where elasticity is an essential quality required, the trees should be felled and sent to market in youth or middle age, when such quality is naturally in the wood, for it is with trees as with the human body, strength and elasticity must be sought in youth and middle age, not at full maturity or old age.

In order to economise weight, transport, freight, etc., it is desirable that trees should be converted into planks, as is done by timber merchants in England, who convert it where or very near to where it grows, so as to avoid all needless expenses for handling.

Moreover, after planking, great care should be taken to avoid another cause of loss by the timber splitting; for the harder and better the quality, so much greater is the chance of splitting in seasoning. Unless this is provided for and prevented, there may be a waste and loss of 20 per cent. when fully seasoned. Samples have been sent to Mr. John Dyke, the agent of the Canadian Government in Liverpool, to forward to the Department of Agriculture at Ottawa, showing how the various woods used in England by carriage builders are protected by wood clamps strongly nailed on the ends of all boards and planks 1 in. and upwards in thickness, and glued canvas smeared with strong paint on the thin boards used for panels.

With timber thus prepared and carefully handled in transport there need be little injury or waste, and thus the price can be so arranged as to be advantageous both to seller and buyer; every unnecessary waste should be avoided, and producer and consumer should be brought into close contact for their mutual advantage.

A system of second or artificial seasoning of timber seems to be very general in the United States in addition to the natural system of seasoning wood in the open air, thus—many factories I visited had hot rooms and drying closets and boxes in which seasoned converted wood is kept for several days previous to the framing being finally fastened together. This is probably a wise precaution for objects made of wood and intended to sustain the great heat of the summer in some of the States; but the system is carried a step further in some cases, as for instance at the great factory of the far-famed Pullman Railway Carriage Company, at Pullman, near Chicago. The timber there is exposed to the influence of steam for several days in closed chambers in order to wash out the sap; after a certain time, ascertained by experiment and experience, the steam is turned off and a current of hot air is blown in, the moisture being carried away by exhaust fans. It is contended by scientific experts that the sap of the wood is the part that sooner or later causes decay, containing as it does certain proportions of starch, sugar, or syrup, according to the nature of the tree. Under conditions more or less favorable, this has a tendency to ferment, changes its character and decays, carrying the fibrous portions of the wood with it. If the steam and dry air really carry off the elements of decay and dissolution, and the cells that contained the sap close firmly, decay is deferred or becomes impossible. Be this as it may, the materials and workmanship of these choice and ingenious Pullman cars leave little to be desired, and if this American system has as much merit as its inventors and agents claim for it, a new era for workers in wood may have set in at which many will rejoice. The system has already been introduced into England, and before many years have elapsed we may possibly be able to hear the experience of those who have put it to the test.

At St. Catharines, in Canada, near Niagara, I found a prosperous branch of an American wheel manufacturing company, and it is probable that with care and enterprise its business may be extended, and others established in the colony to meet the demand for good wheels in England.

While receiving the assistance of the Canadian Government through the courtesy of H. B. Small, Esq., of the Department of Agriculture, and his colleagues at Ottawa, I was afforded opportunities of seeing the enterprise, industry, skill, and rapidity of work of some of the chief timber merchants, lumbermen, and their assistants in that hive of timber industry, Ottawa.

At one of the leading mills great balks of pine were neatly hauled up from the river near the Chaudiere Falls, and, almost solely by the water power judiciously applied from the falls, they were placed in position on the great saw benches, the process being watched and directed by a foreman, so situated that his range of vision took in all that was going on; and I was informed after seeing the sawing done, and the great mass of timber moved by machinery, apparently as easily as a skilled nurse turns over a tiny infant, that a great tree can be converted into joists cut to a given thickness and length at an average of eight minutes per log.

Of course there is much refuse from these logs, and men and lads have to be tolerably active in clearing this away in order to prevent impediments and delays.

The larger refuse is rapidly converted into water pails by very ingenious machinery. Such as is not available for pails is used by a neighboring match manufactory, which work up the scraps, except the bark, and what adheres to it, and the sawdust.

But there is a leak, and a very troublesome one, notwithstanding all this use of refuse, much of which finds its way into the river and becomes interlaced, forming shoals, banks, and impediments that must inevitably cause difficulties and troubles hereafter, which will have to be dealt with by the municipality or the Government.

(To be continued.)

As will be noticed by the present issue very important improvements, both typographically and otherwise, are being made in the CANADA LUMBERMAN. The late arrival of our new printing outfit has not only delayed pnblication for some days, but also compelled us to mix the old stock with the new in order to get out in at least a reasonable time. With the November issue, however, we hope to show one of the handsomest publications on the continent, and our friends of the trade and also of the press, will please forgo criticism until the November number reaches them.

WE have received the number for Sept. 17th of the edition for Canada and the United States of the *Illustrated London News*. It is printed from duplicate plates and is in every respect a *fac similie* of the original London edition, so well-known and highly appreciated. The double page illustration of "an episode of the Thames boating season" is excellent, and some of the other principal illustrations are scenes in Burmah, the United States, Lindisfarre (the pilgrimage), New Zealand, Bulgravia, Morocco, etc. Krupp's latest big gun is depicted on its railroad journey towards Italy. Beside the attractive illustrations, the letter press gives in a compact, readable form the current news of Great Britain and the rest of the old world. The office of publication is 237 Porter Buildings, New York.

Do You Do These Things?

Do you take a squirt can in one hand and project a stream of oil as far as you can throw it, in order to save going to the the hole itself?

If you do, don't do it any more; wilful waste is downright robbery.

Do you use an oil can at all for oiling, except on emergency, or for the moment?

If you do, don't do it any more, for much better lubrication can be had by automatic apparatus.

Do you keep an old tin coffee pot full of suet on the steam chest, and every time you have nothing else to do pour a dipperful into the steam chest?

If you do, stop it, and get a sight feed cup, which will save you the trouble of slushing the cylinder and save the cylinder and valve seats, the piston and follower, and all other places touched by the grease.

Do you feed up on the boiler until the water is out of sight in the glass, then shut off the feed, put in a big fire and sit down in a dark corner with a four-horse brier pipe and smoke until you happen to think that maybe the water is low?

If you do these things you should notify the coroner that some day his services will be needed, but it is better to cease the practice mentioned before the coroner comes.

Do you stop leaks about the boiler as fast as they occur, or do you wait until the place sounds like a snake's den before you stir?

If you do, you waste heat, which is the same word as money, only differently spelled. Every jet of hot water leaking from a steam boiler is just so much money thrown away, and if it were your money you would be bankrupt in a short time, in some boiler rooms.

Do you take a screw wrench and yank away at a bolt or nut under steam pressure?

If you do there will come a time, sooner or later, when you will do so once too often, and either kill yourself or some one else. Bolts or nuts are liable to strip or break if tampered with under pressure, and they never tell anyone when they are going to do it beforehand.

Do you attempt to stop pounding in the [illegible] for the crank pin as it comes around and trying to hit the key once in a while?

If you do, ask the strap and neck of the connecting rod how it likes it, when you don't hit the key and do hit the oil cup.

Do you pack the piston by taking it out of the cylinder, laying it on the floor, setting out the rings and then when the piston won't go into the cylinder, try to batter it in with a four-foot stick of cord wood?

If you do, you should reform, and pack the piston in the cylinder where it belongs, being sure to get it central by measuring from the lathe center in the end of the piston rod.

Do you put a new turn of packing on top of the old, hard burned stuff when the piston rod leaks steam?

If you do you will have a scored piston rod and broken gland bolts some day. Packing under heat and pressure gets so hard that it cuts like a file when left in the stuffing box, and as soon as one begins to leak, all the old stuff should be pulled out and new put in its place.—*The Milling Engineer.*

CORRESPONDENCE.

MADAWASKA, N. B., Sep. 20th, 1887

Editor Canada Lumberman.

DEAR SIR,—I can see no excuse for any one who has [illegible] to express failing to use them for the benefit of his fellow lumbermen, particularly when you, Mr. Editor, promise, as you do in the last issue of THE LUMBERMAN, to make them interesting.

I am going to take exception to your remarks regarding Quebec ground rents, for as you know there are two sides to every question, and without opposition there is no investigation, without investigation there is no proof, and without proof authority is no better than so much sawdust or chaff.

Quebec ground rents, like everything else, finds its level. It is a well-known fact that our lumber trade is on the wane, and unless strongly protected our country will soon find itself in a similar, if not a worse, position than are the Americans to-day. Experience proves that the lumbering business of this country is being carried on extravagantly, and in many cases recklessly, which sooner or later will bring this great industry to grief, leaving the country in a much worse state than the operator found it. I contend that it is the duty of all governments to check, before too late, this wholesale slaughter of our forests, regulate the trade and keep it within the limits of Government control. They should encourage economy, and so protect our forest wealth that for generations to come it may be utilized to build up our country, instead of giving it body and bones to syndicates and monopolists by which to augment their exchequer to the detriment of the general public. We never should allow one stick of timber to leave our country before being manufactured, and this granting of a monopoly of our timber lands to speculators is a curse, and an imposition on the people of this country. And the screws are getting tightened up more and more every day. The wholesale slaughter now bing carried on is making our forests a prey to forest fires, and otherwise destroying the wealth which rightly belongs to the public. I hold that if our lumber lands were highly protected, and domestic mills encouraged in the interior of our country, we would then have one hundred settlers where now we don't have one. Towns and cities cannot be built without a country to support them, and if this natural wealth is removed all prospects of a local trade is removed also. The rapid construction of railroads throughout the interior of our country, adds strongly to the argument to encourage domestic mills to feed and support these iron highways. The starting up of such mills would make a boom in settling our lands, in railroad traffic, and in the manufacture of many things now not thought of. What do our cities gain by their lumber speculators cutting and floating our lumber to the large centres to be manufactured? They increase a small army of labor, hard worked, half fed, and increase the rum traffic, with poverty staring the laborer in the face through the winter, and at the year's end no better off.

What may we expect when our lumber boom ceases? It's all very well as long as high prices are maintained to fill the coffers of syndicates and monopolists, but when a stagnation takes place it will prove a serious affair to the tens of thousands of laborers who now depend on the lumber industry to supply them with the substance of life. The sooner therefore that our wise officials draw the attention of farmers and domestic millers of the necessity of building up our neglected local markets the better it will be for all, and the sooner we will learn to say:

"Ye earnest men, no longer shrink
From speaking what you truly think;
Proclaim the truth you find!
And let free search, free speech, free thought,
By blood of ancient worthies bought,
Advance the human mind."

P. O. BYRAM.

EXCHANGE ECHOES.

Mississippi Valley Lumberman.

There is evidently a growing sentiment among the Canadian people in behalf of commercial union with the United States. If the signs are not mistaken a large majority of our Canadian neighbors are in favor of it, although the central government is opposed to it. Recent events in Manitoba touching the construction of a line of road to connect with the Northern Pacific, indicates that the people of that province are ready not only for commercial union but possibly annexation. Such material prosperity as the Canadas now enjoy may be attributed to her proximity to the United States. The country is rich in raw material, not the least of which is lumber. Her own consumptive demands are not as large as her supply of raw material, and naturally she would be glad to market her products unrestrictedly on this side of the line. A movement in behalf of commercial union has been started at some cities on the border line where freer trade would contribute to their prosperity, but we are not of the number who are ready to believe that the time has yet come to batter down the protective bars. When the existing relations are dissolved let it be by annexation absolute and unequivocal. The friends of commercial union may claim that the one is a step to the other, and that the opposition of the central government to commercial union springs from fear of political union, but we can bide our time. The time has not yet come for any other relations than now exist.

Lumber Trade Journal, Chicago.

The anxiety of the people of the Dominion to consumate a reciprocity treaty with the United States, which will give both countries a free exchange of business, cannot be watched too carefully. The initiative oppositionto the measuresi nstituted in 1877 by the National Association of Lumber Dealers, should be followed by all other leading industries. The real object of the Canadians is nicely hidden by the offer to give us, free of duty, such commodities as we stand in need of; but how will it be about such as we do not need? How will it be about iron, on our lake borders when that which has been supplied by the furnaces of Pennsylvania, Ohio, Indiana, Illinois and Upper Michigan, will be no more. Iron could, by the success of this reciprocity measure, be brought from England to Quebec, and given to us as a Canadian product, far below the prices at which it can be manufactured in this lake boundry. Our furnaces and mines might remain idle, to the profit and gratification of our Canadian neighbors. As Mr. Butterworth of Ohio is fixing up some sort of a reciprocity scheme with Canada, we hope to see the National Association of Lumber Dealers, at their next meeting at St. Louis, give voice to their views on this important question.

Northwestern Lumberman.

The observing person who visits the lumber office of any of the great logging and manufacturing concerns this fall will notice a peculiarity that will attract his attention. The universal sign on the door "no men wanted for the woods," is conspicuous for its absence, and the droves of men with red shirts, top boots and slouch hats are not hanging around street corners or lounging in the corridors of mill offices to any perceptible extent. The general activity has picked them up, and given them employment in other branches of industry, and the gruffness of employers bored by applications for work no longer blanches the cheek of the hardy woodsman. He won't apply very numerously, and the hunting will be transferred to the other side of the outfit. And men will have to be given big wages and furnished with an apple pie chromo to induce them to go into the woods this winter. They are a scarce commodity. Wages, I am told, will range from $20 to $30 a month. It's a very enviable position for labor, even if a little tough on the employer. Men hunters are now raking Canada with fine tooth combs for men for the woods, and the chap who wants work will be cheerfully accommodated.

The Timberman, Chicago.

The lumber business on the Saginaw river has become "the creature of circumstances" to a most remarkable degree, more so, perhaps, than at any great lumber manufacturing centre in the country. In the first place it is very largely dependent on territory which is very remote for logs with which to stock the enormous productive capacity of the monster mills, about eighty of which still continue their work of devastation of the forests of Michigan. In fact, a very large proportion of the pine which now comes to Bay City and Saginaw in the log, and is finally cross-piled on the docks ready for shipment, a few years ago would not have been considered tributary to this market. But necessity, besides being the mother of invention, often forces the adaptation of themselves to circumstances, of the American people in the business departments of life; and this is especially remarkable in the history of the lumbering interests in the Saginaw district. * * * The next important circumstance in the connection alluded to is that of the Canadian pine timber supply. Disguise it as he may, the Saginaw river manufacturer has builded his hopes very largely on the source of supply embraced in the Georgian Bay country, and very many of them invested their money there, intending to make enormous drafts on the forests of our Canadian neighbors. But these full-blown blossoms of hope have been nipped in the bud by the chilling blasts eminating from the legislative building at Ottawa, in the imposition of a tax on logs exported from the Dominion to be converted into lumber in Uncle Sam's domain. Among those who made heavy investments in Canadian pine may be mentioned: Folsom & Arnold, the Emery Brothers, Charles H. Bradley, the Eddy Brothers, Eddy, Avery & Eddy, and Green Pack, of Oscoda; of course these are only a few of the prominent ones. The first named firm, Folsom & Arnold, have had an extensive mill in operation a few years in the midst of their Canadian pine, which keeps several vessels constantly employed transporting the lumber.

Northwestern Lumberman.

After the old English and Scotch elements of the lower provinces shall have died out, and the younger element of the Canadian communities shall have become embued and vitalized by American ideas and commercial influence, the feeling against complete national union with the United States will have become nearly or quite extinct. The United States can afford to wait for the national, if it can have the commercial union. Uncle Samuel is not vain-glorious for extending his borders. He is benevolent, and willing to take Canada under his waistcoat, when Canada is willing to thus hover. The United States does not need the commercial union as much as does Canada, but is willing to enter into such a relationship for the sake of comity and good neighborhood. The Michigan lumbermen who have invested money in Canadian timber limits will hail with satisfaction the movement that is gaining some headway towards the establishment of completc reciprocity between the two countries.

FORESTS WANTED.

The last three or four years, which cover the whole history of our North-West settlements, are said to have been exceptionally, and in some parts, disastrously dry. The hope of better things is supposed to lie in tree planting, but for this there is no adequate provision, as little can be expected to be done in this way by settlers who have to bend their utmost powers towards keeping soul and body together. Moreover, no practical person will waste his time nursing forests in a country where they are almost sure to be swept away by fire. The most practical measure for the afforesting of that country would be the most stringent possible regulations with regard to prairie fires. But for these the country would be full of forests in about ten years; the trees which flourish best, cotton wood, poplar, ash-leafed maple, would spring up of themselves and under their shelter or, as a later crop on the same ground, trees of greater usefulness might perhaps be made to grow. In view of the interests of the vast territories under its guardianship should not the National Government conduct a series of sufficiently comprehensive experiments to secure the best results in the way of tree planting? Diligent observation on the spot and scientific enquiry abroad should be brought to bear to discover, as speedily as possible, by what process of sheltering, from what source of supply or by what rotation of species the most valuable timber can be made to grow. As with our fruit and ornamental trees in the east, the foresters of the great west must look largely to Russia for experience.

A NEW DAM ACROSS THE OTTAWA.

The lumbermen of the Chaudiere and Thos. McKay & Co., have began the work of constructing a roller dam 1,500 feet in length across the Ottawa river, from the small island in the river below the Canadian Pacific Railroad Bridge on the south side of the river, and connecting with what is known as the O'Connor dam on the north side of the river.

To those who are acquainted with the appearance of the river about the Chaudiere Falls it will be remembered that on the south side of the river Messrs. Perley & Pattee's saw mills are situated a little above the falls, and that extending for over a thousand feet from the mill directly up the river is a large dam which composes the northern boundary of their mill dam. Outside of this dam from a point near the saw mills there is a lower roller dam, only apparent during low water, which extends to the island about six hundred feet above the falls and about four hundred feet in a direct line from Messrs. Perley & Pattee's mill dam.

On the north side of the river Eddy & Hurdman's mill dam extends from the rear of E. B. Eddy's large saw mill directly up the river about 900 feet, where it is joined to the O'Connor dam, which latter extends three hundred feet in a slanting direction along the upper extremity of the large flat rock on the Hull side of the Falls.

The new dam which it is proposed to build will extend from the upper end of the O'Connor dam to the island in the channel on the south side of the river. The new dam will be 1,500 feet in length and between five and six feet in height and built as a roller dam, that is five feet in height on the side nearest the falls and slanting down to two feet on the upper side so that at high water the water will pass over the dam.

The object of this dam is to raise the water in the river above the Falls to furnish sufficient water to run the mills at the Chaudiere during the period of low water in the river. In addition to giving more water with which to run the mill machinery the new dam will be very useful to the city waterworks in furnishing additional power to drive the additional machinery which is now being put into the pump house extension. The building of this new dam, it will be seen, will complete a chain of dams, which stretch across the Ottawa River just above the falls. The new dam as well as the old dam, from Perley and Pattee's mills to the island will of course only affect the flow of the river during very low water, as during high water the dams will be covered. The work of construction was began to-day and will be pushed through to completion as fast as possible which will probably be before the ice takes on the river. The estimated cost of the work will be between six and eight thousand dollars.—*Journal.*

GALT'S SUBSTANTIAL PROGRESS.

[CONTRIBUTED.]

Below will be found a few of the new buildings erected in Galt during the present year. It was thought by many that considering the great activity in building operations during 1885 and 1886, there would be a decided falling off this year. On the contrary, however, it amounts to the handsome showing of nearly $210,000. Galt is to be congratulated upon the evidences of prosperity and enterprise which the result indicates. The following are some of the most important structures: Jas. Anderson, 2 brick stores and stone livery stable, $5000; Imperial Hotel Co., block of brick stores and bank, $17,000; Town of Galt, stone vegetable market, $1,800; Fitting up new fire hall, $613; Victoria Wheel Co., addition to factory, $500; Goldie & McCulloch, rebuilding of machine shop, $10,000; Victoria Rink Co., opera house and stores, $17,000; Young & Main, 2 brick stores, $4,000; Shurly & Dietrich, Saw Works, stone addition to factory, $1,000; MacGregor, Gourlay & Co., Machine Works, stone carpenter shop, $1,500; A. I. Campbell, stone carpenter shop, $1,650; Geo. Hespeler, addition to saw mill for the purpose of manufacturing sash and doors, etc., $1,000. Until lately the local saw mills supplied the lumber required for building purposes here, but the pine in the vicinity is almost exhausted. On enquiry it was found that the five saw mills which used to supply Galt had cut as follows: D. Clemens, 750,000; W. K. Dryden. 1,000,000; G. Hespeler, 1,000,000; R. Gilholm, 1,500,000; Reid Bros., 750,000. Galt builders and lumber merchants imported as follows: The town, for sidewalks, etc., 150,000 feet; R. Freer, for builders'. supplies, 450,000 feet; A. McAuslan, 500,000 feet; A. I. Campbell, 200,000 feet; W. & F. A. Scott, 550,000 feet; D. Murray, 2,000,000 feet.

A CHANCE FOR "CRANKS."

Some plan must be devised by which cypress logs can be got out of the swamps, rain or no rain. This is a fine opening for inventors, as there is "millions in it," but we want to warn everybody that it is not a problem that can be solved by figures and drawing. One of these pushing, energetic "cranks," who don't value anybody's advice, can do it, provided he is at the same time a first-class mechanical engineer. The field is open and the reward sure and free to all.—*Southern Lumberman.*

NOTES.

Mr. David Griffith, late foreman for Bronson & Weston in the Gatineau district, is dead.

Messrs. S. & J. Armstrong, McKellar, have a large force in the bush near Maganettawan. They expect to get out over 3,000,000 feet during the winter. The logs are for the Georgian Bay Lumber Company.

A discussion is going the rounds of the press as to the relative strength of wet and dry timber. We do not believe there is much to be made out of the discussion. Some kinds of timber are stronger when dry, while other kinds are stronger when wet or green. But most hardwoods when wet will possess more tensile strength than when dry. Timber thoroughly seasoned is more brittle than when green, and with the necessary force will break square off, while the same timber green would stand about the same pressure by bending more or less without breaking. Take a hickory sapling that is almost impossible to break in its green state, although it may bend double, and thoroughly dry it, and you may easily break it almost "square off," as the boys say. So with almost any kind of timber. Drying makes it stiffer, more unyielding, but in very few instances stronger.—*Scientific Press.*

NEWS NOTES.

A. L. Wright's saw mill at Berry Mills, has been burnt.

Lumber shipping by boat is dull in Ottawa at present.

A. Dickinson, Lower Brighton, lumber-dealer, has assigned.

Miller & Crosby, saw millers, of Carleton, Ont., have dissolved.

Messrs. Grier & Co.'s little mill, at Ottawa, is closed down owing to low water.

An incendiary fire destroyed Spence & Williams' planing mill in Cobourg.

The saw mill firm of McBurney, Laycock & Co., of Gravenhurst, is about dissolving partnership.

The demand for shantymen is steadily increasing, and large numbers of men are leaving for the woods every day.

Lumber shippers are agitating for a new siding at Hull station. Considerable shipping is going on there at present.

The Eddy Manufacturing Company's new pulp mill is being roofed, and when completed the building will be fireproof inside and outside.

This season's cut of deals of the Baptist mills at Three Rivers is said to have been purchased by a Quebec firm, Messrs. Dobell, Beckett & Co.

Large quantities of spruce lumber are being shipped by barges to the United States markets, principally from the Montmorency and Chaudiere mills.

The steamer "Levi Young," one of the Upper Ottawa company's towing fleet on the Chats Lake, was burned opposite Braeside during last month. The crew were all saved.

The ocean freight market in Montreal still continues depressed and unsatisfactory, and there is more space offering than can be filled, deals being quoted at $9.40 to $10.

The West Cumberland, British Steamer, from Montreal to Pictou, has put back to Quebec leaky, having been ashore at Coudres Island. She must go into dock for survey and repairs.

The captain of the barque Emily for Bordeaux reported that on the 22nd August, in lat. 40·20 north, and long. 54 west, he passed large quantities of spruce deals drifting broadcast over the ocean.

Grading on the "Soo" between Gagen and Gladstone will be completed Oct. 10th. Track is now being laid east from Gagen, east and west from Hermansville and west from Sault Ste. Marie.

It is understood that the increase of ground rent on timber limits, which was to have come into operation Oct. 1st, in the Province of Quebec, has been indefinitely postponed by the Mercier Government.

Business on the Quebec wharves appears almost at a standstill, there being so very little doing; it is years since the like was seen, and the prospects of a revival for the rest of the season seem very doubtful.

The Ottawa *Citizen* understands that the Messrs. Hurdman, lumber dealers, are likely to double their cut of last year. It is not long since that this firm purchased from the Gilmour estate a fine limit for $186,000.

The employees of the Moodyville Saw Mill Co. support a comfortable reading room supplied with the best leading British and American papers with the leading local ones, also a library of over a thousand volumes.

Owing to the good demand for lumber at River Platte, the Export Lumber Co., of Montreal, have secured every available sailing vessel to load lumber for that place, and there is quite a scarcity of tonnage for other shippers.

The Eau Claire Lumber Company have experienced a great deal of trouble in getting their logs down the Bow river to their mill at Calgary. They have been working away all summer and have only now succeeded in getting the logs down.

North Gower has been completely surrounded by bush fires, many farmers losing valuable tracts of timber and several have had great trouble in saving their buildings. The loss of timber in this township must amount to thousands of dollars.

Prices for lumber in Kingston have been higher this year, especially in coarse lumber, such as hemlock, basswood and ash. Birch lumber is coming into use more each year, and is taking the place of walnut in house finishing at about one-quarter the cost.

The popular king of the Gatineau, Mr. Alonzo Wright, M.P., had a narrow escape from serious if not fatal injuries from fire a few days ago. He was up the Gatineau, and while walking on a piece of ground that had been burned over, fell into a pit of fire burning underneath the surface. Had it not been for the timely assistance of one of his men he would have certainly perished. Fortunately he escaped without any serious injury.

The village of Danby, Que., was almost entirely destroyed, Sept. 20th, by fire communicated by bush fires which have been raging in the neighborhood for some time. Twenty-two houses and the station were entirely consumed and many families rendered homeless.

George Spencer, of Wiarton, was adrift on the Georgian Bay on a raft of lumber for three days and two nights during a big storm last month. As he was without food and being partly submurged in water the greater part of the time, his escape from death is considered a miracle.

Another disastrous fire occurred in Montreal a few days ago, completely destroying the planing mill, saw mill and lumber yard belonging to the Messrs. Craig. The loss will be heavy. This is the second occasion in which the Craig's have been burned out, the last fire taking place in December, 1883.

The outlook for the local lumber trade in Quebec is said to be very favorable, and prices are well maintained. Latest advices from mill owners say that the demand is good, and they are busily engaged sawing and filling orders; large quantities of lumber have changed hands during the past month.

A disastrous fire took place at Calumet recently, McIntyre's saw mill being burned to the ground. The fire was first noticed about ten o'clock and in a few minutes the flames had gained such headway that all efforts were in vain to save the structure. The machinery in the mill was destroyed. Total loss $30,000.

We regret to have to announce the death, on the 10th ult., at his summer residence, Cacouna, after a short illness, of Mr. John Ross, the head of the firms of John Ross & Co., Quebec, Ross Bros., Buckingham, and Ross, Ritchie & Co., Three Rivers, and one of the oldest and most respected merchants in Quebec.

Mr. Henry Lovering, of the Georgian Bay Lumber Co., left recently for the Georgian Bay lumber district, with one hundred and fifty men to work in the shanties of the company during the coming winter. The men were all hired at Ottawa at wages ranging from $19 to $25 per month and board. Mr. Lovering expects to take two or three gangs more from Ottawa before cold weather sets in.

Wooden ship building has not totally ceased in Nova Scotia. as several fine vessels have recently been launched on the Bay of Fundy shore. One ship of 1535 tons, built by Messrs. Frieze & Roy, of Maitland, was launched recently and several more are rapidly approaching completion. The Burrill-Johnson Iron Co., at Yarmouth, is engaged on the large ferry steamer for the Halifax and Dartmouth Steam Ferry Co.

The work of constructing the new roller dam across the Ottawa River at the head of the Chaudiere Falls is progressing favorably and the lumbermen expect that before the ice becomes set upon the river that the dam will be completed. The work is under the supervision of Mr. G. B. Pattee. The lumber being used in the dam is white pine of large dimensions, so as to resist the heavy pressure of water and ice during the spring season.

They are talking of holding a world's fair in Montreal to celebrate the completion of the Canadian Pacific railway, and the *Witness* says: "Certainly Canada has never had a more important national event of a material sort or one more worthy of celebration than the connection of ocean ports three thousand miles apart by a single railway which, while being by far the longest in the world, yields to none in magnificence or perfection of management."

It is estimated that the timber forests of British Columbia cover an area of 100,000 square miles, or about one-fourth of the entire province. Some districts are very heavily timbered especially toward the coast, where it is said some forests will yield 600,000 feet of lumber to the acre. Owing to the mountainous nature of the country the timber is very hard to get at in many parts. As yet the timber resources of the country have been but little drawn upon. Exports from the Province last year were about 30,000,000 feet, and this year will probably exceed 40,000,000.

Everything is exceedingly dull in shipping in Montreal, although small shipments of deals are being sent forward to the United Kingdom, induced, no doubt, by the low rates of freight. Deal freights to United Kingdom ports by steamers are quoted at 37s. 6d. to 40s. by regular liners, and several steamers are offering for October and November loading. It is considered doubtful if deal freights will stiffen much this fall, as there will be several coal boats on the market, unless cotton freights are high enough to offer inducements for them to go south.

Bush fires are creating great devastation in many parts of the country, notably in the Ottawa district, where the damage to timber and farm property is enormous. Similar complaints of destruction come from the neighborhood of Kingston and the Montreal district. Between Montreal and Quebec a dozen vessels are detained by the density of the smoke. Against forest fires, Ontario has taken precautions in the [illegible] stringent law with fire-rangers to enforce [illegible] rangers can cover only a limited space, and [illegible] in a time like the present is not confined to the [illegible] exceptionally combustible has the drought [illegible] that a lighted match thrown in a grass field would [illegible] cases produce a conflagration. In such a condition [illegible] we fear it is quite hopeless altogether to prevent farm and forest fires; but much can be done by careful precaution, and [illegible] thing which it is possible to do in the way of pr[illegible] ought to be left undone.

EUROPEAN NOTES.

Perhaps the healthiest article in the London market at present is spruce, as the stock there is only very moderate, and if any reliance is to be placed in the reports from abroad, the supplies for the remainder of the season will be limited.

None of the brokers' circulars for the month, which have just been issued, speak hopefully of the future of the market; all give expression to a want of confidence, which has, no doubt, been influenced greatly by the late suspensions here and abroad.

The chief point of interest at the present time is the probable extent of the autumn imports, but it is as yet too early to form an opinion on the subject. The rise in freights may be expected to be counterbalanced in some measure by a reduction in free-on-board prices, especially by those who are anxious to move some portion of their somewhat heavy stock before the close of navigation.

Things in the free-on-board business are at a complete standstill on account of the large advance in freights which has been a feature of the autumn trade, and the transactions of the past few weeks have been almost exclusively confined to filling up parcels for ships already chartered. Importers are getting very chary of closing contracts unless they know where to lay their hands on suitable tonnage, and it is almost useless submitting prices unless a ship accompanies the offer.

Burmah, now an English possession, has immense forests of teak, a wood which has become of much reduced supply in India, with increasing cost. It is regarded, in some respects, the most valuable commercially and practically of all oriental woods. It is neither too heavy nor too hard, does not warp or split under exposure to heat or dampness, no matter how prolonged, is handsome, having several varieties of color and grain, and contains an essential oil which keeps it from rotting when wet, acts as a preservative for iron, and repels insects. The wood takes a good polish.

Timber, under date of Oct. 1st, says: "It is somewhat singular that, notwithstanding the sharp rise in freights, and the moderate stocks here, the market, instead of advancing, shows on the contrary a downward tendency. This more particularly applies to mixed and 3rd deals which have had a marked fall, 4ths and 5ths fully maintaining their price. It is of course possible that we may even yet witness some improvement in the demand, but it is not likely. The weekly dock deliveries continue to fall of, and the Millwall docks, which have for some months past shown an increase, are this week behind last year; the deficiency may, however, be balanced by increased deliveries overside. There is one feature, however, at the present time, which compares favorably with last year, and that is the sounder state of the trade. Last autumn, it will be remembered, there was a considerable number of failures which created uneasiness and distrust all round. Recently we have been fairly free from such disturbing influences, and we hope this may continue.

Deliveries of wood goods at Glasgow have of late been going on pretty freely; compared with last year's they show a decided improvement in trade. The quality of deals (Quebec and lower ports) delivered from Yorkhill yards during the last three months shows an increase of fully 25 per cent. over that of the corresponding period of last year. There has, however, been an ample importation of Quebec deals to Clyde this year, and the market is at present well supplied, especially with the lower grades, which have constituted the bulk of the arrivals, the stock of 1st quality being comparatively small. Altogether there has been handled at Glasgow this year, ex steamer from Quebec and Montreal, 247,156 pieces deals and planks, and ex sailing vessels from Quebec, including imports at Greenock and Bowling, there have been 166,702 pieces. The Clide import list of the week ending Sept. 8th includes a cargo of teak timber, arrivals of which have been on a moderate scale this year. It is consigned to Messrs. Thompson & Gray. The small stock of birch timber held here has been slightly augmented by the arrival of 400 logs per *Vera*, from Campbellton, N. S., to Messrs. Singleton, Dunn & Co. Better prices for birch are now ruling than was the case at this time when the stock was considerably larger.

THE NEWS.

ONTARIO.

The lumber firm of Black & McKellar, Strathroy, has been dissolved.

The saw mill belonging to W. K. Dickenson, Manotick, has been burnt.

Adam Wright's saw mill at Newburgh, was totally destroyed by fire recently.

Louis and Charles McDonald's saw and shingle mill at Walton has been destroyed by fire.

A saw mill at Omaha has been burned by the bush fires which have been raging of late near the Mississippi.

Mr. James Mackenzie, lumber merchant of Sarnia, younger brother of Hon. Alex. Mackenzie, died September 15th.

J. R. Booth is extending his piling ground in the vicinity of Rochesterville, and a siding is being put into it from the C. A. Railway.

H. A. Patterson & Co., of Chatham, have imported two million feet of lumber this year, and are expecting another consignment soon from the Georgian Bay.

M. &. J. O'Donnell, of Jersey City, N. J., lost their stave mill at Brighton, Ontario, by fire. The mill, sheds and 2,000 feet of matched staves burned. Loss, $10,000.

The Cheboygan Lumber Co., recently sold their pine in the Spanish River region to Stephen Baldwin, of Detroit, for $100,000. About three years ago they bought them for $60,000.

Lumbermen in the Upper Ottawa are very shorthanded. Mr. Noah Gareau who tried to engage about forty men in Ottawa could only secure three although he offered the highest wages.

The last raft of square timber which will arrive this season from the Upper Ottawa has already run the Chaudiere slides. The timber is the property of W. H. Klock & Co., and was cut in the Temiscamingue district.

Seymour Hollister and Henry Jewell, both Americans, have bought a large tract of pine in Canada, near Sault Ste. Marie, and are making arrangements for extensive logging operations. These gentlemen are thoroughly practical loggers and command abundant capital.

T. L. Nichols, a lumber dealer at Welland, has been absent from his business for some time and the sheriff has seased and is disposing of his stock. He never made any headway although in trade for some years.

A move is being made by the millmen at Norman, a suburb of Rat Portage, to separate the mill districts municipally from the town. The lumbermen claim that they do not receive benefit in return for the amount of taxes paid.

Messrs. R. Hurdman & Co., of Ottawa, have a gang of men employed at present, putting up the frame of their new dimension mill whch will be in running order in about two months. They have also added a pump and first-class fire apparatus.

The Minnesota and Ontario Lumber Company's mill at Norman, Lake of the Woods district, will cut nearly ten million feet of lumber this season. The logs are principally drawn from Minnesota, where the company has extensive timber reserves. The output of Cameron & Kennedy's mill at the same place will be about 6,900,000 feet.

The outlook for lumber at Ottawa is said to be very favorable. There has been a gradual advance in prices during the last couple of months. An outside dealer states that three-inch deals now sell at $7 per thousand, being an increase of one dollar.

Two slides of 1,400 and 800 feet have been constructed by J. R. Booth on the Kabaskong, and another is under construction which will be 480 feet long. Over 350,000 logs have been driven through this season, and it is expected that 100,000 more will be pushed through before the season closes.

The lumbermen at the Chaudiere are apprehensive of a shortage of power for their saw mills, owing to the almost unprecedented lowness of the water in the Ottawa river. It is stated that the water in the mill dams is at present lower than it has been since 1876, when the mills at the Chaudiere were compelled to shut down altogether. If the water in the river falls a foot lower some of the mills will have to cease operations.

M. Brennan & Sons, lumber merchants and saw and planing mill proprietors, are building a new saw mill on their timber limit, Huntsville. This mill will have a capacity of about 75,000 feet per day and will be the largest of their three mills. The mill building is now up and the two 75-horse power boilers are in place. The engine of 150-horse power is also in position. The weight of the steam machinery will not be less than 50,000 pounds.

Mr. Richard Allen, of Bay City, Mich., formerly an old resident of Ottawa, is in the city. Mr. Allen left Ottawa about twelve years ago for Bay City with a few dollars in his pocket. He arrived there when the lumber industry of that State was in its infancy, and by perseverance and business tact became finally the owner of a large saw mill near Bay City. He is now chief partner of one of the wealthiest lumber firms in Bay City. Mr. Allan worked as a corporation laborer in Ottawa for two years.—*Ottawa Journal.*

On Monday morning shortly after midnight the men of the yard department of the Rathbun Company commenced to load the steam barges Resolute and Reliance. The whole work was done under the supervision of M. Marrigan, with G. P. Sills as foreman on the Reliance, and Wm. Wilson and Chas. Dryden on the Resolute. At 6.36 o'clock the same morning, the Reliance was, after two shifts, loaded with 161,286 feet of lumber; and at 7.10 o'clock the Resolute, after three shifts, had received 295,837 feet of lumber. This beats all previous records. The boys are proud of their achievement and are looking forward now to a grand oyster supper as a fitting termination of the season's successful work.—*Deseronto Tribune.*

A dispatch from Kingston, Sept. 16th, says:—There have not been in years as destructive bush fires as those which have burned this year. They are still consuming valuable timber, fences, buildings, and in some instances the crops of the season. At Eganville, in the next county, fires are raging in every direction. On Sunday morning one fire started below the Cascades, and by night had travelled half a mile towards the village. The fires in the vicinity of Golden Lake are probably the largest. The farmers have been night and day battling against the flames. Mr. Brisco was working between two fires when a heavy wind arose spreading the fire so rapidly as to encircle him. He made a bold dash through the burning pinery and lost his hair and whiskers.

Messrs. Hurdman & Co., the extensive lumbermen of the Chaudiere, are making arrangements for the construction of a new circular saw mill, which will utilize a part of their unused water power in the rear of their office, in Ottawa, and next to the works of the Chaudiere Electric Light Co. The new mill will be used entirely for sawing dimension timber and will be 150 feet in length by 74 in breadth. The building will be of wood and will have sufficient capacity to saw all the dimension timber the firm will be able to turn out. The firm have a gang of men engaged in preparing the timbers for the new structure, and the foundation for the new mill was started during the past month.

A very peculiar circumstance occurred in the new saw-mill of Messrs. Grier & Co., Ottawa, a few days ago. While a log was being put through one of the edgers the man in charge heard the saws strike against some hard obstacle, when he immediately had the gang stopped to find out the cause. The log was drawn back, but before anything could be found, it had to be cut into, when it was discovered that near the centre there was embeded an old Indian hatchet, which, judging from the quaint shape and the depth it was buried in the log must have been stuck there quite a number of years ago. The hatchet though very well preserved, must have been left sticking in the tree while very small, as it had completely grown over it, leaving no trace whatever.

An exchange says:—Mr. Johnston, of Rockland, who is taking down a raft of dimension timber to Lachine, has met with unusual bad luck. When the timber reached the Deschenes rapids the water was remarkably low. In running the first few cribs over the rapids three of his men were injured. The biggest part of the raft was tied at the head of the rapids, when the recent gale struck it, scattering it here, there and everywhere. On the raft was a lot of chains, ropes and other goods, which on the timber breaking up went to the bottom of the river and will be a dead loss. Mr. Johnston's loss is put at $1,000. To add to the series of misfortunes, a number of men deserted their employment; on the whole Mr. Johnston's attempts at getting down the timber have met with disasters seldom experienced on the Upper Ottawa.

Ottawa lumbermen generally expect to cut about as much in the woods this year as was cut last year, if nothing interferes with the season's operations. In connection with this it is interesting to note that it is estimated that the busy saws at the Chaudiere will cut this summer about the following figures, which are somewhat less than last year's figures, which were the largest for the previous twenty years: J. R. Booth & Co., 90,000,000 feet; Bronson & Weston 75,000,000 feet; E. B. Eddy & Co. 80,000,000 feet; Perley & Pattee 70,000,000 feet; Hurdman & Co. 50,000,000 feet. The cut of Messrs. Grier & Co. last season was about 16,000,000 feet, but since the building of their new mill which has given them increased facilities it is expected that they will more than double that amount this year. James McLaren will cut over 50,000,000 feet this season.

The shipments of sawn lumber from Ottawa during the first seven months of the present year, as also for the same period of 1886, are as follows:

	Ft. B.M. Lumber.	Ft. B.M. Lumber.
JANUARY	4,416,887	4,587,083
FEBRUARY	7,174,531	5,382,395
MARBH	9,271,289	9,676,682
APRIL	7,778,551	8,115,873
MAY	7,053,136	8,511,481
JUNE	6,328,401	8,782,371
JULY	5,704,831	8,862,361
	Total, 47,727,626	53,918,246

	1886.		1887.	
	M. Lath.	M. Shingles.	M. Lath.	M. Shingles.
JANUARY	1,477	40	385	
FEBRUARY	1,386½	219¼	275	
MARCH	1,039½	105	701½	
APRIL	2,331	10	370	90
MAY	893¼	125	386	
JUNE	936	80		
JULY	886		123	
	8,952¼	576¼	2,240½	90

Increase in Sawn Lumber, 1887, 6,190,620 ft.
Decrease in Lath, 1887, 6,711¾ M.
" Shingles, 1887, 486¼ M.

The foregoing includes shipments to points in Canada, as well as what went to the United States.

QUEBEC.

The sale spoken of in the last issue of the LUMBERMAN, stating that negotiations were going on between McLaughlan Bros., of Arnprior, and the Eddy Manufacturjng Company, of Hull, for the purchase of the mills and limits of the first mentioned firm, has, it is understood, fallen through.

Charette & Co., lumbermen, Coteau St. Louis, have dissolved.

The firm of McArthur Bros., of Quebec, Que., Toronto, Ont., and East Saginaw, Mich., lumber and timber manufacturers and dealers, has been changed to "The McArthur Bros. Co., (Ltd.)." No further change has taken place.

D. LeClaire's saw and planing mill, Montreal, and adjoining lumber piles, burned August 29. Loss, $15,000; insurance, only $2000.

The following is clipped from an American lumber exchange and we re-produce it for what it is worth, not knowing whether it is true or false: "It is announced in official circles that extensive frauds, committed by wealthy and well-known lumbermen, on the government are coming to light in the province of Quebec. Timber has been cut on limits for which patents were held and the certificates of settlers as to the number of trees cut has been falsified so as to defraud the government."

MANITOBA AND THE NORTHWEST.

D. Cameron, saw miller, of Minnedosa, has sold out.

Prince Bros. mill at Battleford has closed down temporarily owing to shortage of logs.

John A. Christie, of Brandon, has sold out his large mill and business to Durham & Mann.

The mills of the Rat Portage district, six in all, have all been running this season with the exception of one.

Fox's mill at Illecillewalt, west of Donald, barely escaped destruction from fire lately, caused by a spark from a railway engine.

A good deal of spruce lumber has been cut on Lake Winnipeg this season and importations of furnishing material have been made from British Columbia.

Joseph Davis, manager of the Manitoba Lumber and Fuel company, has returned from a trip through the timber districts of British Columbia.

The Canadian Pacific railway mill recently burned at Donald, near the rockies, is being replaced. The machinery from the mill in the district at Six Mile Creek will be utilized for the purpose.

Charles Balfe, a pine cruiser recently connected with Capt. Bent's party of Manitoba surveyors running the Brainerd & Northwestern line between Leech lake and the Mississippi river, is supposed to have been drowned in Leech lake.

In the Riding mountains, a timber country of considerable extent in northern Manitoba, preparations are being made for a large cut this winter, the extension of the Northwestern railway into the district having started up a number of new towns, which are callin for a supply of lumber.

Dick & Banning have, it is said, been about the most fortunate of the Lake of the Woods mill men this season in the matter of floating their logs. Logs on the Big American were the most unfortunate, and here was the principal cut of the Minnesota & Ontario company. A large number of logs are hung up on this stream, though there is still some hope of getting them afloat.

Favorable advices come from the Lake of the Woods district regarding the result of the season's operations in that quarter. The mills from this vicinity continue to furnish the main supply of lumber for the province of Manitoba, as well as the western country some distance beyond.

Mitchell & Bucknell, who have a mill on the Assiniboine river at Millbroke, Man., have closed down for the season, after a successful summer's operation. Whimster & Kyle, Strathclair, have also closed down for the season. They report having had a good local trade.

From the western territorial country comes the news that Peter McLaren will build a saw mill at Macleod, Alberta district. The machinery for the mill has been shipped. The mill will be supplied with logs from the foothills of the mountains. The Alberta Lumber company will have their mill at Deer river completed early in November.

During the early part of September trade was decidedly dull in Winnipeg lumber circles, owing principally to the farmers being very busy and a scarcity of help. An improvement is now confidently expected, however, as those contemplating building improvements will of necessity have to hurry up before winter sets in. The crops have been harvested in good condition, and the yield is fully up to expectations. In the city building operations are quiet, largely owing to the unsettled nature of things in connection with the railway situation.

A saw mill is to be established in the Red Deer country, about 100 miles north of Calgary. The Rocky Mountains lie to the west, and along the base of the mountains extends a timber country which is said to cover a considerable area. The mill referred to is being built by the Alberta Lumber company. The machinery is being hauled from Calgary, and the mill will have a capacity of 50,000 feet per day. It will be completed this fall and ready to commence cutting in the spring. The Alberta and Athabasca railway is projected to run through the district.

The nature of the Canadian Pacific railway monopoly in Manitoba and the Northwest Territories will be seen from a reference to freight rates on lumber. Van Horne, vice president, and general manager, promised the Winnipeg board of trade as early as 1882, that lumber, fuel and wheat would be carried at very low rates. How he kept his word will be observed by the following: For green lumber shipped from the mills at Rat Portage to Winnipeg, a distance of 133 miles, the freight rate is $4.65 per M; for dry lumber the rate for the same distance is 15½ cents per 100 pounds. This rate is over four times greater than is charged by the railroad company on its lines in Eastern Canada, where it has not a monopoly. The rates from the mills in the mountains on lumber shipped eastward to Calgary and other points are even higher than the figures given above.

The Keewatin Lumber Company has kept its mill at Keewatin busy all the season, and about 8,000,000 feet will be the output. About that quantity of lumber is now in the yard. About 12,000,000 feet of logs were taken out last winter by this company on the American river, about one-third of which are hung up. This company is prospering under the management of Messrs. Mather. Dick & Banning's mill, also at Keewatin, will run steadily during the season, and cut six or seven million feet. A good deal of trouble was experienced in getting out logs, but nearly all of the cut amounting to about nine million feet, some of which had been hung up the previous year, was finally got out. The Keewatin mills are run by water power from the falls of Winnipeg river, and therein differ from the other mills of the Rat Portage district which are run by steam.

A correspondent writing from Winnipeg to the Mississippi Valley *Lumberman* says:—The remarks made in a former letter regarding the state of prices here, and the necessity existing for the establishment of a regular schedule to guide dealers in disposing of their product, seem to be already having some effect. It has been whispered around within the past few days that a movement is to be undertaken for the formation of a lumberman's association for the Canadian northwest. The difficulty heretofore has been to get the first steps taken. Lumbermen recognized the necessity for such an association, but no one wished to make the first move in the matter, owing to a feeling of jealousy or distrust which, rightly or wrongly, was supposed to exist among mill men and dealers. If one firm proposed the formation of an association it was feared others might hold back, and so the matter stood. It is now understood that to obviate this difficulty an outside and entirely disinterested party will issue a call to lumbermen to hold a meeting, for the purpose of fixing prices and forming an association. In this way no individual firm will be taking the lead or assuming a position of undue prominence. There is every reason to believe that the issue will result successfully. All the lumbermen are unanimous as to the benefits which would follow the formation of an association. Moreover, it is recognized that the present is a most opportune time for making a start. Circumstances have not been more favorable for four years than they now are for such a move. While stocks were large, business depressed, and every one anxious to reduce their stocks, even at times at a loss, it would have been almost an impossibility to have succeeded in forming an association, and still more difficult to have kept it together and sustained list prices after it had been formed. Now, however, circumstances are quite different. Stocks of lumber are light, logs not too plentiful and the demand good. Mill men can afford to be reasonably independent and demand fair profits. Under these conditions there is no reason why legitimate profits should not be made. Still, so long as there is distrust among manufacturers and dealers, it will be difficult to keep uniform prices and at a fair figure. The only way to accomplish this is to form an association and arrange prices at intervals, as the exigencies of the industry may demand. The proposed association will include the Lake of the Woods mills and eastward probably to Port Arthur, Lake Superior; also the Lake Winnipeg district.

NEW BRUNSWICK.

Dimension deals remain at about $8.50 per mille at Halifax, and this is not a profitable figure for the manufacturer.

Freights from St. John to transatlantic ports are quoted at about 41s. 3d. to Liverpool, 42s. 6d. W. C. England, 43s. to Dublin or Belfast, 65 francs to Marseilles.

Flemming & Son, St. John, N. B., have the contract for erecting 16,000 feet of snow sheds at St. Fabien, Que., on the Intercolonial railway. There will be a large lumber requirement for the roof and sides.

The amount of wood goods forwarded from the port of St. John up to date has, contrary to expectations, exceeded the exportation for the same period of last year. The timber shipment (that of the square timber and pine stock) has this year been handled entirely by Mr. Mackay, and, indeed, he and Mr. Gibson have handled the great bulk of the shipments to date.

The condition of the New York lumber market is said to have reacted favorably upon the the business of St. John, N.B., which ships largely to New York. The coastwise trade has been more flourishing from St. John than for years, lumber constituting the bulk, though at this season there is gererally a stagnation. The activity of building in the eartern part of the United States has stimulated the demand for Canadian timber at good prices. Among mill men and shippers renewed energy has been induced, and now the market is termed a healthy and springy one, while the freight carriers, as before mentioned, have profited materially by the general activity.

A St. John, N. B., journal represents the present condition of the lumber trade at that market as somewhat peculiar. The northern manufacturers seemed to think that conditions were ripe for an advance, and sent out notices proclaiming a raise of $1 in spruce, which buyers, encouraged by large water receipts, declined to meet, some even claiming to have received overtures involving a 50-cent cut on old prices, instead of any advance being asked. The effect of the demoralized bull movement, however, was to make cargo prices firmer, while foggy weather advance water rates 50 cents and $1. The increased demand for carriers because of heavier water movement made vessel men more autocratic, for the craft were taken as soon as they put in an appearance, the cargo demand for lumber being active. On the whole the attempted advance is viewed in its effect in about the same light as the last alleged advances in Chicago—it has resulted in firmness of old prices, but little or no actual advance. Spruce quotations are therefore unchanged. There was said to be a very remarkable request for shingles, but heavy receipts kept up the supply so as to head off an advance. The demand for clapboards has improved, but the supply was full and prices easy.

BRITISH COLUMBIA.

It is said that Puget Sound lumber is now being shipped from Vancouver, via the Canadian Pacific, to Albany, N. Y.

Shingles in British Columbia are worth $2.50 a thousand, and first-class cedar lumber $40 f. o. b. Boat lumber cut to dimension sizes is worth $45. Common lumber sells at $12.50 a thousand. The demand, both local and eastward along the Canadian Pacific, is good.

George W. Hotchkiss, es-secretary of the Chicago Lumberman's Exchange, and now editor of the *Lumber Trade Journal*, announces that he has consented to take charge of a party of lumbermen to the far west, over the Canadian Pacific railroad. The excursionists will make a short stop at St. Paul, one day at Winnipeg, one at Baniff, one in the glaciers of the Rockies, one at Vancouver, one at Victoria, one at Seattle and one at Westminster. Interesting objects, such as the hot springs in the Canadian national park, lumber camps, saw mills, etc., will be visited. Several lumbermen with their wives have announced their intention of going.

UNITED STATES.

Manistee has shipped 200,122,000 feet of l[illegible]

Men for woods work are reported very scarce [illegible] saw valley, Mich.

Chicago is said to double her consumption of mahogany about every two months.

Australian forests are said to be practically dest[illegible] and woods of that nature.

The South is coming to the front with cypress, gum, [illegible] wood and yellow pine lumber.

The Cheboygan Lumber Company, Cheboygan, Mich., will cut pine this winter from its Canadian lands.

The demand for shingles in the Saginaw market is goo[illegible] present and the prices fully 60 cents better than last year

Alpena, Mich., had shipped to Sep. 1 an aggregate of 104,303,000 feet of lumber, 4,960,000 shingles, 151,900 railroad ties and 65,400 cedar posts.

Jewell & Hollister, of Oshkosh, Wis., will put in 15,000,000 or 20,000,000 feet on the Canadian tract of 125,000,000 feet, near Sault Ste. Marie, recently purchased.

CANADIAN investors have recently purchased, through Lamb Bros., of 1 Broadway, New York, a tract of 134,000 acres of North Carolina Pine lands.

The shipment from Saginaw River to Sep. 1 aggregated 323,888,627 feet of lumber and 52,365,000 shingles, which is a decrease of 57,000,000 feet of lumber and 16,000,000 shingles from shipments to same date in 1886.

It is expected that about the usual amount of logs will be put in the Menominee, in Michigan, the coming winter, which, with 150,000,000 likely to be left over, would make a total of about 650,000,000 feet for next season's sawing.

Bangor, Maine, has a new enterprise. Every mill on the river wastes great quantities of saw-dust. It has not been available for shipping because of its bulk. Now a hydraulic press has been invented to press the saw-dust and reduce its bulk some 75 per cent., and in this shape it can be easily handled.

At Minneapolis, Minn., a conflagration broke out September 10, in the lumber manufacturing quarters, which resulted in the total destruction of five saw mills, which are as follows, with the estimated losses: Merriman, Barrows & Co., loss $50,000; insurance, $31,000. McMullen & Co., loss, $35,000; insurance, $25,000. Eastman, Barry & Co., loss, $40,000; insurance, $30,000. C. A. Smith & Co., loss $27,000; insurance, $17,000. W. W. Eastman, owner of the mill operated by Cole & Weeks, loss, $50,000; insurance, $21,500.

The Export Lumber Company, of New York, which does good service to those interested in lumber matters by issuing in sheet form the export of white pine lumber from the port of New York, has just sent out a statement covering exports up to July 1. This report shows that from January 1 to July 1, 32,507,000 feet were exported. Comparisons are as follows: From January 1 to July 1, 1886, 22,794,000 feet; 1885, 32,947,000; 1884, 34,873,000; 1883, 30,559,000; 1882, 29,223,000; 1881, 33,703,000; 1880, 26,999,000; 1879, 27,919,000; 1878, 20,200,000; 1877, 26,976,000.

A correspondent of the *Northwestern Lumberman* writes:—The Hon. R. A. Loveland, of East Saginaw, has gone to Midland, Ont., on business connected with the holdings of the Emery Lumber Company, of which he is a member. This company own 100,000,000 feet of timber on the line of the Canada Pacific road in the Georgian Bay district, and intended to bring it all to Tawas and Saginaw to be manufactured, but the doubling up of the export duty on logs knocked it out and the stock put in last winter, 12,000,000 feet, was sold to the Shepard & Morse Lumber Company and is being manufactured at Midland. I understand the company will lumber this winter on the tract, and in the event of commercial union between Canada and the United States, the logs will be rafted to this side, otherwise they will be manufactured in Canada.

The papers in and about Muskegan, Mich., are calling on the State game and fish wardens to stop this outrageous trespass on the rights of the public. The same thing is being done at several points in Wisconsin, where millers are filling up lakes with everything that is unsaleable. All lumbermen are not vandals and there ought to be some organized sentiment among them that will stop such things. The Raquette, Grau and other streams running out of the Adirondacks, into the St. Lawrence, have been rendered malarious by decaying sawdust and lumber refuse. So, too, the back water of dams built to give floatage, often kills the trees over a great area, and transforms beautiful silver paradises into hideous fever-breeding wastes. This has occurred in several places in the Adirondacks.

TRADE REVIEW.

Toronto, Ont.

TORONTO, Oct. 7th, 1887.

The cargo trade in this city is at present in a favorable condition, but the one great difficulty now is the car famine on the Grand Trunk railway. The car supply has literally broken down, and the company's officials seem to be unable to do anything to supply the wants of the trade. It is getting to be a serious matter for those mills depending on the Grand Trunk railway for shipping facilities. It might also be truthfully said that from such points as Midland, Waubaushene and Coboconk scarcely a car has been shipped in three weeks. There is plenty of lumber to be shipped if cars can be had to carry it.

Prices are firm and steady. The local trade is improving as the fall contracts are now being let. The American demand for good lumber has fallen off and sales have been slow, although wholesale dealers are not disposed to make concessions.

Retail dealers have no complaints to make regarding the amount of trade done since my last communication. As was expected the retarded work when once under way is being pushed forward and quite a number of new buildings started.

An addition has been made to the city by taking in some of the suburbs, which have to be built up in the very near future. The consumption of lumber in this city is increasing greatly and will, doubtless, be in much greater demand in a very short time.

As some of the mills are closing for the season we may look for a greater scarcity of long bill stuff and consequently greater difficulty in filling bills.

Prices are still well maintained with no perceptible indications of a fall.

The quotations given may, as in last month, be read from 50c. to $1.00 per M higher; the yards throughout the city having no fixed prices, each conducting business on the go-as-you-please plan, irrespective of what may be the prices in a yard not more than a block off.

CAR OR CARGO LOTS.

1¼ and thicker clear picks, American inspection	$34 00@35 00
1¼ and thicker, three uppers, American inspection	40 00
1¼ and thicker, pickings, American inspection	30 00
1x10 & 12 dressing and better	20 00 22 00
1x10 & 12 mill run	15 00 16 00
1x10 & 12 dressing	14 00 16 00
1x10 & 12 common	12 00 13 00
1x10 & 12 spruce culls	10 00 11 00
1x10 & 12 maple culls	9 00
1 inch clear and picks	24 00 26 00
1 inch dressing and better	18 00 20 00
1 inch siding mill run	13 00 15 00
1 inch siding common	12 00 13 00
1 inch siding ship culls	10 00 11 00
1 inch siding mill culls	8 00 9 00
Cull scantling	8 00 9 00
1¼ and thicker cutting up plank	22 00 25 00
1 inch strips 4in to 8in mill run	14 00 15 00
1 inch strips, common	11 00 12 00
1¼ inch flooring	14 00
1½ inch flooring	14 00 15 00
XXX shingles, sawn	2 40 2 50
XX shingles, sawn	1 40 1 50
Lath, Sawn	1 80

YARD QUOTATIONS.

Mill cull boards & scantling	$10 00	Dressing stocks	14 00@15 00
Shipping cull boards, promiscuous widths	12 00	Picks Am. inspection	30 00
" " stocks	13 00	Three uppers, Am. inspect. B. M.	40 00
Scantling & joist, up to 16 ft	13 00	1½-in. flooring, dres'd	25 00 30 00
" " 18 ft	14 00	1½ " " rough	14 00 15 00
" " 20 ft	15 00	1¼ " " dres'd	23 00 25 00
" " 22 ft	16 00	" " undres'd	14 00
" " 24 ft	17 00	" " dres'd	16 00 20 00
" " 26 ft	18 00	" " undres'd	12 00 14 00
" " 28 ft	19 00	Beaded sheeting, dressed	18 00 20 00
" " 30 ft	20 00	Clapboarding, dres'd	12 50
" " 32 ft	21 00	XXX sawn shingles per M	2 75 2 90
" " 34 ft	22 50@22 50	Sawn Lath	2 25
" " 36 ft	24 00	Red oak	20 00 25 00
" " 38 ft	27 00	White "	25 00 30 00
" 40 to 44 ft	30 00	Basswood, No. 1 & 2	18 00 20 00
Cutting up planks 1¼ and thicker dry	25 00 26 00	Cherry, No. 1 & 2	50 00 60 00
" board	18 00 20 00	White ash, 1 & 2	25 00 30 00
		Black ash, 1 & 2	20 00 25 00

Hamilton, Ont.

HAMILTON, Oct. 5.—Trade in this city is in fairly active condition, and prices are well maintained. Quotations remain about the same with nothing important to note.

The following are the prices at the yards:

Mill cull boards and scantlings	$ 9 00@10 00	Dressing stocks	$ 6 00 18 00
Shipping cull boards, promiscuous widths	10 00 12 00	1¼ flooring, rough	16 00 18 00
Shipping cull stocks	13 00	1½ flooring, rough	16 00 18 00
Scantling and joist up to 6 feet	13 00	1¼ flooring, dressed	25 00
do up to 18 feet	13 50	1½ flooring, dressed	32 00
do up to 20 feet	14 00	1 flooring, dressed	23 00
do up to 22 feet	15 00	Beaded sheeting 1	28 00 30 00
do up to 24 feet	16 00	Picks, Am. inspection	30 00
do up to 26 feet	17 00	Three uppers Am. In.	40 00
do up to 28 feet	18 00	XXX sawn shingles	2 60 2 70
do up to 30 feet	20 00	Sawn Lath	2 25
Cutting up plank 1¼ and thicker, dry	20 00 25 00	Red Oak	20 00 25 00
Cutting up boards	20 00	White Oak	25 00 30 00
		Basswood No. 1. & 2.	18 00 20 00
		Cherry No. 1 & 2	50 00 60 00
		White Ash No. 1 & 2.	25 00 30 00
		Black Ash, No. 1 & 2.	20 00 25 00

Montreal, Que.

MONTREAL, Oct., 5th, 1887.

The demand for lumber continues to be fairly satisfactory both wholesale and retail, though it is scarcely as brisk as it was a few weeks ago. This is due to the high wages current which has had the effect of checking building operations, though the amount of improvements of this class that are going on in Montreal and its vicinity is fairly astonishing. The prospects of a glut of lumber are very slight and dry stuff is really scarce. We note no change in values. A comparative statement of the amount of deals and sawn lumber shipped from this port in ocean vessels, and compared with that of last year, from the opening of navigation to Sept. 3rd, gives in 1886, deals, (St. Petersburg standard) 41,289, and for 1887, 32,251; sawn lumber, 1886, 19,865,355 feet, and for 1887, 13,508,414 feet.

The following are the ruling prices at the retail yards:

Pine, 1st qual'y ℔ M	$38 00	40 00	Basswood, run of log culls out per M	$18 00	20 00
Pine, 2nd " "	28 00	30 00	Oak, per M	40 00	50 00
Pine, shipping culls ℔ M	14 00	16 00	Walnut, per M	60 00	100 00
Pine, 4th quality deals ℔ M	10 00	12 00	Cherry, per M	80 00	100 00
Pine, mill culls, ℔ M	8 00	10 00	Butternut, per M	35 00	40 00
Spruce, per M	10 00	13 00	Butternut, per M	35 00	40 00
Hemlock, per M	9 00	10 00	Birch, per M	20 00	25 00
Ash, run of log culls out per M	20 00	25 00	Hard Maple, per M	25 00	30 00
			Lath, per M	1 50	00 00
			Shingles, 1st, per M	2 00	3 00
			Shingles, 2nd, per M	1 00	2 00

Saginaw River, Mich.

OCT. 2nd.—The *Courier* says: The cargo market is practically lifeless, the sales being fewer in number than during any previous week this season. The high lake freights have put an embargo on trade and many who have purchased stock are arranging to carry it over. In fact the dock room is likely to be taxed to its utmost limit the coming winter. Norway bill stuff manifests signs of weakness, and sales have been reported at 50 cents to $1 off from the quotations that prevailed during the early months of the season. In other grades there are no material changes. Complaint is made by buyers that prices are too high, and a concern that bought 3,500,000 feet at Upper Michigan points asserts that lumber of corresponding grades can be purchased at Upper Michigan points at $1 to $1.50 a thousand less than the asking price on Saginaw River. The docks are filling up rapidly and manufacturers are concerned at the outlook as many of them will be forced to shut down their mills unless stock can be moved off their docks.

Shingles continue active and firm and XXX have been sold at $3.55, an advance of five cents over the ruling quotations. The scarcity of timber is bothering a number of manufacturers. The product of the season will be short of last year. The car lumber trade is active and is likely to continue so. The high lake freights is giving the railroads a large amount of lumber freight, and the movement during the fall and winter will exceed that of any previous year.

CARGO LOTS.

Uppers	36 00@38 00		Norway	9 00	10 50
Common	15 00	20 00	Box	10 00	10 50
Shipping Culls	8 00	10 00	Straight measure	12 00	23 00
Mill Culls		6 00			

YARD QUOTATIONS—CAR LOTS DRY.

Drop Siding.

Clear, ⅞ in	44 00@46 00	C, ⅞ in		30 00
A	38 00 41 00	D		19 00
B	36 00			

Flooring and Siding—Dressed.

Flooring, clear, d & m	46 00	Siding, clear, ½ in.		22 00
No. 1	31 00	A		20 00
No. 2	30 00	B		17 00
No. 3	20 00	C		14 00
No. 4	13 00	D		12 00

Finishing Lumber—Rough.

Three uppers, 1 in.	43 00@45 00	Fine common, 1 in.	28 00	31 00
1¼ & 1½	44 00 46 00	1¼ & 2 in.		32 00
Selects, 1 in.	35 00 36 00	C, 7, 8 & 9 in.		25 00
1¼ & 2 in.	36 00	Base, 2 to 9 in. No. 1		40 00
		No. 2		30 00
		No. 3		20 00
		Coffin boards 16 in. and over		16 00

Joist, Scantling and Timber.

12 to 18 feet	10 00	22 feet	12 00
20 feet	11 00	24 feet	13 00

Plank and timber, 12 inches wide, $1 extra.

Wide Select and Common—Rough.

C (No. 1 com.) 13in. and up	28 00	D (common) 14 in. and up	16 00

Lath, Shingles and Pickets.

Lath, No. 1	1 40	Country brands XXX	3 25	3 35
No. 1	1 25	Clear butts	2 25	2 35
Shingles, river brands		P'kts, 2 to 2½ in rough	12 00	13 00
XXX	3 40@3 50	Dressed		20 00
Clear butts	2 40 2 50	1¼ in. square, dressed	14 00	19 00

New York City.

NEW YORK, Oct. 5th, 1887.

The condition of the White Pine export trade of New York is inactive. the demand being light. Prices remain firm. Arrivals of Spruce have continued heavy but shipmentc now on the way are very light and receivers are making no efforts to force sales, looking for a better market after present cargoes are out of the way. Prices show a slight decline. Lath are firm at $2.25. The Pitch Pine market continues steady without special feature. There does not seem to be enough business to occupy all the mills at renumerative prices, and lumber is being offered at figures which will net the manufacturer less than the cost of production. There is still a large inquiry for export, but principally for delivery at ports in the Gulf of Mexico. where prices remain the same, and the mills are fairly stocked with orders. They show some indisposition to make large engagements, owing to a short log supply. North Carolina Pine Timber can be had all the year round, at short notice, and judging from past experience the price will not vary over 50 cents per 1,000 feet. In spite of the recent heavy arrivals of Spruce, orders are being given at old prices. The over supply of Spruce has had a damaging effect upon any but bills of long length. There is a good demand for boards in the rough. Southern dressed lumber is increasing in popularity. The White Pine Timber market is without any noticeable change. The demand continues fully up to supply, and the mills are shipping about as fast as they can cut. There is but little change in hardwoods. The yards are not as busy as they could be. While there is a complaint of dullness, considerable lumber is being quietly worked off and the dealers are all ready to buy good lumber in larger quantities than it is being offered. More good Black Walnut lumber is now offering than for some time. The demand, however, does not show any improvement. There is a steady sale for rejects and culls; Mahogany and Cedar continue quiet for the season of the year. The fall trade seems to be somewhat later than usual in opening, but there is a fair amount of business being done, and the increase is sure to come.

Black Walnut.

⅝ in., all clear	$80 00@85 00		Culls, 1 inch	$35 00@37 00	
1 and 1¼ inches	92 00	96 00	Culls, thick	38 00	42 00
1½ and thicker	98 00	105 00	Counter tops, 18 in. and over	110 00	150 00
Rejects	52 00	55 00			

Poplar, or White Wood.

⅝ in. 10 inches and over	22 00@24 00		1¼ to 2 inch	29 00@30 00	
¼ in. coffin boards	27 00	28 50	2½ and thicker	31 00	33 00
1 inch, 10 inch and over	27 00	29 00	Common 1 to 2 inch	21 00	22 00
1 inch, 8 in. and over	26 00	28 00	Saps, 1 inch	24 00	26 00
			Culls, all thickness	15 00	18 00

Dressed Poplar.

½ inch panel	24 50@25 00		⅜ in. clg. 4 to 6 in	21 00@21 50	
⅝ inch panel	27 00	28 00	½ in. clg. 4 to 6 in	24 00	24 50
¾ inch panel	29 00	30 00	⅝ in. clg. 4 to 6 in	27 00	28 00
4, 5, 6 inch casing	30 00	31 00	¾ in. clg. 4 to 6 in	29 00	30 00
7, 8, 9, 10 inch casing	32 00	33 00	⅞ in. clg. 4 to 6 in	30 00	31 00

Ash.

1 inch, white	37 00@39 00		Strips, clear	28 00@30 00	
1¼ to 2 inch	38 00	40 00	Black ash, good	26 00	28 00
2½ to 4 inch	40 00	42 00	Black ash, culls	10 00	12 00

Oak.

1 inch plain sawed,	37 00@39 00		inches and over	50 00@53 00	
1¼ to 2 inch	38 00	43 00	Thicker	52 00	54 00
Thicker	41 00	42 00	Strips under 6 in.	38 00	40 00
Quarter-sawed, white, all clear, 6-					

Cherry

⅝ in., wide and clear	65 00@70 00		1½ and thicker	85 00@90 00	
1 inch	73 00	76 00	Coumter tops, 18 in. and over	100 00	115 00
1 inch strips	38 00	54 00			
1¼ to 2 inch	76 00	80 00	Culls, all thickness	17 00	20 00

Miscellaneous.

Chestnut, clear	35 00@38 00		Redwood California plank	55 00@58 00	
Chestnut common	22 00	25 00			
Basswood white	28 00	32 00	Hickery, old growth	50 00	60 00
Basswood common	18 00	23 00	Hickery, 2nd growth	70 00	80 00
Maple, clear	25 00	30 00	Elm	20 00	22 00
Birch, clear	32 00	35 00	Sycamore	25 00	28 00
Birch, 1s and 2s	28 00	30 00	Sycamore quartered	35 00	40 00
Cottonwood	19 00	21 00	Gum	38 00	41 00
Redwood, California boards	50 00	53 00	Butternut	45 00	50 00

Detroit, Mich.

Uppers, Selects, Stocks, etc.

Uppers, 4-4	$45 00		Shop, 5-4, 6-4 & 8-4	$25 00	
5x4, 6x4 & 8x4	45 00		Fine common, 4x4	31 00	
3 & 4 in	50 00		5x4, 6x4 & 8x4	33 50	
Selects, 4x4	38 00		Stocks, 1x12 & 1x10, No. 1	19 00	
5x4, 6x4 & 8x4	40 00		1x12, & 1x10, No. 2	16 00	
Shop, 4x4	22 00		1x12, & 1x10, No. 3	13 00	

Flooring, Siding, Ceiling, etc.

Flooring, select common	22 00		Roofing, D & M	16 00	
No. 1 common	18 00		Siding, clear	21 00	
No. 1 fencing	16 50		A	20 50	
Ceiling, select common	25 00		B	18 00	
No. 1 common	22 00		C	15 50	
No. 1 fencing	20 00				

Bill Stuff and Culls.

Bill stuff, ordinary sizes:			26 to 28 ft	14 00	
12 to 16 ft	12 00		30 to 34 ft	16 00	
18 to 20 ft	12 50		Ship culls	12 00	
22 to 24 ft	13 00		Mill culls	10 00	

Shingles and Lath.

Shingles, clear, 18 in. Ex	3 75		6 in. stocks clear, Ex	4 00	
10 in. clear, 18 in.	3 00		5 in. stocks clear, Ex	4 80	
6 in. clear, 18 in.	2 75		Lath	2 50	

Add for surfacing one or two sides, $1.

Philadelphia, Pa.

OCT. 1st.—The Northwestern hardwood market is good, from the standpoint of wholesaler and retailer. The wholesalers have had a good summer, and are now anticipating the winter's requirements, and the retailers are selling liberally to builders, who are bringing the most extensive building operations for years to a close.

The general situation is this: Supplies, which were of only moderate proportions in early summer, have been pretty well run down, even with frequent additions to stocks. Only about so much hardwood will sell, be the price what it may. Dealers and manufacturers recognize this fact, and hence endeavour to supply only the actual demand. Just now contracts are being made for forward requirements. Sellers are not

rushing into the market, but are satisfied with the way stuff is going. If cherry would sell, plenty of it would be forthcoming at present prices. Furniture manufacturers take very little of it, for somehow it does not fasten on the popular taste. But little business is done outside of the common grades of walnut; perhaps because consumers earlier in the season purchased freely. Culls sell well at $30. Poplar from West Virginia is generally in good request. All kinds of ash are selling well, and, in fact, good regular stock is sought for, either for immediate use or for piling. Both plain and quartered oak are in good request, though there is some complaint in regard to the quality of quartered oak. Birch, redwood, hickory and butternut once in a while loom up in the market, but there is nothing in them. Yet samples are always to be found in certain yards. Two or three mahogany firms have done a good year's business, but the lower grades are a drug. In yellow pine the usual heavy business is reported, and at full prices. An enormous amount of Pennsylvania hemlock is handled, and the old story must be repeated that dry stock is scarce. Boards are in active demand and a great deal of business is placed for winter delivery, which gives hemlock an upward tendency.

White Pine.

Mich. uppers, 1 to 2 in., dry	$50 00	@52 50	1¼ to 2 in. plank, barn quality	22 50	25 00
2½, 3 & 4 in.	55 00	60 00	Common plank	20 00	22 00
Siicts, 1¼ to 2 in.	42 50	45 00	⅞ box boards, wide	14 00	16 50
Selects, 1 in.	41 00	43 00	⅝ siding, selected	27 50	30 00
12 in. flooring quality	30 00	32 50	Culls, 12 in.	15 50	17 00
barn	19 00	23 00	Wide	15 00	16 00
Edge barn, all widths	18 00	20 00	Narrow	12 50	14 00
			No. 1 moulding	36 00	38 50

Cargo Lots.

Yellow pine edge bds	14 00	@16 00	Scantling and plank	20 00	22 00
Heart face boards	19 00	21 00			

Hemlock Boards and Scantling.

Edge boards	10 50	@11 50	Scantling, 2x3 & 2x4, 16 & 18 ft	12 00	@13 00
12 in. stock	11 00	13 00			
Fencing, 6 in., 16 ft.	11 00	13 30	3x4, to 12, 12 to 20 ft.	11 50	12 00

Shingles and Posts.

Cypress shingles, 24 in. heart, d & b	13 00	@18 00	Cedar shingles, 30 in. hand dressed	35 00	40 00
24 in. sap, d & b.	10 00	12 00	Chestnut posts, 9 ft.		32 00
			7 ft.		28 00

HARDWOOD.

Walnut.

Nos. 1 ffi 2, 1 in., good dry, Indiana	$87 50	@95 00	Reject or common, 1 in., 1¼ and up	60 00	65 00
1¼ & up	92 50	100 00	Culls, 1 in.	35 00	37 50
Nos. 1 & 2, 5/4 in.	72 50	77 50	1¼ in. & up	35 00	40 00

Poplar.

Nos. 1 & 2, 5/4 in. good wide, Indiana	25 00	@27 50	Nos. 1 & 2, 1¼ in. & up, good wide, Ind.	32 50	36 00
1 in.	28 00	32 50	Columns, 5x5 & up clear	35 00	35 00

Oak.

Nos. 1 & 2, 1 in., good western, straight	32 50	@35 00	Nos. 1 & 2, 1¼ in. & up, good western, straight	35 00	37 50
quartered	49 00	50 00	quartered	52 50	55 00

Ash.

Nos. 1 & 2, 1 in., good western	35 00	@40 00	Nos. 1 & 2, 1¼ in. & up, good western	32 50	42 50

Yellow Pine—Yard and Wholesale.

Sc'tlg, 2x4 to 12x14	22 00	@23 00	Flooring, 1 in., Va.	17 00	19 00
Plank, 1¼ to 2 in.	23 00	27 50	1 & 1¼ in., Ga. &		
Fl'g, 1 & 1¼ in. No. 1	27 50	30 00	Fla. cargo run	22 00	24 00

Cherry.

Nos. 1 & 2, 1 in., good	62 50	70 00	Nos. 1 & 2, 1½ in. & up, good	65 00	75 00

Buffalo and Tonawanda, N. Y.

BUFFALO, Oct. 5th.—The New York *Lumber Trade Journal* says: The weather has been cool and beautiful all of this month, and this or some other cause, has infused new life into the lumber trade, and nothing but a panic will prevent a splendid fall trade. Cargoes are again coming freely, our dealers evidently being of the opinion that it is wiser to pay existing freights and have their lumber sorted and piled during the good weather than to await a possible decline in lake freights. Such a course is undoubtedly wise.

Trade in the Pine yards is good, with prices in advance of our last quotations, but not sufficiently settled to admit of intelligent quotations.

Hardwoods are fairly active, the sale of Ash, Oak, Maple, Whitewood, &c., for local consumption is very large. Buffalo is a good hardwood market, one in which a buyer can always depend upon finding a good assortment of almost anything in the Hardwood line, and at reasonable prices. Much of the coarser grades of Oak lumber, and largely the timber, is produced near the city, and with the competition of so many railroads freights are reasonable. Probably 80 per cent. of all Hardwood handled here arrives by rail, the other 20 per cent. by lake. Fifteen years ago the figures were directly the opposite.

The condition of trade at Tonawanda so far as can be learned is very satisfactory, and reports from the travelling men point to a good fall and winter trade, and no difficulty in obtaining prices. The demand for shingles still continues good, and standard brands are picked up almost as fast as they can be obtained. XXX 16 inch, C. B. 18 inch, are firm at $4.25 and $3.25 respectively, and at the close of navigation it will be difficult to obtain them at those prices, from the present outlook. The trade through the central part of the State is good, and all the retail yards report a good season and look for a continuation of the same.

Hardwood is booming and the local yards are bothered not a little to supply the demand for dry stock, especially in Whitewood, which is meeting with favor among the retail dealers and is affecting the trade and price of the upper grades of Pine, much to the sorrow of the wholesaler with a good stock of selects and uppers.

Norway Pine—Rough.

No. 1, 1 & 1¼ in.	19 00	@20 00	Stocks No. 1, 1 & 1¼ in		21 00
No. 2, 1 & 1¼ in.	15 00	15 50	No. 2, 1 & 1¼ in.		17 00
No. 3, 1 & 1¼ in.	11 50	12 00	No. 3, 1 & 1¼ in.		12 00
			Scantling 2x4 to 2x12	12 to 16 ft	13 00
			Timber, 4x6 to 12x12	16 00	20 00

White Pine—Rough.

Uppers, 1 in.	$44 00	@46 00	Shelving, No. 1, 13 in. and up		31 00
1¼, 1½ and 2 in.	44 00	47 00	No. 2, 13 in. & up	22 00	29 00
2½, 3 and 4 in.	55 00	60 00	Fine common, 1 in.		32 00
Selects, 1 in.	39 00	40 00	1¼, 1½ and 2 in.	32 00	35 00
1¼, 1½ and 2 in.	39 00	40 00	Common, 1 in.	16 00	19 00
2½, 3 and 4 in.	45 00	50 00	1¼ and 1½ in.	17 00	20 00
Cuts, No. 1, 1 in.	25 00	28 00	2 in.	20 00	22 00
1¼, 1½ and 2 in.	32 00	33 00	Coffin boards		17 50
2½, 3 and 4 in.	37 00	40 00	Box, 1 in.		12 00
No. 2, 1 in.	15 00	17 00	1¼ in. & thicker		13 50
1¼, 1½ and 2 in.	21 00	22 00	A stocks, 1x10		29 00
Moulding, 1 in.	28 00	32 00	1x12		29 00
1¼, 1½ and 2 in.	28 00	32 00	B stocks, 1x6 to 16		17 50
Siding strips, 1 in.		38 00	C stocks, 1x6 to 16		13 50

Dressed Lumber.

	No. 1.	No. 2.	No. 3
Base and Casing under 6 inches	$33 00	$23 00	$16 00
Base and Casing, 6 inches	34 00	25 00	17 00
Base and Casing, 6, 7 and 8 inches	40 00	29 00	18 00
Flooring, 1 and 1¼ inches, 2½ to 5 in. wide	30 00	20 00	15 00
Ceiling, ⅞ in., 2½ to 5 inches wide	33 00	23 00	16 00
Ceiling, ⅝ in., 2½ to 5 inches wide	28 00	22 00	14 00
Ceiling, ½ in., 2½ to 5 inches wide	24 00	18 00	13 00
Philadelphia Fencing	39 00	30 00	21 00
Bevel Siding, 6 inches	23 00	21 00	11 00
Bevel Siding, 5 inches	23 50	21 00	17 00
Bevel Siding, 6 inches	23 00	19 00	14 00
Novelty Siding, 6 inches and over	40 00	23 00	16 00

Shingles and Lath.

Shingles. 18 in. XXX	3 85	@ 3 90	Lath, pine No. 1	2 10	2 15
XX	2 85	2 90	No. 2		1 70
X		1 25	Norway		1 60
Shingles, 16 in. XXX		3 00	Hemlock		1 60
XX		2 10			
X		90			

Chicago, Ill.

OCT., 1st.—There is a decided improvement in the cargo market. Lumber sells easier, and it is firmer than it has been for some time. The receipts for a couple of days the early part of the week were rather free, owing to a pretty heavy blow that happened to be in the right direction, and the market was consequently liberally supplied. There is an evident demand for lumber among buyers, and it seems to be of that omnivorous character that will absorb anything available. There is a greater call, of course, for dimension and common inch, but offerings of better stock are not hard to place, there being still a good many that have not yet filled in their assortments of lumber to carry over exactly to their liking. There will be from now on a good deal of miscellaneous buying to piece out stocks, and if the market is not too liberally supplied, the brokers ought to have a comparatively easy time disposing of the lumber. It can hardly be said that much actual gain has been made in prices, though a quotation for short piece stuff is given a range a quarter of a dollar higher than last week. The price for average standard cargoes is $10 streight and firm, but there are some choice lots coming to hand that admit of a slightly higher figure. There has been no piece stuff sold during the week below $10, unless it was of a quality too low to be considered standard. The market is so quick and easy at $10, that there is a possibility that the next fleet may be crowded up a point; but on the other hand present buyers are exerting themselves a little to discount the advance likely to soon occur in freights, and the attempt to get mere value for the lumber might considerably abate their anxiety to purchase. Some sellers claim that they have done better this week with their common inch to the extent of about 25 cents. The dealers are aware thar they will not be able to get it cheaper this year, and they have room yet for a good deal of common lumber, which is admitted to be about as good property as one can have in his yard.

There have been a good many shingles offered, but evidently no more than was required, for they are reported a shade firmer. For standards $1.82½ @ $1.90 is the range now, which is better than it has been for a month or more. There is a sharp inquiry for shingles, and it is thought they will go higher very soon. Lath are steady and firm as a rock.

The peculiarity of the present trade at the yards still continues. Its variable character, as between different firms, seems in fact to be its most noticeable feature. While in some offices the searcher after truth will be told that trade is excellent and that orders are flowing in from the country in a steady stream, at others he will hear in response to his query that "business is only just fair." However, one cannot take a trip through the district without seeing unmistakable indications that the stock is somewhat slow, and that the business done is accomp- without much rush or excitement. Orders where they are plentiful in number, are not usually for very heavy amounts. Retailers are moving cautiously, and the policy of careful buying which has obtained among them of late is now most faithfully adhered to.—*Timberman.*

Minneapolis, Minn.

OCT. 1st.—This market is fairly active, although trade is generally considered below the average for this time of year. No effort is being put forth to make it otherwise, either because orders cannot be filled with dry stock, or because it is deemed to be the part of business policy to hold lumber for an even better market in the spring. An average local demand is likely to absorb about all there is to be marketed. The mills, too, are falling short of their estimated productiveness. Dealers are basing some of their confidence in future values upon the shortage in the sawing capacities, brought about by the recent fire. The local trade in both St. Paul's and Minneapolis continues large. The permits issued in Minneapolis last week numbered 130, for structures to cost $421,275. In the week included $146,000 to be expended on the Soo shops. In St. Paul the building permits numbered 132 for buildings to cost $128,800. All this means a very large local consumption demand and that it is being enjoyed is evidenced by the large receipts of lumber in both cities. In Minneapolis the receipts are fully double what they usually are at this season of the year.

THE QUEBEC TIMBER TRADE.

According to the Quebec *Chronicle* there is little doing in the timber market in that city at present. That journal has heard of two rafts of small, ordinary timber changing hands at 16 cents per foot. The following is a comparative statement of timber, staves, &c., measured and culled to 14th September, 1887.

	1885.	1886.	1887.
Waney White Pine	2,209,685	2,589,583	2,016,487
White Pine	1,619,709	2,496,331	1,035,435
Red Pine	60,614	245,120	635,890
Oak	1,376,224	922,369	536,442
Elm	947,745	378,936	196,872
Ash	251,996	126,885	94,599
Basswood	47	218	535
Butternut	3,083	192	1,079
Tamarac	1,186	3,511	5,507
Birch and Maple	380,268	160,461	116,694
Std. Staves	45.8.2.10	61.4.3.9	43.1.1.23
W. I. Staves	81.8.0.20	100.7.2.23	118.4.1.10
Brl. Staves	195.9.3.15	.....	15.0.3.26

AMONG THE MANUFACTURERS.

Mr. Peter Bertram has bought out Mr. R. T. Wilson's axe factory at Dundas, Ont., and will increase the capacity of the works. These works have been in existence for about fifty years and their products are widely and favorably known.

Mr. James T. Milne, of Peterborough, manufacturer of Milne's Oscillating Steam Gang and Solid Wheel Band Mill, recently made contracts with J. Milne, of Agincourt, and James Hay, of Woodstock, for the setting up of a band mill in each of these places, to be running by 1st December. All the latest improvements are being added. The bearings will be finished with Spooner's finest Copperine.

One of the main features in the machinery department of the late Toronto exhibition was the extensive display of Emery Wheels and other machinery made by the Hart Emery Wheel Co., of Hamilton, Ont. The popular and accommodating Secretary of this company, Mr. James T. Barnard, was in attendance and demonstrated to all enquirers the superiority of the machines manufactured by his firm. We learn that the business at these works is increasing daily and that it is often difficult to keep up with the orders which are pouring in from every part of the Dominion. A change of advt. appears in this issue.

Attention is directed to the advertisement in the present issue of Spooner's Copperine, which is rapidly replacing the use of babbit metal in all kinds of manufacturing establishments. Copperine is the result of careful study and consideration for all its intended uses. It is claimed there is not a point wherein it fails. It has been tested in many establishments, and by some of the most practical engineers and machinists in this country and pronounced a success. Copperine is made with copper and tin, in each quality sufficient, by careful and scientifically-tested proportions to be thoroughly anti-friction, and to do its intended work. The following are a few of the large firms who have it in use:—Georgian Bay Consolidated Lumber Co., Waubaushene, Ont.; The Rathbun Co., Deseronto, Ont.; The Wm. Hamilton Manufacturing Co., Peterborough, Ont.; Longford Lumber Co., Longford, Ont.; E. B. Eddy, Hull, P. Q.; Withrow & Hillock, Toronto, Ont. Alonzo W. Spooner, of Port Hope, is the manufacturer and wholesale dealer.

CHIPS AND SHAVINGS.

ELM has become a favorite wood with chair makers.

"OAK is the grand, everlasting wood of the ages," quotes a lumber journal.

IN the east mahogany is being used more extensively than ever for inside finish.

PAPER picture frames which are a good imitation of walnut moulding are being made, and unless cut with a knife it is hard to tell the difference.

FOR interior house finish soft wood seems to be becoming obsolete, if there is any pretense to richness in design. Hardwood is used almost altogether in houses of the better class.

IN time now long past, flooring strips were supposed to be thoroughly seasoned before they were put down, but now the tree that stands in the forest to-day may form the floor that is laid a week or ten days hence.

THE two oldest trees in the world are supposed to be the one in Calaveras county, Cal., that is believed to be 2565 years old, and the cypress of Somma, in Lombardy, Italy, that is 1911 years old, or planted forty-two years B.C.

ALL sorts of vessels, culinary and otherwise, including pails, tubs, basins, water coolers, spittoons, as well as various other articles, are now manufactured in one piece from wood pulp, under the name of indurated fiber ware, and are called indestructible.

ON account of its weather-resisting qualities, there would seem to be no good reason why cypress should not make headway as a material for siding, in competition with white pine. It is being used to a small extent for house finish in some northern cities. It has a pleasing appearance.

IRONWOOD and lignum vitæ are preferred for heavy canes, and bamboo and malacca sticks for light ones. British Columbia redwood, however, is said to make as heavy a cane as any wood known. It has a rich port wine color and is very handsome.

IN London, 20,000 men earn their living at carpenter work, 4,000 in Paris, and 4,000 in Berlin. Hours in London are 52½ per week, wages, 18 cents per hour. In other cities in England carpenters work 58½ hours and at 12 cents an hour. Employment is precarious. In Paris the eight-hour day prevails and wages are $1.70.

IT is thought with good reason, that cypress interior finish will serve a purpose in keeping out bugs and moths like that of red cedar. The latter is costly and not very attractive to the eye; while cypress is comparatively cheap and handsome. It is a cedar, and has a slight aroma, and will tend to keep a house sweet and free from vermin.

RED oak grows in favor. It is in some respects and to some tastes more in favor than white oak. It is easier worked, shows up as ornamental a grain, is just as durable, and far more easily obtained. Maple does not hold its beauty to the eye like oak, but discounts it when you come to flooring. Both are wanted in increasing volume every year.

BANDS are superseding circulars, in old as well as new mills, and have reached a stage of development and utility which the circular did not attain for decades after its introduction. The more economical production of lumber by utilizing in the pile that which formerly went into sawdust, is the study of all manufacturers.

PERSONS who may not know the nature and color of black birch after dressing and polishing may be interested in knowing that the grain of the wood is very close, the color mottled and slightly darker than satin wood. Black birch makes beautiful furniture, and the only complaint made against it for house trimmings is the care and extra time required in nailing the boards, to prevent splitting.

THE following will interest many of our readers who spend the winter months in the lumbering camps:—An old Mount Washington guide says that he never carries a compass in the woods. There are three sure ways, says he, that I have for finding the points of the compass. You will notice that three-fourths of the moss on trees grows on the north side; the heaviest limbs on the spruce trees are always on the south side; and thirdly, the topmost twig of every uninjured hemlock tips to the east.

CHERRY is not what it once was in the popular estimation, and cannot be had in size, quality or quantity as of yore. Yet it is unquestionably one of the most beautiful of our native woods, and will never wholly go out of fashion as long as it can be obtained, which will be in greater or less quantities forever. Of walnut the same may be said; at present it is not so fashionable as it was 20 or 30 years ago, but while trees grow the black walnut will not be allowed to become extinct. The neglected varieties of our forest growth, such as sycamore, elm, birch, black ash and beech, are all finding a place in public favor.

HANDLING CIRCULAR SAWS.

IN reading an article by Mr. Hobart in your paper recently, I was led to think he had had but little experience in the use of saws, or else that he did not place a very high estimate on human life.

The lifting up of a board from a pinched saw or placing one over its top appears to be a very hazardous operation, and the word "dodge," is very appropriate. Circular saws are cranky machines. The way they knock things, when on a rampage, throw clubs, knots and chips, will make a man dodge if anything can. Like a mule, they seem to hold a grudge against every one. They may appear to be quiet and gentle. but they never fail to get their work in when an opportunity occurs.

The novice who should try to follow Mr. Hobart's advice, in adopting this "dodge," would be very likely to find himself sprawling on the floor, with a cracked jaw, a broken head or no head at all, a moment later. The man who knows the vicious nature of saws, when he sees an edging or strip of lumber balancing over the edge of the table behind the saw, usually ducks his head or gets out of the way as soon as he can.

I have had twelve years' experience in the use of saws and have learned that one cannot well be too cautious in handling them. Nearly all of the accidents which occur in their use are simply the result of carelessness.

Nor long since a man here was running an edger in the night, his lamp being secured to a post behind the table. Placing his stub pipe in his mouth he leaned forward over the saw to light it by the lamp, when his feet slipped back, letting him down, and in a twinkling his arm was cut off just above the wrist.

There is great danger in running saws at too high speed, especially when the power is variable. The speed may be proper and safe when cutting; but while changing the stuff the speed will sometimes be nearly doubled. I have known saws to burst under such circumstances, and fly about the mill like shot. I recollect one instance where a piece from a 22-inch saw flew off, parting in a straight line across the plate some five inches deep. This piece was thrown with such force as to pass one-half through a window shutter one inch thick. The instant before the saw burst the sawyer was standing directly in front of it.

A number of years ago, when I was building knitting machines in Ballston, Spa., a lumberman from a couple of miles up the creek, called to consult with me about a saw which ran crookedly. I went up to see it, but on examination it appeared to be stiff and in good order. I requested him to start it up slowly, when it appeared to run truly, and on applying a piece of edging, found that it cut a clean, narrow kerf.

Said I, to the man, "That saw appears to be all right."

"Let me show you." he replied.

Then he lifted on a full gate. The speed began to increase and kept on increasing. It was a 28-inch saw used for sawing ash for fork handles. The speed soon reached a fearful rate, and I stepped back out of the way. Taking up a plank the man started toward the saw, when I caught him by the shoulder and said, "Come away, quick!" He looked at me with surprise, saying, "I see nothing wrong."

I held him back and pointed to the saw, which had now attained such a speed that the plate was so expanded as to vibrate sidewise, like the stem of a boy's top with a whiz through the air enough to make one's hair stand on end. It was weaving back and forth at least three-quarters of an inch out of line, and apparently as limber as a piece of leather.

I expected every moment to see it fly to atoms. I motioned to him to shut the gate, and when it had stopped I told him that I would as soon stand before the cannon's mouth as before a saw running at such a fearful speed.

"Why," said he, "I have been using it so for the past three days."

"Well," I said, "you may consider yourself a lucky man."

We then changed the pulleys, reducing the speed one-half, when he had no further trouble, and could saw more stuff than before the change.

To be a good sawyer is an achievement to which very few men ever attain, and although thousands spend their days at the business, yet they never fully understand the true science of putting and keeping a saw in perfect order. Every one has notions of his own, and the less he really knows the more notions he will have. Many of them believe that the machinery runs faster and will do more work in the night than in the day time.

A good sawyer will make a mill earn the full amount of his wages more, every day, than an ordinary man can, and double the amount that a poor man will; not only in the quantity of work done, but also in the quality, and at the same time he will appear to make less effort than either of them in accomplishing it.

In setting saws the tooth should not be bent in a true line with the plate, but should be given a twist carrying its front or cutting edge further out of line, and allow clearance for the back part of the tooth. This is very important, as the front edge at the outside (*i.e.*, the side toward the tooth which is bent), soon wears away, leaving a smooth rounded corner which tends to spring back into line with the plate, leaving a bearing further back on the tooth, while by giving it a twist the tooth will bear much more wear before this can take place.

Swaging the teeth with an upset is much to be preferred to bending the teeth, for with swaged teeth there is no chance of the tooth to spring away from the work. Whether the teeth be swaged or bent, it is most important that the saw be trued after the operation so that every tooth shall cut, and run in line with the others. If the sides of the teeth are dressed with a file, the points should be bevelled back to give clearance the same as the twisted tooth.

The upset was unknown in my sawing days as it is a later discovery. In sharpening splitting saws the front edge of the tooth only should be touched with the file, and this filed exactly square across the plate, or in line with the mandrel.

A saw should run perfectly true. If a 54-inch saw should show more than a thirty-second of an inch variation it should be corrected. The collars may be out of truth, and a trifle here may work mischief at the circumference. This may easily be tested by taking off the saw and running the mandrel slowly. Place a wedge between the collar and the journal box to prevent any vibration of the arbor, then by placing a stiff rest near the collar and holding the end of the file down upon the rest with the end against the collar, the slightest variation may be detected.

If the collar should prove to be out of truth it may be trued up by scraping the face of the collar while it is running slowly allowing the file to cut only on the high side of the collar.

Inserted teeth are doing away with filing and setting saws at the present day, and are also doing away with a large amount of timber.

A first-class 54-inch solid tooth saw, No. 9 guage, will save six per cent. of the timber and double that amount of power, and make as good lumber as the best inserted tooth saw in the market. This would save the value of the cost of the saw in every six days' work, sawing clear pine.—*Journal of Progress.*

BRITISH BOARD OF TRADE RETURNS.

An increase in quantity of timber and lumber received into the United Kingdom, but a decrease in aggregate value, is shown by the official returns for the eight months ending August 31st, 1886 and 1887 compared:

Eight months ending August 31st.

	Quantity. 1886.	Quantity. 1887.	Value. 1887.
TIMBER (Hewn).	Loads.	Loads.	£
Russia	113,234	132,574	210,494
Sweden and Norway	371,874	383,342	497,242
Germany	104,301	137,924	293,817
United States	60,165	63,979	249,755
British E. Indies	26,638	10 566	110,564
British North America	80,533	76,297	324,238
Other countries	268,209	307,805	303,089
Total	1,024,904	1,112,487	1,994,199
Timber (Sawn or Split, Planed or Dressed).			
Russia	469,188	579,594	1,103,825
Sweden and Norway	859,797	954,712	1,878,392
United States	209,206	165,702	407,375
British North America	479,393	495,188	1,137,359
Other countries	39,626	51,418	140,184
Total	2,057,209	2,246,614	4,707,135
Staves (all sizes)	75,688	88,082	347,405
Mahogany (tons)	33,472	27,449	227,030
Total of Hewn and Sawn	3,082,113	3,859,101	6,701,334

The total for eight months of this year is thus 3,359,101 loads, hewn and sawn, aggregate value £6,701,334; while that for same period of 1886 is 3,082,113, costing £6,758,755. The returns from Canada (B. N. A. in above list) shows a lessened import of hewn timber, but an increase of sawn, with a value smaller in the proportion of £1,137,359 to £1,147,046.

In iron, steel, tin, &c., the quantities exported from the United Kingdom during eight months ended with August last, are in all cases larger than in the like period of 1886. Values are all higher, too, with the exception of wire and tin plates:—

	8 mos. 1887	8 mos. 1886
Pig and puddled iron	755,922 tons	688,532
Bar, angle, &c	165,418 "	153,013
Railroad, all sorts	642,543 "	502,250
Wire	27,748 "	26,892
Cast and wrought	239,482 "	232,646
Hoops and sheet	220,327 "	198,608
Old iron	205,010 "	94,200
Steel unwrought	214,708 "	73,041
Tin unwrought	66,228 "	61,334
Tin plates	235,901 "	232,730

SAW MILL BOILERS.

I HAVE been interested in the various articles on boiler explosions that have appeared in your columns from time to time, and especially in those on saw mill boilers, and would like to state a few facts that have come under my observation, which I think will help to solve the problem of saw mill boiler explosions. It is my belief that, whenever there is a leak in a boiler, or the fire box of a boiler, the alkali formed thereon and about the leak, by the combination of the wood ashes from the fire and water, eats the iron very rapidly. I was running an engine and boiler in a basket factory where a good deal of the refuse wood was used as fuel. There were three leaks in the fire box, two at the end of the tubes, and one on the side, about two or three inches above the level of the fire, the other two being a foot above the fire, or about fifteen inches from grates.

Every morning and night I noticed that the tube ends, or, in other words, ends of the flue sheet, were covered with a coating of wood ashes, for a distance of about fourteen inches from the leak. This coating averaged about a quarter of an inch thick. Every time I blew out, which was once a month only, I wiped these ashes off, and found that whenever the ashes had adhered to the iron, it was pitted and grooved. I knew it could not have been the water, as it was "pure pond," and the barrel of the boiler was in good condition inside. I wiped the ashes off the side, and found the iron, for a distance of about eight or ten inches from the leak, the same in appearance as the flue sheet, but in worse condition, the pits and grooves being much larger and deeper, and from all appearances pretty nearly through the iron, which is ⅜-inch or 7-16 inch in thickness. I immediately notified my employers of the matter, who said: "Those leaks have been there for a long time now, and have never done any damage, and I guess they will last for a while longer, anyway." I had just previously heard, through one of the oldest employes of the firm, that the smoke box, through which the exhaust was carried, had been replaced only twice in three years, as it had been "rotted out," as they termed it, and it was almost ready to be replaced again.

Failing to get necessary repairs done, I looked elsewhere for a job.

This experience did not satisfy me, however, so I began to investigate matters a little. I went to several saw mills and wood-working shops and found thut five out of six had leaky boilers—some to a dangerous extent—and no engineers. These boilers were in the same condition and using different water; nearly all used wood and shavings exclusively for fuel. One was a horizontal tubular boiler which had a leak just in front of the bridge wall and about half way up the side from the centre. I went there Sunday, when all was cold, and wiped off the ashes which were on and around the hole for a distance of eight or ten inches. The iron was pitted and had a crumbly appearance; that is, it looked as though the iron had been pounded and had jarred the small particles out.

The ashes on this boiler were only one-eighth or three-sixteenths-inch thick. I examined five or six others and found that when the leaks were anywhere in range of the fire they were invariably covered with ashes and fine dust.

It can be safely said that two-thirds of the saw mills in this state at least, have their safety valves overloaded to a very dangerous extent, or no valves at all, and as the men in charge are thoroughly incompetent to run a steam boiler, and are required to run some other machine in connection with their engine and boiler, the steam is allowed to run up to a dangerous pressure, and of course these parts that have been weakened by this process I have just mentioned give out under the strain.

Owners of saw mills, that is the majority of them, do not do a very rushing business, and consequently do not feel like sending forty or fifty miles for a boiler maker to put on a patch, as long as their feed pump is in good condition, so the boilers are allowed to run just as long as they will hold together. Sometimes not quite so long, as we often see.

I can cite instances where mills were running with engineers, and a farmer boy came along and offered to do the work for them 25 to 50 cents less a day, and the engineer had to make room for him. The great evil wit saw mills is cheap labor for skilled work.—*H. H. K., Willoughby, Ohio, in American Machinist.*

THE REPORTER COULD NOT DRAW HIM OUT.

The Ottawa *Evening Journal* says:—Mr. Mercier stayed at the Russell and warded off interviewing reporters with great skill. He was polite and nice and all that kind of thing, but he would not talk. He looked like a man who felt decidedly at home as he sauntered up and down the rotunda of the Russell, but when a newspaper man drew near he relapsed into stonewall taciturnity.

The leader of the national party in the Province of Quebec is rather above medium height, big made and brawny with a good crop of black hair, a bright dark eye and hawk nose. He has a square chin and a twinkle in his eyes, that a Yankee would call cute. He is affable and polite and has a way of shrugging his shoulders when debating within himself, that has a charm of novelty about it.

"Would you care to speak about that burning question to lumbermen, the price of ground rents" asked a *Journal* reporter after he had shaken the hand of the Premier who showed every symptom of a fraternal feeling.

"I do not care to talk. I will speak in Hull and then you can print what I say, but I don't care for talking now."

"Will the ground rents go up from $2 to $5 a square mile?" went on the scribe.

"I cannot say. I have such a sore throat."

"Some of the lumbermen think that it is not only a rise in the ground rents that will take place, but the other fees will also take a jump."

"My throat is very sore," said the Premier, and he backed away enveloped in the folds of a large sized you-don't-catch-me-talking smile, "very sore indeed. Bonjour."

AMONG THE PINES OF GEORGIA.

By Edward Jack.

To us Canadians who find our forests so difficult to travel among in summer time, owing to the quantity of brushwood one encounters almost everywhere, as well as to the obstructions offered to ready progress by tracts of burned or broken lands, the forests of the interior of Georgia offer a pleasing change, especially during the mild and agreeable southern winter. Here are to be found no cradle knolls, no broken ground, no no burned land, no underbrush—for miles and miles, nothing but lofty pines standing so far apart that I have driven for hours among them, seated ina buggy drawn by a pair of horses, making only an occasionaldetour to avoid a few square rods of scrub oak or some blown down tree. One of the latter, which I had the curiosity to measure, was 108 feet long, while the first limb was 71 feet from the root. There were many trees at this time aroundme, which certainly attained a height of not less than 120 feet.

THE SURFACE OF THE COUNTRY

where I travelled for 60 miles was as smooth as the streets of any city. It was not level but gently rolling. The streams by which it was intersected often had banks from fifty to sixty feet in height. These were not abrupt but with a steep slope. Sometimes there were flats along other shores on which magnolias, oaks, bays and other evergreens grew in the greatest abundance. In the early spring these shores are fragrant with the perfume of the Yellow Jassamin which grows abundantly all over this country, while here and there about the small round ponds scattered through these forests the lilac flowers of the Redbud mingle their blossoms with the white bloom of the May-haw, and here may be seen our robins as well as the turtle dove which abounds in these woods, as does the southern partridge or quail. The brilliant cardinal bird and the gay blue bird wtth robe of deepest cobalt may be seen also flitting from bough to bough.

One may judge of the genial character of this climate from the fact that near Flint river I saw peach trees in blossom on the 4th of February, while in a small garden which I passed on the 5th of that month, peas were already above ground. On the 7th Ionquilles were in full flower and strawberries were in blossom. What added much to the pleasure of travelling among the pines of the part of Georgia which I was visiting was the absence of mosquitoes and black flies.

THE GEORGIAN PINE

is in general much larger and of better quality than that of Florida. On the Flint river the soil is very different from the white sands of Florida, into which the wheels of one's carriage sink deeply, forbidding rapid rate of progress. In the locality where I was travelling through the pine woods, the dark gray sandy soil was firm anywhere; the only benefit of the highway was that it led to bridges by which streams could be crossed, and avoided the occasional fallen trees which the traveller now and then encountered. A good road could be found anywhere among the pines.

The southern pine does not grow so thickly on the same extent of territory as does the white pine of the West, where it is no *very* uncommon thing to find a 40 acre lot yielding a million feet (board measure) of this lumber. In the West one tract may be very thickly timbered with white pine, while there may be next to none on the adjoining lot. The southern pine, on the contrary, although not found growing thickly in any one place, is yet far more generally distributed over an equal area of ground than its western relative.

Southern pine lands also possess a very great advantage over many others in this, that fires will not destroy them, even when the wire grass, which grows beneath the trees, is burned every spring, so that the tender growth may afford better nourishment to the sheep and cattle that wander through the forests. Besides this, when the pines have been cut down, especially on the Lime Sink region of Georgia, the land which is free from stone can, with the aid of fertilizers, be made to yield magnificent crops of cotton, Indian corn, melons, or other vegetables or fruit, and peach; pomegranate or fig tree will flourish anywhere here without manure, and yet these pine lands of Georgia are so little prized that they were selling in large lots last winter at from $1.50 to $2.50 per acre, where the trees were adjacent to large streams and where the timber could be cheaply placed in the same and driven to the sea.

It must not be inferred from what I have said that all the pine lands of the south or even of Georgia are equally well timbered. On the contrary, there are vast tracts the timber on which is of little value, and many an English capitalist has been swindled by the false representations of designing men into purchasing large tracts of land which are of little or no value. Instances of this have came under my own observation, and no one should allow himself to be drawn into the purchase of any southern lands until he has sent his own trusted and competent explorer to carefully examine and report on the same. Should he not do so he may in general make up his mind that he has been cheated in his investment.

FORESTRY MANAGEMENT.

The importance of forestry management in the estimation of older nations, better skilled than we in Ontario have shown ourselves to be in economic administration, appears in a volume of U. S. Consular reports lately published. The reports cover the particulars of Government control and management of forests in Austria-Hungary, Germany, France, Italy, and Switzerland, and are full of matter of great use to students of the subject in this country as elsewhere. Consul-General Jussen reports that no proper returns are published in Austria-Hungary of the profits of Government forests for the whole empire, but for Bohemia alone the clear annual profit is about 14,000,000 florins. The net income from the Prussian State forests, Consul-General Raine reports, stands at about 24,000,000 marks annually. The French net annual income is about 16,000,000 francs, as reported by Consul Roosevelt. Consul-General Alden reports that is impossible to give trustworthy figures of the revenue and cost of forestry in Italy. According to Consul-General Winchester, the Swiss Confederation derives no revenue from forests. The total value of yield from cantonal forests, however, is about 33,000,000 francs, and the returns from the forests of the Canton of Zurich show a nearly three-fold increase of profit yielded during a period of fifty years of cultivation—from 31 28 francs per hectare (nearly two and a half acres) in 1830-40 to 90 58 francs in 1870-78. Returns in money, however, while of great importance in a Province like Ontario, are the lightest evidence of the true value of the forests. Their influence upon climate and rainfall, and the consequent benefit to agricultural land and to public health, are considerations of far greater importance, besides which is the provision of useful and wholesome employment for great numbers of the population—the number of forest officers of all grades is about 32,000 in Austria alone. It is interesting to note the difference existing in the views of the Governments of the older countries of Europe from those prevailing with some of our own rulers. They attach the greatest importance to forest culture and assume every responsibility in regard to it. Here there seems a desire to shrink such responsibility. To get rid of the forest domain as soon as possible, to put it out of the government hands and into the hands of private speculators, has been the policy in Ontario heretofore, the excuse being that the cost of supervision is too great and onerous. It has been the motto of the Mowat Government that it is better to sell the timber off than have the trouble of preserving it from fire and pillage. But what of the future? Is there any thought of where the supply of timber is to come from after the present stock has been exhausted, which will not be many years at the rate of depletion that has been going on. The forests constitute the capital of the Province, which must shortly come to an end, if drawn from without any effort made to preserve or replace them.—*London Free Press.*

HEMLOCK.

The *Lumber Trade Journal* says hemlock, which a few years ago was wholly ignored in this and other markets, is rapidly coming to the front in coarser uses and is becoming a familiar sight not only for paving foundations, but for joist and small timber, and not a few western dealers have placed it on their price lists. To the initiated, hemlock is known as a far superior timber to pine in various uses, and western prejudices against its use are rapidly giving way, as they did in the east more than a score of years ago.

The Canada Lumberman to Jan. 1st, 1889, for $1.00.

SAWDUST.

Many a lumberman can mend his ways by simply making better roadways before wet weather sets in.

So much green lumber is used and houses are built so fast in Birmingham, Ala., that when the builder asks the owner to settle up for a house, the owner tells him to wait and let the house settle down.

It is announced that a German chemist has succeeded in making a first-class article of brandy out of sawdust, whereupcn an exchange is moved to enquire: "What chance will the prohibition movement now have when a man can take a hand saw and go out and get drunk on a fence rail?" May be it will relieve the poor, over-worked wives from the arduous labor of sawing their own stovewood.—*Southern Lumberman.* It will on the other hand prove another incentive to increase the denudation of our forests. Shoot the chemist by all means and preserve our forests at all hazards.

Old Sawyer has a son whose conduct is not the best in the world, and he was telling to a crowd many of the boy's bad habits and ended by saying that he was drunk all the time and was the worst boy in the neighborhood. An old farmer whose sympathy was aroused, said: "That is so, Mr. Sawyer, your son is a bad one, awful bad." Old Sawyer looked astonished and then thundered out: "He is just as good as your boys, confound your old meddlesome picture."

To try to run a saw mill or a lumber business without a lumber paper is like presenting the play of Hamlet with Hamlet left out. Neither is satisfactory. People *did* run saw mills before there was any lumber papers published, and they also beat their hominy in a mortar before mills were built, but, as an East Tennesse woman once remarked to us, "It is a mighty poor way of living." It will not do in this day and time. A lumber paper is now as indispensable to a mill man or lumber dealer as a file or rule. There are a great many lumber papers published now—some think too many, but we have never seen one yet that was not worth five times its subscription to any one engaged in the lumber or timber business. Therefore we say to every one in the lumber trade: take one or more of the papers devoted to your interest. If you can't take but one, and can find a better one than ours, or one more earnestly devoted to the lumber trade, take it, and we will think no less of you. But take one or two anyhow, no matter how small your business is. In a multitude of councils there is wisdom, and the managing editor of a lumber paper has daily, weekly and monthly communication with the best, most enterprising and successful men in the trade, and can collect, arrange and diffuse their ideas, their experience, their suggestions and all the facts and conditions of the trade in such a manner as cannot fail to prove profitable to all others engaged in the same business. You can not succeed in the lumber business or in any other business now without the aid of a paper devoted to that interest. You must "keep up with the procession" or make up your mind to get left.—*Ex.*

The American Lumber Tax.

Taxed lumber is a feature in the United States tariff that is not over-popular with our American cousins. They recognize two facts: (1) that the duty on lumber makes them pay more for everything made of wood, and (2) that by restricting importations they are causing their own wooded land to be fast cleared of the "forest primeval." The Chicago *Herald* says that on this point that "protected lumber exhibits in both its direct and ultimate results a fair example of the 'benefits' of legislation for a privileged class. Canadian forests are here forbidden competition," says the *Herald*, "and, denuding our own lands of our trees, we are so changing the climate that drought and floods more frequently occur. Tempests unknown in lands where timber belts break the winds annually cause increasing devastation. Americans are doing what the great geographer, Malte-Brun, says occurred in France, drying up the sources of our fertility and handing down to the next generation a degenerated evil. To hurry this wasting process the aid of the law is invoked." The American tax on lumber is from $1 to $2.50 per thousand. The average tax is $2 per thousand on the quality of lumber used in building a cottage. Its greater market price is $14 per thousand. The duty constitutes one-eighth part of its selllng price. The way in which the builder of a cottage has to foot it up for these protective taxes is thus put by the *Herald*:

"The lumber in a $500 cottage is one half the cost, the labor three-tenths, and other multifarious protected material cost the remainder. In the price of the lumber there is more than 12½ per cent. on $250. Call it that—$31.25; in the glass, nails, screws, locks, hinges, etc., summing up $100, there is certainly a charge of 33⅓ per cent., as the average duties are 47 per cent. This dwelling is thus protected from being built by about $65, added to its natural cost. Thirteen per cent. of its cost is simple inflation. There is no revenue from it whatever. The duty is guaged at precisely the advance that will keep Canadian lumber out. The cheap hardware in the same category."

'Tis ever thus when legislators, instead of turning their attention to reducing the burdens of a people, employ their powers in adding to the cost of life's necessaries. Our Chicago contempory must see that the points it has brought out are strong ones in favor of commercial union, and especially strong from an American point of view. The influx of Canadian lumber would lower the prices to the American consumer, and at the same time afford a new market for Canadian lumber.

To Utilize Sawdust.

Along the shores of Georgian bay are hundreds of sawmills. The sawdust is not only worthless, but it is a nuisance, the getting rid of which costs money. If thrown into the water it kills or drives away the fish, hence furnaces are built in which it is burned. The millers would be very glad to put this sawdust on board vessels. It would be better and cheaper to for them to do that than to convey it to the furnaces and burn it. It could be brought to Hamilton, converted into fuel gas and sent through mains for domestic use just as illuminating gas is now sent; the pyroligneous acid and other chemical products could be saved; and the remaining charcoal could be used as fuel direct. There would be no trouble in the burning of it. The green sawdust direct from the saw is used in the mills and no other fuel is required with it except to start the fire in the morning. Wood gas is largely used for illuminating purposes in Switzerland, Germany and Russia, and wood was used instead of coal in the Philadelphia gas works, some years ago, when it was affirmed to be cheaper than coal and to produce gas of greater illuminating power. Difficulties have been encountered with the gas in consequence of the fact that greater pressure is needed than in using coal gas, and that there is greater tendency with it to smoke. These objections would not be felt in using it as fuel.—*Hamilton Spectator.*

Notice to Contractors.

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for Goderich Works," will be received at this office unill Friday the 14th day of October, for the construction of works at Goderich, Ont., in accordance with a plan and specification to be seen at the Department of Public Works, Ottawa, and at the office of the Town Clerk, Goderich.

Tenders will not be considered unless made on the form supplied and signed with the actual signatures of tenderers

An accepted bank cheque payable to order of Minister of Public Works and *equal to five per cent.* of amount of tender, must accompany each tender. This cheque will be forfeited if the party decline the contract or fail to complete the work contracted for, and will be returned in case of non-acceptance of tender.

The Department does not bind itself to accept the lowest or any tender.

By order,
A. GOBEIL,
Secretary.

Department of Public Works, }
Ottawa, 14th September, 1887. }

HENRY PORTER,

MANUFACTURER OF

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WANTED! The undersigned is prepared to purchase any quantity of Black Ash, Red Birch, Red Oak and Basswood.

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If your Grocer does not keep it, order direct from us.

THE attention of Steam Users is directed to our preparation of CEDAR OIL for removing Scale and Sediment from Boilers, lessening the quantity of fuel used, and prolonging the life of the Boiler.

THE RATHBUN COMP'Y,

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WANTED AND FOR SALE.

Announcements in this department will be inserted at the uniform rate of ten cents per line, each insertion, payable in advance. For three or more consecutive insertions of the same advertisement a discount of 25 per cent. will be allowed. Eight words should be counted as one line.

RARE CHANCE—FOR SALE IN TOWN OF Mitchell—planing mill, lumber yard and established building business; buildings nearly new; modern machinery; growing town, and good country; power furnished to cabinet factory; annual rent $500; long lease; good bargain will be given as the proprietor has determined to retire from the business. THOS McLAY, Mitchell, Ont.

PLANING MILL FOR SALE—GOOD TOWN on railway, in Eastern Ontario; no opposition. FENNEL & WEBBER, 41 Toronto Arcade, Toronto.

TIMBER LIMIT FOR SALE IN ONTARIO—Write to J. RALSTON, 31 John St., Hamilton.

STEAM SAWMILL FOR SALE—CARRIAGE Steamfeed; capacity 60,000 feet day and night; situated on the Ottawa river, east of Pembroke 4 miles; fitted up with improved machinery; run ten months; siding from C. P. R. into yard; about ten acres of land in connection; seven dwelling houses; boarding house and blacksmith shop; limit well timbered, white and red pine, tamarack, cedar, hardwood, etc.; area of limit 25 square miles. Apply to JAS. B. DICKSON, Pembroke, Ontario.

SECOND-HAND TIGHT BARREL STAVE and Heading outfit, for sale cheap. Address Box 110, Cleveland, Ohio, U. S. A.

FOR SALE—A STEARNS NO. 2 CIRCULAR Mill, friction feed, with five head blocks, carriage and track for long timber; two 60-inch Hoe patent and one solid saw, all in first-class condition. HENRY HOWARD & CO., Port Huron, Mich., U. S.

FOR SALE—A SPLENDID WATER POWER —may be used for any manufacturing business; at present used as saw and shingle mill; one mile from station. Addrses CHAS. GRASLEY, Belfountain, Ont.

VALUABLE TIMBER LIMITS FOR SALE —Berth No. 2, in the Township of Joly—containing 24¾ square miles, more or less.

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CHARLES A. BRAMBLE, D. L. S.

Fredericton, New Brunswick.

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Taberg, New York.

Notice to Contractors.

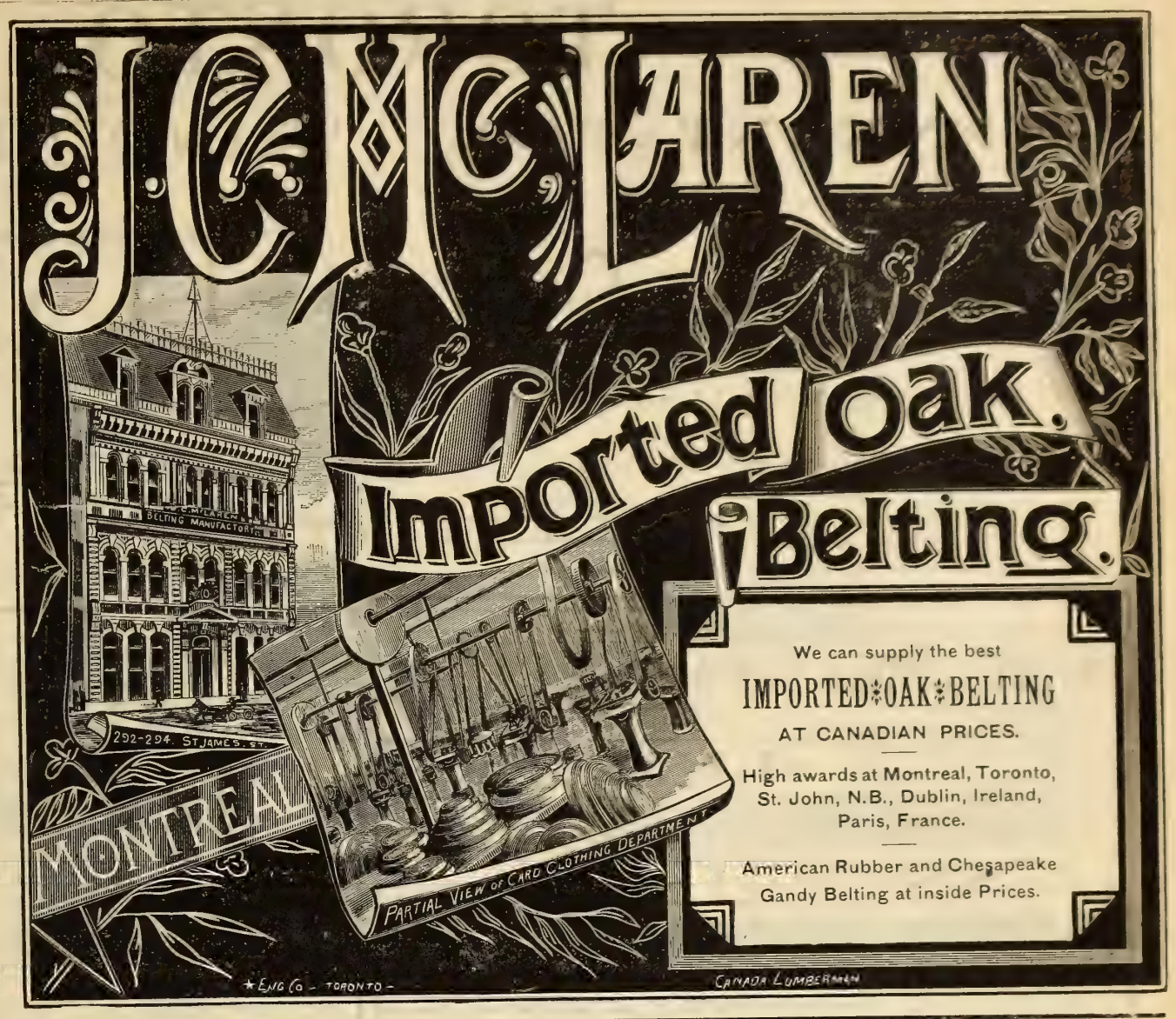
SAULT STE MARIE CANAL.

CONTRACTORS intending to tender for works of construcuion of the canal proposed to be formed on the Canadian side of the Saint Mary's River, are hereby informed that Tenders will be received about JANUARY next, and that the most favorable time to examine the locality will be between the present time and the early part of November next.

When plans, specifications and other documents are prepared due notice will be given. Contractors will then have an opportunity of examining them and be furnished with blank forms of tender, etc.

By order,
A. P. BRADLEY,
Secretary.

Department of Railways and Canals,
Ottawa, 24th August, 1887.



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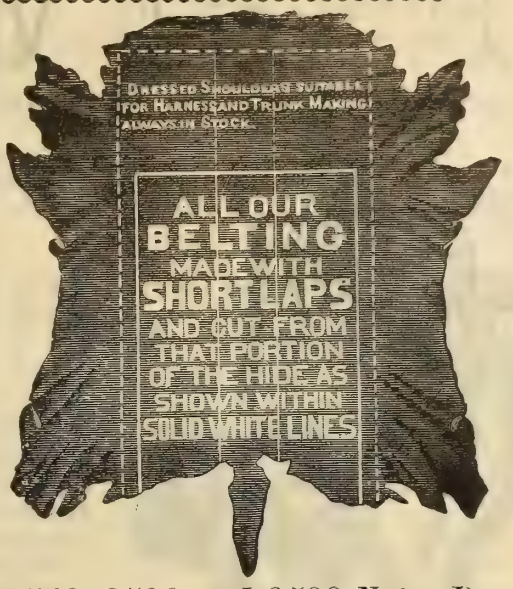

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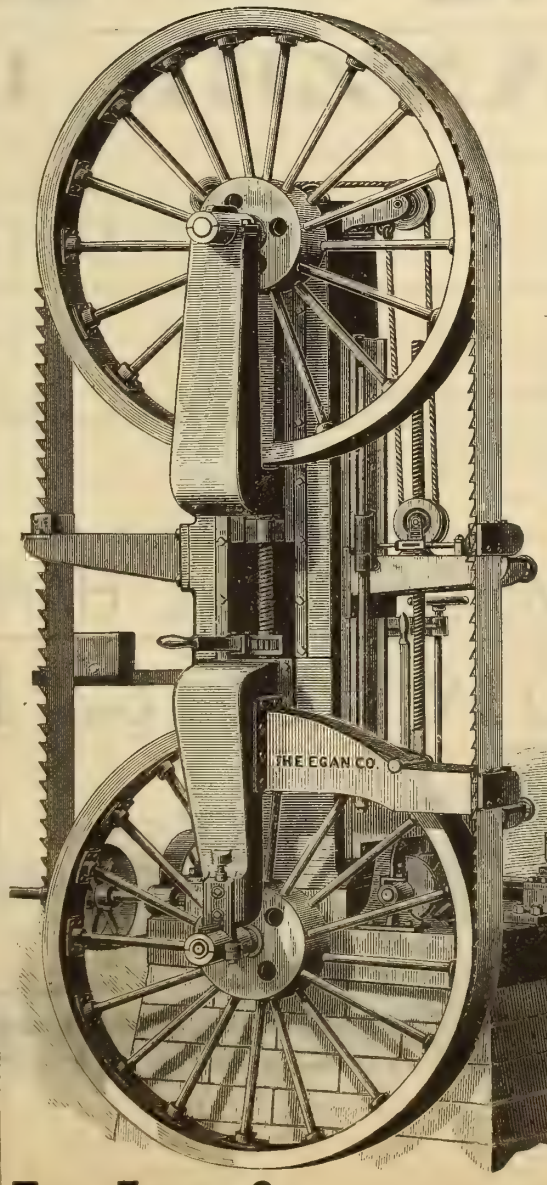

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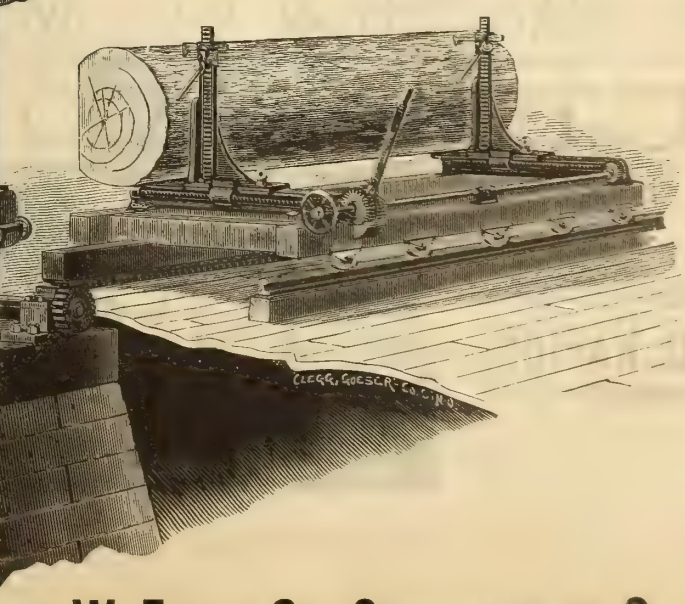

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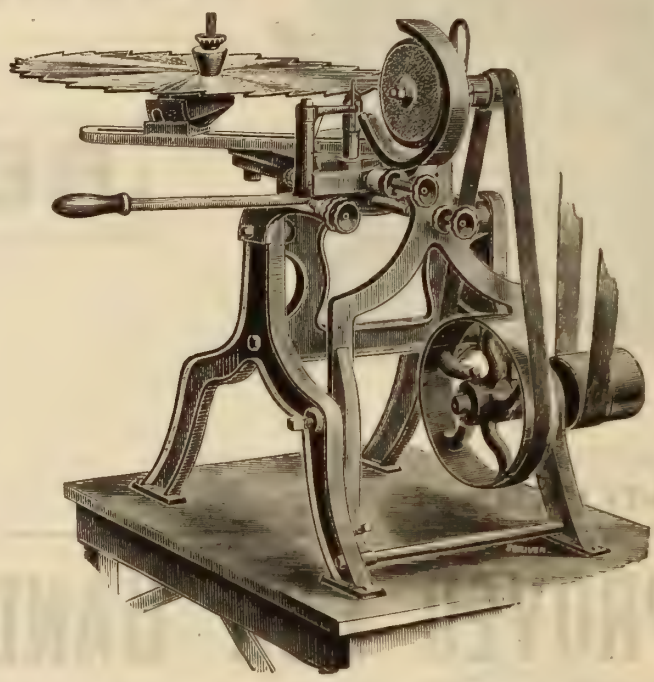

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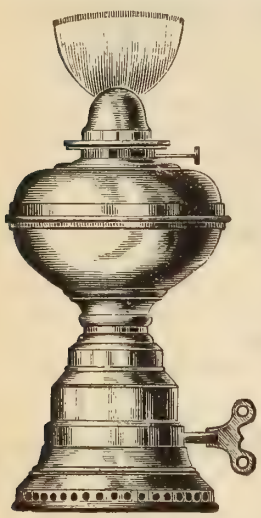

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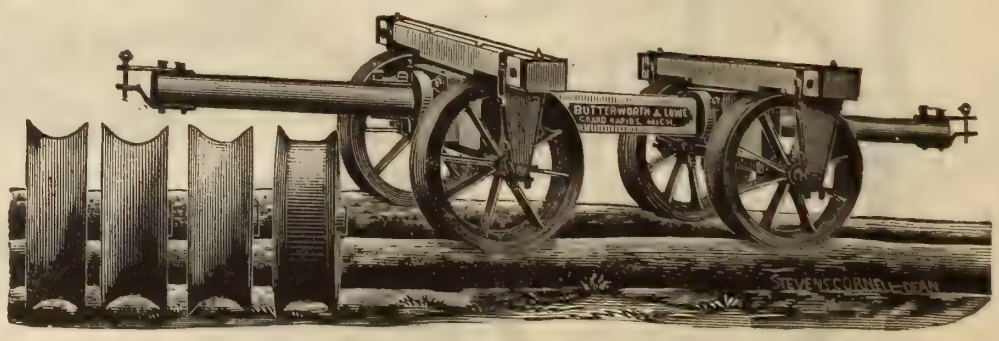

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THE CANADA LUMBERMAN.

VOLUME VII. NUMBER II. } PETERBOROUGH, ONT., NOVEMBER, 1887. { TERMS, $1.00 PER YEAR / SINGLE COPIES, 10 CTS.

THE CANADA LUMBERMAN

PUBLISHED MONTHLY BY

ARTHUR G. MORTIMER,

OFFICE: OPERA HOUSE BLOCK, PETERBOROUGH, ONT.

TERMS OF SUBSCRIPTION:

One Copy one Year, in Advance, - - - - - $1.00
One Copy six months, in Advance, - - - - - 50

Advertising Rates Furnished on Application.

THE CANADA LUMBERMAN is published in the interest of the lumber trade and of allied industries throughout the Dominion, being the only representative in Canada of this foremost branch of the commerce of this country. It aims at giving full and timely information on all subjects touching these interests, discussing these topics editorially and inviting free discussion of them by others.

Especial pains are taken to secure the latest and most trustworthy market quotations from various points throughout the world, so as to afford to the trade in Canada information upon which it can rely in its operations.

Special correspondents in localities of importance present accurate report not only of prices and the condition of the market, but also of other matters specially interesting to our readers. But correspondence is not only welcome but is invited from all who have any information to communicate or subjects to discuss relating to the trade or in any way effecting it. Even when we may not be able to agree with the writers we will give them a fair opportunity for free discussion as the best means of eliciting the truth. Any items of interest are particularly requested, for even if not of great importance individually, they contribute to a fund of information from which general results are obtained.

Advertisers will receive careful attention and liberal treatment. We need not point out that for many the CANADA LUMBERMAN with its special class of readers is not only an exceptionally good medium for securing publicity, but is indispensable for those who would bring themselves before the notice of that class. Special attention is directed to "WANTED" and "FOR SALE" advertisements which will be inserted in a conspicious position at the uniform price of ten cents per line for each insertion. Announcements of this character will be subject to a discount of 25 per cent. if ordered for three successive issues or longer.

Subscribers will find the small amount they pay for the CANADA LUMBERMAN quite insignificant as compared with its value to them. There is not an individual in the trade, or specially interested in it, who should not be on our list, thus obtaining the present benefit and aiding and encouraging us to render it even more complete.

BOTH from Great Britain and Quebec the reports as to square timber show some improvements. Prices are a little better and the market is by no means glutted, especially when the revival of trade in Great Britain is taken into consideration.

NEWS comes from New Westminster, B.C., of a large shipment of timber from that port for Shanghai, China. This is only one instance of the possibilities of the trade on our Pacific coast. There are extensive markets that can be served from that quarter and are susceptible of being developed with a little shrewdness and energy.

OWING to the scarcity of ship building timber in San Francisco and the dearness of Oregon pine, yellow fur from British Columbia is in demand in that city and seems to be well appreciated. The lumbermen of the Canadian Pacific coast seem to have excellent prospects before them. For the important Australian market they have every advantage over competitors.

WE learn from the *Northwestern Lumberman* that in the Southern States there is a feeling of hostility to the efforts that are being made by the Northern lumbermen to obtain sawlogs and square timber from Canada to supply their mills. For the same reason it is likely that the South will be opposed to a repeal of the duty on Canadian lumber. They do not want competition.

ACCORDING to the opinion of Mr. Durant of the Timber Manufacturers' Association of the Northwest, the lumbermen of the northwestern States are limiting the output of their mills so as to avoid overproduction and are carefully husbanding their standing timber. Canadian lumbermen should note this tendency and be cautious how they play into the hands of their competitors.

SOME of the lumbermen of the Upper Ottawa, amongst others Messrs. Timmins and Gorman, who hold limits bordering on Georgian Bay, are not going to ship their winter cut by rail to Quebec. They propose utilizing the water route, by way of Georgian Bay and Lake Huron for reaching the market. It is said there will be a great deal more square timber business done next season than last.

IT appears that in the Boston market the pine of Canada and the Northwestern States is being in a large measure supplanted by poplar and cypress from the South. This is one of the indications that our lumbermen should be active in securing new markets and developing those that may be more fully supplied from the Dominion. There is much trade that can thus be done by us directly, which is now in the hands of foreign middlemen, who reap an unduly large share of the profit.

THE British Board of Trade returns for September and the first nine months of this year are not unsatisfactory. There seems to be some revival in trade and the timber interests have participated in the general improvement. Importations have not been very heavy, in square timber less than last year, and the immediate prospect is brighter. There has been no sudden advance but the situation is improved with every prospect of its maintenance.

REPORT states that Sir Alexander Galt, who is the moving spirit in the construction of the Port Arthur & Duluth railway, has been successful in his financial negotiations and that the road will be constructed. This is the line which is to be built from a connection at Port Arthur on the Canadian Pacific to a connection in Minnesota with the Duluth & Iron Range. Ore and lumber are the things which the line would make accessible and at the same time afford a very direct and available connection between Duluth and the Canadian Pacific.

WE make the same offer to new subscribers this fall that we did a year since, namely, that any one remitting us a dollar now will be entered for the twelve numbers of the CANADA LUMBERMAN for 1888, and, in addition, for the remaining issues of this year free. As the great majority of readers prefer to have their subscriptions commence and end with the year this is one of the most attractive premiums that can be offered. The paper is still growing in popularity, and, we believe, our subscribers will bear us out in usefulness and influence also. We shall be glad to have a large addition to our list based upon this offer.

A NUMBER of Canadian capitalists have purchased a mill and a large tract of timber land on the St. John River, Florida, and having formed the Satsuma Lumber Company, recently incorporated, with a paid up capital of $150,000, will manufacture Cypress lumber extensively. Vessels that can cross the St. John River bar can load full cargoes at the mill. The officers of the new Company are: F. C. McIndoe, president; F. Vaughan, treasurer; Samuel Hatt, secretary; E. A. Bates, manager and E. O. Parsons, superintendent. John W. Russel, of 200 Broadway, will be the New York agent.

THERE has been revived at Ottawa the project of forming a Lumber Board of Trade, or Exchange. In the past each firm has made sales independently, has acquired its own information as to the markets, and so forth, as best it could, and has been shy about communicating any knowledge it possessed to the others. Far from anything being gained by such secrecy and isolation, the system, if it could be so termed, has been neither convenient nor advantageous. It is proposed to have a building where the latest market quotations from various points will be received and where sale can be made without inconvenient and expensive journeys. By this means much unnecessery expense will be saved, sales can be made with fuller knowledge and therefore more advantageously, and the necessity will be obviated for reduplicated trouble by each firm. When it is well started the lumbermen of the Chaudiere will have no inclination to go back to the old plan with its waste of labor and money.

THE commission that has been appointed to make enquiries regarding the Trent Valley Canal has a considerable interest from the lumber trade. There are extensive limits in the counties of Peterborough, Victoria, Hastings, Haliburton, Simcoe and others that are served by these waters, and there are very large mills operated by its water power. Much lumber and timber is already carried by means of barges on the Trent, the Otonabee and the chain of lakes on this route, and the quantity would be greatly augmented if this cheap means of carriage were extended. The opening of the locks at Fenelon Falls, Buckhorn and Burleigh, which will be open for navigation next spring, will in itself be of considerable service to several large mills.

DUN, WIMAN & CO. state that in the quarter ending with September, 308 failures occurred, a considerable increase over the corresponding period last year. The liabilities were $2,996,000, considerably over those of last year. Keen competition and the long existence of declining prices, are said to have affected the stability of trading firms. The following are the totals of the failures in the Dominion of Canada and Newfoundland for three quarters of 1887: Ontario, $3,906,225; Quebec, $3,341,359; New Brunswick, $5,253,515; Nova Scotia, $527,160; Prince Edward Island, $115,600; Manitoba, $213,505; Victoria, $160,900; Total for the provinces, $13,458,264; Newfoundland, $232,250; Grand total, $13,690,514.

IT is only in a very general way that the common law makes it a larceny to take a newspaper and refuse to pay for it. Just how the law is inforced is something with which people generally are not very well acquainted. According to an exchange the publishers of a paper in Illinois, a short time since, brought suit against forty-three men who would not pay their subscriptions, with the result that it obtained judgment in every case for the amount of the claim. Of these judgment debtors, twenty-eight made affidavit that they owned no more than the law allowed, and accordingly, attachments were avoided. This, however, did not end the case. Under a decision of the Supreme Court, our contemporary continues, they were arrested for petty larceny and bound over in the sum of three hundred dollars each. In Canada the law provides that anyone taking a newspaper or other periodical from the post office three times in succession is held liable to subscription to the same whether he has subscribed or not. We regret to say that quite a number have been regular readers of THE LUMBERMAN for some years, and when billed for their account either do not respond at all, or when they do endeavor to evade payment. We have no desire to follow the course adopted by our American contemporary, but must gently hint to those to whom this matter applies that it takes money to run a paper, and the same must be forthcoming, otherwise we may have to adopt stringent measures to secure our rights. How many will take the hint?

IT is with satisfaction, not unattended with a little modest pride, that we present the current number of the CANADA LUMBERMAN in new attire and thorougly remodeled in every way. Improvements have steadily been going on for upwards of a year, and no better indication of the appreciation of our efforts could be found than the rapidly increasing support given it, not only by the lumbermen and wood-workers of the country, but also the advertising public. Something over one month ago an order was placed in the hands of Mr. J. T. Johnston, of the Toronto Type Foundry, for a carefully selected and complete new printing outfit. Possessing the best of facilities, we have spared no pains to give THE LUMBERMAN as handsome a typographical effect as any trade journal on the continent. Whether or not we have succeeded our readers are left to judge. Whilst transforming the mechanical appearance of the paper we have also endeavored to elevate it in a literary sense, and while yet open for many improvements, we hope to make it more and more valuable to the trade throughout the Dominion. Though we have to thank many of our readers for their efforts in the past towards furnishing information, we think that more interest should be taken by the trade in the matter of correspondence on relevant topics, and

the furnishing of news regarding operations. A journal of this nature, which is supposed to furnish the news of the trade throughout the Dominion, must of necessity seek the co-operation of all interested parties towards this end. As has often been stated in the past, the columns of THE LUMBERMAN are always open for the free and fair discussion of all matters relating to the lumber and kindred trades. Will not those who have ideas and opinions to express endeavor to pay more attention to this department, and by so doing assist us in making the CANADA LUMBERMAN on a par with any similar publication? We cordially invite criticism and suggestions from all regarding matter for publication, and will try to benefit by such and allow our readers to do likewise. Those not already subscribers who may receive a copy of this issue, will be kind enough to give it a careful reading, and if they think it worth the price of subscription—$1 per year—a remittance of that amount will do us more good than any amount of praise.

THE project of forming at Toronto a Provincial Lumbermen's Association, or a special division of the Board of Trade, seemed to be regarded with favor, and there was some movement towards carrying out the idea. But the matter has been allowed to sleep and no progress has been made, to our knowledge. It would be unfortunate if the attempt should be allowed to fall through, for such an organization would be very beneficial to the timber trade of the country. Union is strength, and such an important industry has many interests that might be furthered by concerted action. Individual lumbermen, however influential, when acting separately and without unison, cannot have the same weight as their claims would possess if pressed on behalf of the whole trade by those speaking authoritively in their name. There are also many points as to which they would do well to develop a common policy after consultation and discussion. The matter should not be permitted to remain dormant, but now that some interest has been excited practical steps should be taken without delay for the permanent organization of the timber trades.

THE rain that fell early last month had the good effect of extinguishing the forest fires that were being vainly combatted. Unfortunately before the ravages were stayed there had been much destruction of our forest wealth. Not only did the owners of standing timber see much of their property thus destroyed, but there has been another bad result. On some imits where the destruction was not total the trees have been killed by the scorching to which they were exposed. These lifeless trees must be cut at once or they will be rendered valuless by the various boring worms. By this necessity the plan of operations of many lumbermen will be disarranged, they will be driven to cut prematurely with a tendency to glut the market. Though greater precautions have been taken lately to preserve the forest from destruction by fire the damage that has been done this year shows that still more is required in the way of prevention. It is true that the season was exceptional with its prolonged drought, but there are few years when there is not a period of danger. The lesson should be learned that even greater precautions are not only desirable but would be profitable.

SINCE our last issue the Mercier Administration has come to a decision regarding the ground rents for timber limits in the Province of Quebec. They have decided not to carry out their proposed increase from $2 to $5, but to make it $3, being an increase of $1 a square mile over the old rental. But while thus seeming to yield to the protest of the lumbermen, the relief thus given is deceptive. Since they have adopted the expedient of drawing larger sums from the trade in another way. The regulation for collecting the dues has been changed, and in future the charge, instead of being by the log, will be by the thousand feet board measure, $1.30 for pine and 65 cents for spruce. It is calculated that the receipts from this source will thus be increased by 20 per cent., the total increase being altogether more than the additional $138,000 estimated by the Provincial Treasurer from the increase of the rental to $5. It appears that the Quebec Government is determined to exact by some means a heavy contribution from this important industry, which was by no means so remunerative as to warrant this addition to its burdens. Another new regulation will be even more obnoxious to many lumbermen and others interested in timber limits. In future the leases are only to be for one year and the tariff is to be subject to annual revision. This will not only reduce the value of such property, but what is of even greater consequence it will deprive the value of stability. One effect of this will be to render it of less credit as a security, so it may be more difficult and will certainly be more costly to obtain advances. This will have a tendency to cripple operations and curtail these operations to the loss not only of themselves but of the whole community. The only mitigating circumstance attending this change of base, is that the smaller advance of the ground rent, will obviate the pressure that would have been put upon the lumbermen to strip part of their limits prematurely in order to relieve themselves of so much of their ground rent. This, however, is partially counteracted by the instability of the tenure. Altogether the new regulations are for the benefit neither of the trade nor of the community.

AN official report has been presented to the Secretary of the Interior at Washington by his own request, which, if adopted, will effect a complete revolution in the management of the forests of the United States, and by the force of example very possibly of those of Canada. The head of the Forestry Division of the Department of Agriculture, having been requested to prepare a scheme for the organization of a forestry department, has done so in a very thorough manner. Having graduated in a German forestry university, he adopts the scientific system of forest culture and management in that country with such modifications as his long experience on the continent suggests as suited to local requirements. He lays stress upon the principal that no more timber should be cut from a forest that is replaced by growth, that renewal by planting should at once follow, and that the enormous devastation by fires should be checked. To attain the objects he suggests, that the forests should be withdrawn from sale and settlement, that the forest reserves should be divided into great blocks, further subdivided into districts. Over these he would place trained inspectors with a staff of foresters, a bureau of commissioners having the general control. There would then be no further leasing of limits, but the right to fell the trees selected by the inspectors would be sold. This is a modified form of the system in vogue in the countries of the continent of Europe where the management of forests is a science. It would be a total change from the system that prevails in North America with minor variations in different portions. It is obvious that such a system if adopted in the United States, and this is far from improbable, would have important effects upon the lumber industry of Canada. For a time the cut in the United States would be likely to be diminished, and there would be a greater demand which might be supplied from Canada. But when the system was fully established among our neighbors there would be a steady supply and that prolonged in a manner which does not seem hopeful under present circumstances. If the system should prove successful in the United States there would no doubt be a strong tendency to imitate it in Canada. In our country we differ from our neighbor, the forests not being controlled by the central authority but by the Provinces. This, however, would not prevent the change being made piece meal, for if one Province moved in this direction the others would be likely to follow. The rights of private holders would undoubtedly be respected, but European experience goes to show that individual proprietors would be led to follow the public system. The lumbermen of Canada and others connected with our forest wealth, will watch with interest to see what action is taken by the Washington cabinet and by Congress in regard to this very important report.

BRITISH COLUMBIA TIMBER LANDS.

In the *Canada Gazette* of Oct. 15th is to be found the amended regulations for the survey, administration and disposal of Dominion Lands within the forty-mile railway belt, in the Province of British Columbia. Among other changes which have taken place we find that sub-clauses 4, 5, 6 and 7 of clause 13 are new, and are intended to facilitate the settlement of timbered lands, which would not otherwise be opened for homestead entry. The regulations are copied from the Timber Regulations of the Province of Ontario, and the object is, while permitting such lands as contain merchantable timber to be taken up and cleared for agricultural purposes, to prevent persons who merely desire to obtain the timber, from getting possession of land under cover of a homestead entry, stripping the land of its timber without paying any dues, and then leaving the land much less valuable for all natural purposes, than if it had remained in its natural state. The sub-clauses referred to above read as follows:—

(4.) All merchantable timber growing or being upon any land entered or sold within the limits of Dominion lands in British Columbia, and all gold, silver, copper, lead, iron, petroleum, coal or other mines or minerals shall be considered reserved from the said land, and shall be the property of Her Majesty, except that the homesteader or purchaser, or those claiming under him, may cut and use such merchantable timber as may be necessary for the purpose of building, fencing or road-making on the land so entered or sold, and may also, under the authority of the Crown Timber Agent, cut and dispose of all timber required to be removed in the actual clearing of the said land for cultivation, but no merchantable timber (except for the necessary building, fencing or road-making as aforesaid) shall be cut beyond the limit of such actual clearing; and all merchantable timber cut in the process of clearing, and disposed of, shall be subject to the same dues as are at the time payable by the holders of licenses to cut timber:

(5.) The patents on all lands, hereafter entered or sold as aforesaid, shall contain a reservation of all merchantable timber growing or being on the said lands, which merchantable timber shall continue to be the property of Her Majesty; and any person or persons now or hereafter holding a license to cut timber on such land, may at all times during the continuance of such license enter upon the uncleared portion of such lands, and cut and remove such timber, and make all necessary roads or water-ways for that purpose, and for the purpose of hauling in supplies, doing no unnecessary damage thereby; but the patentees or those claiming under them may cut and use such timber as may be necessary for the purpose of building, fencing or road-making on the lands so patented, and may also, under the authority of the Crown Timber Agent, cut and dispose of such timber to be removed in actually clearing the said land for cultivation, but no merchantable timber (except for the necessary building, fencing or road-making as aforesaid) shall be cut beyond the limit of such actual clearing; and all merchantable timber so cut and disposed of shall be subject to the payment of the same dues as are at the time payable by the holders of licenses to cut timber:

(6.) Holders of timber licenses, their servants and agents, shall have the right to haul their timber over the uncleared portion of any land entered as a homestead or purchased as hereinbefore provided, and to make such roads or waterways thereon as may be necessary for that purpose, doing no unnecessary damage, and to use all slides, portages, roads, waterways, or other works previously constructed or existing on any land so entered, sold or leased, and the right of access to, and free use of all streams and lakes theretofore used, or that may be necessary for the passage of timber; and all land necessary for such work is hereby reserved:

(7.) All merchantable timber growing or being upon any land hereafter entered as a homestead or sold under these Regulations, shall be subject to any timber license in force at the time of such entry or sale, and may, at any time during the currency of any license or licenses to be issued during such period be cut and removed under the authority thereof

RAILWAYS AND FORESTS.

The report of the Forestry Division of the United States Department of Agriculture gives information respecting "The relation of Railroads to Forest Supply and Forestry," which should be of much value to the people of Canada.

The total length of railroads in the United States was at close of

1840	2,795 miles.
1850	9,021 "
1860	30,635 "
1870	52,914 "
1880	93,349 "
1886	137,615 "

It is estimated that about 12,000 miles will be completed in 1887.

The quantity of timber required for ties, bridges, station buildings and other structures over these roads is much greater than most persons suppose. It may, indeed, be justly called enormous. In many of the districts in which railroads have been built timber was so abundant that it was used for every conceivable purpose, as being the cheapest of all materials.

The length of track, it will be understood, considerably exceeds the length of road. The report assumes that it is 187,500 miles. Allowing 2,640 ties for each mile, the whole number would be 495 millions, and as each contains three cubic feet of timber on the average, the whole quantity embedded under the entire mileage is 1,485,000,000 cubic feet.

It is difficult to ascertain the quantity used in bridges, trestles and piles; 2,000 feet per mile is considered a fair average. The total at that estimate is 375 million cubic feet.

Telegraph poles number 30 to the mile and in all about five million. At an average of ten cubic feet for each they require 50 million feet more.

But for every cubic foot ready for use in ties, bridges, etc., 1⅔ feet of round timber is used.

The total quantity cut is therefore 3,150,000,000 cubic feet. It is almost impossible to conceive what these figures mean.

The average life of ties is about seven years; the average life of bridge timber and poles about ten years. To maintain the present roads requires therefore 70,714,286 new ties every year. Allowing for renewals of bridges, trestles, etc., the total quantity required is nearly 255 million cubic feet per year.

Then putting the construction of new roads at the low average of 5,000 miles each year, 13,200,000 new ties and ten million feet of timber, bridges, etc., are required for this purpose.

The total annual demand is now 305,712,858 cubic feet. The demand must increase every year if nothing be done to prevent it. The waste in getting out ties and railway timber is very great. The railroad managers require the best material. When wood is so abundant that much is burned in order to clear the land, the farmers who generally get out ties and timber do not feel the necessity of care or economy. Young oak, larch and pine trees, which furnish but a single tie each, are recklessly cut down, and the means of restoring the forests from which the larger trees have been taken for other purposes are thus destroyed.

The effects of this recklessness are now very perceptible, especially in the wooded districts from which supplies for the prairie roads have been taken. In vast districts what were valuable forests are now mere wastes of brush and firewood.

It is calculated that all the valuable timber on 296,847 acres of well wooded land is required each year to meet the demands of the railroads, assuming that every acre will yield 300

ties. Vast as is the supply it must soon be exhausted if the consumption continue at this rate ever increasing.

In Europe, where timber of all kinds is comparatively scarce and dear, steel ties are used by some roads and are found satisfactory. It is hardly to be supposed that steel ties will come much into use on this continent for many years to come. Other European roads use antiseptics to prolong the life of ties and to render wood hitherto not used suitable for this purpose. Antiseptic preparations, it is suggested, could be profitably used in those parts of America in which suitable wood is scarce. The Union Pacific and the Atchison, Topeka & Santa Fe roads have established works at which soft woods are treated to make them suitable for ties, piling, etc.

In Canada the scarcity of wood for railway purposes has not yet been much felt. But there are some districts to which ties and timber must be hauled for a considerable distance even now, not to speak of the prairie roads, for which in most cases only soft wood can be got.

The report urges the owners of land, and especially those railroad companies which have obtained great land subsidies from the Government, to provide against future want by planting extensively now. It tells of instances in which aboriculture has been carried on profitably and satisfactorily on a large scale, as well as of the great success which has crowned the labors of those who have planted trees for farm and homestead purposes on the treeless prairie.

It is asserted that farmers who sell hardwood or pine ties at 30 to 35 cents each waste what must be very valuable in a few years—what indeed is worth now much more than the price they get, and farmers are urged to combine wherever they can to obtain better prices.

QUEBEC TIMBER DUES.

The following is the text of the official circular recently issued by the Quebec Government regulating the timber dues :

EXECUTIVE COUNCIL CHAMBER,
Quebec, 6th October, 1887.

Present—His Honor the Administrator In Council :

His Honor the Administrator has been pleased to order that the regulations based on the Order-in-Council, No. 160, of the 7th of April last (1887), establishing the ground rent per square mile, on all the limits for the cutting of timber, and those including the tariff of stumpage dues, in so far as they relate to pine and spruce logs, as established by the Order-in Council, No. 39 (Crown Lands), of the 7th of April, 1881, be rescinded, and that from this date the following be substituted therefor.

The ground rent payable on all limits under license to cut timber, granted up to the present, or to be granted in the future, shall be three dollars ($3.00) per square mile, payable in cash on or before the first day of September in each year. Default of payment in this case, at the proper time, will entail the forfeiture of the right of renewal of said license.

The stumpage dues imposed on pine logs, of which the contents shall be reduced to a standard of two hundred feet, board measure, shall be one dollar and thirty-six cents ($1.36) per thousand feet, on all timber cut after the first of September of this year.

The dues on spruce logs, cut after this same date, reduced to the same standard of two hundred feet, board measure, shall be sixty-five cents per thousand feet.

The payment of those dues shall be made in conformity with the affidavits of the cullers and foremen employed in the forest operations by the lumber merchants, proprietors of limits, or their representatives, also according to the affidavit of said proprietors, the whole to be revised and verified by the written report of the forest ranger.

The statement of measurements affected by those cullers must be sworn to before the Crown Timber Agent or forest ranger ; and shall be subject to any inspection and verification that the Commissioner of the Crown Lands may judge it advisable to order. Those annual statements of forest operations must be transmitted to the aforesaid agents, on or before the 30th of Sebtember, following the season in which the said operations took place.

It is further ordered that the regulations based on the Order-in-Council No. 36, (Crown Lands), of the 6th of December, 1883, concerning the dues liable to be imposed on culls and pieces of small dimensions, be abrogated.

EXCHANGE ECHOES.

Timber Trades Journal, London. Eng.

On the continent we understand that pitch pine, both deals and timber, is selling freely at full prices. The reason for the decline in prices on this side of the Channel is, rightly or wrongly, attributed to a falling off in the actual consumption ; and, as the stocks are not abnormally large, there is very fair ground for the assumption, not that the wood is going out of use, but that not so much of it is now required as formerly.

Southern Lumberman.

It is intimated in a good many directions that lumber will be advanced next year. The reasons for this belief are not easily given. It is true the demand for lumber may advance, but on the other hand the amount of new lumber territory constantly being opened up and the enterprise displayed by sawmill builders as an off-setting factor which is well worth while to keep in sight. Even in the far Northwest there is speculative fever at work. We are constantly reminded by forestry congresses of the rapid depletion of American forests. This possibly is encouraging and stimulating a great many to make purchases of desirable timber territory and hold for future exigencies.

Hamilton Times.

The Toronto *Globe* ascertains from the records of recent sales that the price of Ontario timber lands is on the advance. A square mile that was sold for $160 in 1881 has since been withdrawn at $539. The *Globe* thinks that commercial union would still further advance prices. Mr. Mowat can hardly be blind to the fact that these values belong by right to the people of Ontario, and not to speculators. If a lumberman can afford to pay such a price to a speculator for the right to cut, he can afford to pay the same price to the Provincial Government. There is an easy way of diverting the "boodle" into the Provincial treasury, and Mr. Mowat should promptly adopt it. Mr. Mercier has set the example in Quebec.

Chicago Timberman.

It is practically settled thus early that logging operations this winter, are going to be expensive. Many kinds of camp supplies are slightly higher than they were last year, and there are no important items cheaper. Labor is not plenty and while prices are nominally about the same, the existing conditions point to a higher average during the season. In general, the difficulty of getting logs to water and the amount of labor required to accomplish it increases slightly every year, because it is natural that the more accessible timber should be first cut. In the older sections, there will be a good deal of clearing up work done. A good many logs put in over long hauls, the added expense of which there is nothing to counterbalance. The differences in every case may be small and apparently unimportant, but the sum of them is likely to be considerable, and to make the aggregate as well as the per thousand cost of logging the coming season, greater by an appreciable percentage than it was last year.

Southern Lumberman.

It seems a hard fate that a mill man, after having his mill blown to pieces, should have to pay out large sums of money to assuage the grief of the surviving relatives of the man whose carelessness was the cause of the destruction of life and property. Nevertheless, there is both justice and mercy in this ruling of the law. The prime cause of the accident was the placing of an inexperienced fireman in charge of the boilers. Generally a negro is selected who possesses the ability to toss a cord of wood or a load of sawdust per hour, and who will manage to keep up steam sufficient to move the saws properly. The negro is so interested in the contest thus engaged in that he fails to keep up enough water, and presently there is a crash and everything goes to pieces, taking his boiled remains with it. Both the damage that is thus occasioned and the suits that follow should teach the mill owner that it is cheaper in the end to employ a competent engineer. We think that the number of accidents that are occurring in various parts of the country are doing a great deal in educating the mill owners to a proper sense of the responsibility resting upon them. Unfortunately the experience of one man does not seem to teach another man anything.

Mississippi Valley Lumberman.

There are indications that there are better things in store for the lumber trade in the Canadian northwest, as elsewhere. The trade up that way, since the disastrous boom of 1882 has been even more badly in the dumps than it has elsewhere. Mills have been idle and lumber has blackened in the pile. Owners of pine lands tributary to that market have been without a market and demoralization has been supreme. But there is again inquiry for pine lands and our advices from that locality bring the information that mills which have been idle are to be operated next season. Minnesotians have an interest in this renewal of business, because much of the timber which is tributary to Rat Portage—the chief source of supply for Manitoba and the territory west—will be cut from Minnesota soil. New railroads may make some of this timber tributary to the Minnesota markets, but the large and valuable tracts of pine lying on the north slope are naturally tributary to the Canadian markets. It is likely to be some time before a large consumptive demand on the other side of the line will make very serious inroads into this almost virgin timber, but how great a proportion of the whole amount will find its way into the Minnesota markets will depend somewhat upon the extent of consumption in the Northwest and the amount of development in the railroad building line which is accomplished in the northern part of this state. Minnesota men are large holders of pine on the northern slope and they therefore have more than a passing interest in the development up that way.

CHIPS AND SHAVINGS.

—Resin is frequently used for producing an immediate adhesion of the belt to the pulley, and for this it is well suited, but if the owner has any regard for the consequences he will soon learn that while the resin will give an instant grip to the slipping belt, it will soon be ground into the leather, stiffen the material and make the last state of that belt worse than its first.

A manufacturer who uses considerable oak, [illegible] get oak into which the worms have not worked one [illegible] gradually go further south. The reason for this [illegible] to him, though he believes that the more the country is [illegible] up the wormier the oak becomes. To get oak absolutely [illegible] from worm holes he must now go to those sections of the country south where the forests have been but little molested.

—Happening to want a place to strike a parlor match to light a gas stove, says a writer in the Chicago *Journal of Commerce*, I struck the match on the top of the stove over the [illegible] The gas ignited but the match did not. I laid the [illegible] aside, and as the gas burner was wanted I used the same match until I had lighted it twenty-three times, and the match is apparently as good as ever. Cannot some one invent an improved lighter from this suggestion?

—A sash, door and blind maker says there is more waste of lumber in the business than is always taken into account. Says he : "A man figures that his lumber costs him so much, his labor so much, and interest, taxes, insurance and what not so much more, and that there ought to be so much left for profit ; but when he comes to figure up at the end of the year, he has to inventory his plant at all it cost him to make his books balance." This will apply to others besides the sash, door and blind makers.

—Prof. D. P. Penhallow, having studied the relation of annual rings to the age of trees, concludes that the formation of rings of growth is chiefly determined by whatever operates to produce alternate periods of physiological rest and activity. In cold climates the rings are an approximately correct, but not always certain, index of age ; but, in warm climates, they are of little value in this respect. The influence of meteorological conditions in determining the growth of each season is most important, particularly with reference to rainfall. Periodicity in rainfall corresponds with periodicity in growth.

—The brick saw mill of the Kirby-Carpenter Lumber Co., at Menominee, Mich., is as near fire proof as a saw mill can well be. It is so much so that not a dollar of insurance has ever been placed upon it. The walls are of brick with an iron truss roof, leaving the sawing floor entirely free from posts or any sort of obstruction. A very heavy brick bearing partition runs lengthwise through the middle of the lower storey, doing away with the great number of posts and beams necessary to supportthe floor and shafting of an ordinary mill. The company's total sawing capacity is about 450,000 feet a day of ten hours.

—The largest manufacturers in the country, says an exchange, are the most diligent and constant students of the question of supply and demand. No educator is too expensive for such persons. The mill man operating at remote points, with an outfit of the most primitive character, superintended by sawyers that, ten chances to one, never set foot outside the county limits, in his own estimation knows more about lumber matters in general than all the veterans in the business put together—in fact such men know so much that it keeps them constantly poor. The class deserving of these comments is large ; it has a powerful influence, and it refuses, yes even spurns, well meant advice. Their labors overcrowd the markets with undesirable stock, and they whine and kick at settlements which are monuments to the shrewdness of the seller who made them, albeit the mill man brands the transaction as "a cold blooded steal."

—In nearly every case of a boiler explosion a trifling cost would have saved the lives of one to three men. In all seriousness, we think the suggestion we made recently, that the offices should be situated directly over the boiler, would be the best preventative of boiler explosions in the present laxity of all reasonable precautions. If the owners were the only ones exposed to the folly of using boilers unfit for service, controlled by ignorance, it would not be worth while to plead for inspection laws. But unfortunately, as a rule, they are not exposed at all. Boiler insurance has done a good deal to lessen explosions, yet the principal of insurance is not understood as well as it should be. We heard this exemplified during the past week in a way that would be amusing if it were not something worse. It was the case of a man owning two large boilers. Said he, "I am about tired of paying for insurance on boilers ; I have paid regularly for nine years, and there hasn't been an accident from the results of which I could collect a cent ; besides this I have been forced to make repairs at a cost of nearly four hundred dollars!" Comment on the above would be superfluous.—*American Machinist.*

THE NEWS.

ONTARIO.

A lumber exchange is being talked of at Ottawa.

The timber slides at the Chaudiere have been closed for the season.

Spence & Kuhlman, a planing mill firm of Cobourg, have assigned.

Quite a large quantity of hemlock logs will be cut at Deseronto this winter.

Grant & Ranger have the job of cutting 50,000 logs on Fraser & Co.'s Black River limit.

Fraser & Co.'s limit bordering on Sheenboro' township is considerably damaged by fire.

Fraser & Co., of Ottawa, have decided to employ jobbers henceforth instead of concern shanties.

Mr. John Mills, Merrickville, has recently made considerable enlargement of his cabinet factory in that place.

The Otonabee river has been filled for some time with J. M. Irwin's drive. They are getting down in good shape.

The water has risen about six inches in the River du Lievre, but is still far too low to run the lumber mills full power.

Messrs. Grier & Co.'s saw mill at the Chaudiere was closed down, temporarily, on the 19th ult., owing to lack of water.

Emery Bros., of Saginaw, intend doing some heavy log cutting this winter on their limits in the Georgian Bay district.

On the Spanish river the Spanish Lumber Co. are going to exceed all their previous efforts in log cutting the coming winter.

J. O. Long, an employee in Mickle's saw mill, Gravenhurst, recently had his left leg and collar bone broken by a tram-car running over him.

A shantyman named John Ryan had his legs broken recently by the falling of a tree while engaged in cutting in the upper Ottawa lumber district,

The Rathbun Company's mill at Campbellford has all ties cut for this season and is now cutting lumber, and will finish operations about November 1st.

As the last block for the season was being cut in Thompson's shingle mill, Orillia, G. W. Brown, who was operating the saw, had a thumb and four fingers taken off.

Bronson & Weston's Schyan limit was seriously threatened by fire, but hard work and care averted the danger till rain came. Heavy local showers have killed most of the fires.

Building operations are very brisk at the works of the Terra Cotta Lumber Company, Deseronto. Large extensions are being made to the buildings which now enclose a large space.

The Upper Ottawa Improvement Company have purchased fifteen hundred pieces of boom timber to be used this winter in making the necessary repairs to their works on the Upper Ottawa.

Lumberman Bingham, of Ottawa, states that his drive on the Gatineau river has been laid up at Gilmour's mills, Chelsea, for over a month past. This stoppage of the drive is owing to a dam built across the river.

The Georgian Bay Lumber Company will cut 200,000 feet of square timber this season, and Messrs. Timmins & Gorman 100,000 feet. The former firm will cut ten million feet of timber on the Wanipite river this season.

The new furniture factory of the Lindsay-Seldon Furniture Company at Peterboro' is rapidly approaching completion. It covers an area of 80x40 feet, and is four stories high. It is located close to the river and adjoins the railroad track.

Bronson & Weston, of Ottawa, have two company shanties and three jobbers. J. F. Inglee has two shanties and expects to get out about 10,000 logs this season. Benjamin Moore and R. W. Eady are also jobbing for Bronson & Weston on Schyan limit.

It is rumored that Thomas Mackie, is negotiating for the purchase of Messrs. A. & P. White's steam saw mill at Pembroke, along with their mill and limits at Deux Rivieres. The Messrs. White are said to be willing to sell either property separately or both together.

In the Keepawa District there was recently some uneasiness among the log makers, owing to an outbreak of typhoid fever in one of Hurdman's camps, from which, fortunately, being isolated, the disease has been kept from spreading. Such cases as did occur, were, however, of a very mild type.

The Orillia *Packet* says that considerable difficulty is being experienced by the lumbermen operating back north in procuring the required number of men to carry on the work upon the enlarged scale rendered necessary in consequence of the limits being so overrun by the bush fires, many dams and sluiceways being also destroyed, and which will have to be replaced this fall so as to be ready for the spring freshets.

Mr. Rowen, C. E., has discovered what is thought to be a forest of petrified trees on the Storrington side of the Rideau canal. The columns are among sandstone, and while the latter splits horizontally the former splits perpendicularly, thus proving the contention that a forest has been discovered. The discovery will create a sensation among the geologists.

The Parry Sound and Conger Lumber Companies are making some extensive additions to their fire extinguishing apparatus by laying pipes from their engines and other ways. One very pleasing feature in connection with these arrangements is the spirit of reciprocity shown between the Companies in allowing a mutual use of the appliances for the benefit of both.

J. R. Eaton of Orillia has his planing mill in operation again, after a thorough overhauling, which renders it "as good as new." He is procuring a drying kiln, which will enable him to transform green timber into seasoned, within five days. This has been much needed in Orillia, where seasoned lumber is more difficult to obain than in places distant from the mills.—*Packet.*

The mill owners at the Chaudiere have to pay for driving, towing and boomage, as well as for passing their logs through Government works, it does not pay them to bring down logs of 12 inches and under in diameter, apart from the fact that their slabbers, nearly all our mills being fitted up with upright gangs, are never set for less than ten inch stock; such small logs cost more than they are worth when sawed up.

Lumber cutting as well as lumber shipping in Ottawa is now at low water mark. Numerous barges are lying about waiting for a load and there is nothing to load with. It is said that up till August the shipping interest was a booming one, but since then there is difficulty in moving the boats about at the lumber wharves, for their bottoms scrape and bump on the rocks to a troublesome extent. Never since the mills were erected at the Chaudiere has the water been so low.

Mr. A. J. Maxwell, of Mattawan, states that the Mattawan is a lively place just now. Every day shantymen are pouring in from Ottawa on their way to the various lumber shanties, and the lumbermen are shipping large quantities of supplies to the Mattawan to be taken by teams to their various shanties. All the firms this year expect to do fully as much as they did last year, a little more perhaps, to make up the shortage in the cut last winter owing to the depth of the snow.

A large lumber operator on the Whanapitae is reported as saying: "I think we'll get our square timber to Quebec by the water ways just as speedily and as cheaply as by way of the C. P. R. to Papineauville, and then taking the Ottawa river. As for water there is no better river in Ontario to drive than the Whanapitae, there is always plenty of water and the river is not broken up by rapids and the timber can be rushed into the Georgian Bay in double quick time."

A few days ago men belonging to the firm of McLaren & Edwards, saw-mill owners, of Carleton Place, were in Almonte inspecting the slide, taking measurements of necessary repairs, etc. It is their intention to float down their logs anyway, whether the slide is repaired or not, taking the falls for the highway, as they did last summer. It is said to be their present intention to close their Carleton Place mills and remove the plant to Rockland, on the Ottawa river, where mills will be erected to receive the machinery.

The Midhurst grist and saw mills recently burnt, said to be the oldest in the country, were erected by George Oliver on the site granted by Government in 1819. In the year 1841, Mr. Boys, the late County Treasurer, purchased them, improved them and worked them for several years, doing a large business. At this time a distillery was attached to the mills, which supplied all the hotels north of Bradford, and the grist mill did the grinding for all the settlers between Barrie and Lake Huron.

The bush fires around Eganville are all out and reports come from all sides of the great amount of valuable lands cleared by the fire. Hundreds of acres of beaver meadows and alder bushes were burnt over so that they are entirely cleared, and people are commencing to plow them just like prairies, only they are a lot richer than most prairies. Thousands of acres of fine swamp land is laid flat, that is a tract of fifteen square miles was burnt, that will undoubtedly ere long make the finest valley of farming land in the country. Most of the men in this county who were determined on going to the shanties this fall have now to remain at home clearing land. In this instance, at all events, the bush fire has resulted in doing good instead of harm.

Messrs R. W. Thistle & Co. expect to cut a larger number of saw logs on the Kippawa this year on their limits, which have only been worked to a very small extent for the past two or three years, and it is probable that Messrs. Grier & Co. will cut about double what they did last year in order to keep both their mills at Ottawa working. J. R. Booth will cut more logs this year on his Temiscaming limits, than ever before, and Bronson & Weston will cut extensively on their Bonchere limits. Hamilton Bros. will cut a little more than usual on the Dominion limits, and Moore & Co. will turn out a large quantity of square timber from their Kippawa limits.

The prospect for Ottawa securing the mills of the Canada Lumber Company, of Carleton Place, does not appear certain after all. There will be a change in the location of the big establishment, but the advantages of half-a-dozen sites have not been fully considered. This was in effect the information given by Mr. W. C. Edwards, M. P., to a *Journal* reporter. Said Mr. Edwards: "The firm has come to the conclusion that the sawing capacity of the mills will have to be increased. This cannot be done at Carleton Place, where the water-power, for one thing, is not sufficient for our requirements. Then again better shipping facilities can be secured elsewhere, the railways not allowing competitive rates from Carleton Place. Ottawa is among the list of available sites. Mr. Folger of the Kingston & Pembroke railway has also brought before our notice the advantages of Mississippi, which is west of Carleton Place. Different points down the river, such as Point Claire, sixteen miles above Montreal, and St. Anne's, a few miles further up, are available. The proximity of these latter places to market is considerable advantage, and we think logs can be towed that distance and sawn there at a greater profit than to saw the lumber at Carleton Place and freight from there. The nearer we are to Montreal, too, the better chance we stand of disposing of the cuttings and refuse. No decision has been reached regarding the use of steam or water power. According to present indications the mills, wherever they are located, will be running next spring. About three hundred men are employed now at Carleton Place, and work is kept up night and day." Mr. Edwards added that exemption from taxation was not as great a consideration as the attainment of the best shipping facilities.

QUEBEC.

The lumber firm of Malo & Thomas, Montreal, has been dissolved.

The Lachute mills are again running full time owing to the raise of water in the river.

The Quebec *Official Gazette* advertises the ground rent on timber licenses at $3; stumpage dues, $1.30 per 1000, and the dues on spruce logs 65 cents per thousand feet.

The Canada Paper Company propose cutting some 25,000 cords of wood the coming winter for grinding into paper pulp at their pulp mills at Windsor Mills, Ont.

The Upper Ottawa Drive Association is constructing dams in the Cascades Rapids, at Portage du Fort, for the purpose of facilitating the driving of logs through that part of the Ottawa river.

There will probably be a scarcity of lumber vessels at Montreal this autumn, in the opinion of the *Herald*. There are about eight cargoes yet on the Export Lumber Company's wharf waiting transportation. The rate now offered is $12, an increase of $1.50 over that given in the spring. There are still some vessels unchartered at Quebec and no doubt several of these will come to Montreal to load.

We learn from the Quebec *Chronicle* that the timber market has been pretty quiet, and no sales were reported last week; though, since we last gave a report of the market, we understand three large Ottawa rafts changed hands at 24 cents for 35 feet; 26 and 28 cents for 58 feet, and 22 to 22½ for 50 feet; the former being 1886 timber and the latter being 1887 wood. The demand for old wood is sluggish, and the stock at present on hand comes under that category.

Owing to the fire in its premises, the Montreal Furniture Company is in financial trouble. Bulmer, jr., & Bro., and Kerr Bros., large creditors presented a petition in Court, asking for an order to wind up the company, to avoid useless litigation, as the company was now unable to meet its liabilities, and a number of actions had already been instituted. The application was not opposed, and the order was granted, Mr. H. Bulmer being appointed provisional liquidator.

The following comparative statement of timber, spars, staves, etc., measured and culled to Oct. 26th, is furnished by the Quebec Supervisor:—

	1885.	1886.	1887.
Waney White Pine	2,830,948	3,047,480	2,020,094
White Pine	2,711,467	2,941,158	1,168,143
Red Pine	70,758	271,693	591,040
Oak	1,566,968	1,036,766	746,243
Elm	1,018,932	398,950	221,300
Ash	287,595	134,472	113,478
Basswood	95	432	535
Butternut	3,265	192	1,079
Tamarac	3,622	6,864	5,507
Birch and Maple	381,085	227,183	116,694
Masts and Bowsprits	— pcs	104 pcs	— pcs
Spars	17 pcs	— pcs	— pcs
Std. Staves	77.7.3.20	65.1.2.28	44.1.1.15
W. I. Staves	185.9.3.25	128.7.0.29	156.0.0.5
Brl. Staves	209.2.0.24	19.0.3.16	15.4.0.11

MANITOBA AND THE NORTHWEST.

Clark & Sutherland, lumbermen, St. Boniface, have sold out.

Fotheringham's new mill at Rainy River, a few miles above Rat Portage, will cut 30,000 feet daily.

The Keewatin Lumbering and Manufacturing Company has increased its capital stock from $160,000 to $500,000.

The Minnesota and Ontario Lumber Co., have opened a branch yard at Oak Lake Man., with Mr. Chisholm in charge.

Mr. Peter McLaren will build a saw mill at Macleod, Alberta. The machinery for the mill has been shipped. The mill will be supplied with logs from the foothills of the mountains.

Clark & Sutherland, of Winnipeg, who bought out the stock of the late Winnipeg Lumber company last spring, have sold out their branch lumber yard at St. Boniface, Man., to Mr. Fred. Walker.

It is reported that the timber country on the Red Deer river, northern Alberta, has been almost destroyed by fire this season. This is the district where the Alberta Lumber company are now erecting a saw mill.

On Lake Winnipeg matters in connection with the lumbering industry are quite active. Every day or two steamers with barges of lumber are arriving at Selkirk, and every available boat is engaged in getting out lumber before navigation closes.

The new Eau Claire company's mill at Calgary is now thoroughly in operation and cutting about 30,000 feet per day. A plentiful supply of logs is on hand to keep the mill busy for the balance of the season, and there will be a surplus over to commence with in the spring.

There is a good deal of speculation going on among lumbermen as to who are operating the Rainy Lake company's mill at Rat Portage. This company it is well known has long been in course of liquidation, and was some time ago put up for sale, but was bid in by the principal creditors—the Bank of Montreal. The claim of the bank against the estate is a very heavy one, running up in the hundreds of thousands. The mill is an excellent property, and the estate also includes valuable timber limits; but it is doubtful if a large proportion of the claims against the estate will ever be met. The heavy indebtedness is a relic of the old boom days, when money was plentiful and could be obtained readily for almost any scheme, often without investigation into the value of the security offered. Lately preparations have been made to operate the mill on a large scale next season, and mill men are enquiring who are the movers in the matter. Many think that the bank is now the real owner of the property, though the liquidator is still in charge. About 10,000,000 feet of logs will be taken out this winter from the limit of the company on Rainy Lake and tributaries, and men have already been procured for this purpose.

Contracts for the construction of two railways have been let within the past week or ten days, in the Canadian northwest. One of these is known as the Great Northwest Central. The proposed route of the road is from Brandon, on the main line of the Canadian Pacific, 150 miles west of Winnipeg, northwestward to Edmonton, a distance of nearly 1,000 miles. About 50 miles will be completed this fall and 100 miles next season. The projectors say that in time the road will be extended through the Rocky mountains, via the Yellowhead pass, to the Pacific coast. This is the route which it was originally intended the Canadian Pacific would take. The country is prairie as far as Edmonton, but beyond that is timber mostly. The other railroad is the Port Arthur and Duluth, which will run from the place named, on Lake Superior, to the Minnesota boundary, a distance of about 90 miles, where it will be connected with the Iron Range road from Duluth. About forty miles are now under construction. This road will open up a good timber country, and also one of the richest mineral regions in the world, silver and iron being the principal metals found. United States capitalists are largely interested in the territory.

A correspondent writing to an American exchange says: Manitoba is usually spoken of as a country of rolling prairies, illimitable prairies, etc., and those who are not personally acquainted with the region would be led to believe that the topography of the country presents a continuous landscape of meadows. Such, however, is far from being the case. The southern boundary of eastern Manitoba is also about the northern boundary of the true prairie country. A few miles north of Winnipeg, a solid timber country commences, and extends northward to the limit of vegetation. The timber, however, is usually of a light nature, and farther north it is simply scrub. Spruce, poplar, tamarac, jack pine, white birch, etc., are the principal varieties. Spruce is about the only thing used for lumber. Instead of being a prairie country, the northern portion of the province is in reality more of a timber country. There is a little pine, but the area is very limited, to an odd tree here and there. The number of saw mills will show that there is some timber in the country. There are about forty mills located at points through the country, not including mills to the east of the province, in the Lake of the Woods district. Were Manitoba the country it is often supposed to be, there would be little use for these saw mills, except as ornaments, and your readers will be well able to estimate the ornamental properties of the average saw mill. About the dismantled and partially dismantled ruins of the old mill, which stands as a remembrance of the early days, and which was itself the pioneer of civilization, there certainly is something sublimely ornamental, but even the more poetical mind will find little beauty in the saw mill in its palmy days. West of Manitoba the northern boundary of the timber belt is found farther to the north, and here the true prairie comes in, only broken by occasional patches of cypress and cottonwood.

NOVA SCOTIA.

Mr Robertson, the projector of the big timber raft at the Joggins, expects to launch the raft in the November spring tides. Should the launch be successful another raft will be started immediately, Mr. Robinson having signed a contract with New York capitalists to that effect.

The demand for lumber, says the Bangor *Commercial*, has continued unabated, and the market is active, with no falling off in prices, the reverse of the usual state of affairs at this season of the year. Receipts of lumber at the leading centres have been large but have found a ready sale, and manufacturers have had all the orders which they care to fill, indicating a firmer tone for the fall trade, with no accumulation of stock at points of shipment. In fact the demand promises to keep the mills busy up to the close of the season. The general outlook for the remainder of the year is good, with fair profit both to dealers and manufacturers.

There is a boom in the shipbuilding yards of Lunenburg, no less than six fishing schooners being in course of construction. Six others will be built during the course of the winter, which vessels will be a desirable addition to the fishing fleet of that port. The people of Lunenburg county are almost wholly of German descent, and nearly the whole population is engaged in the deep sea fishery. The vessels are models of adaptability for the business, and are said to be stronger than American craft of like class.

NEW BRUNSWICK

At St. John the mills are likely to stop running shortly for want of logs.

The Woodstock wood working factories are crowded with orders and are working extra time.

During the last fiscal year the Cumberland Coal and Railway Company, of New Brunswick, carried nearly fourteen million feet of lumber over the line.

The Hilyards, at St. John, will have a mill equipped and ready to operate by December 1st, to replace the one recently burned. The main structure is 45x60, and another 40x52.

Mr. J. L. Cutler, a large shingle and short lumber manufacturer in Bangor, Me., was in St. John recently, looking up a site for a mill. It is understood that an offer has been made to purchase the Stetson mill in Carlton.

The boiler of J. & W. Atkinson's steam saw mill at Moncton burst some days ago making sad havoc among the men generally. The engineer is not expected to recover from the injuries received. Some five others were hurt, not seriously though.

UNITED STATES.

The fires in Michigan prairies are about all out.

There is still considerable disturbance in railroad rates in the western States.

Chas. M. Charnley, the well known Chicago lumberman has assigned on a judgment of $100,000.

On the Saginaw river, in Michigan, the burden of complaint for some weeks past has been the steady accumulation of lumber on the mill docks.

Shippers have been complaining a good deal this season of scarcity of cars, and several times it has been reported from different points that a very respectable car famine existed.

The hopes of the holders of lumber have been slightly revived of late by the announcement that the Tonawanda dealers have advanced the price of all grades of lumber $1 per thousand.

Now that it is evident that the log supply for the mills at Muskegon and Saginaw is a thing of but a few years, the newspapers over that way are discussing the feasibility of rafting logs down the lake to the mills.

Everywhere in the northwestern States it has been noted this season that the shingle market has improved. It appears, though it is impossible to be quite certain of the fact, that proportionately more shingles have been sold than lumber. It is alleged by some operators that this has been what they call a shingle year; that there has been a general demand among consumers for shingles beyond the usual call.

Makers of planing machinery are reported to be doing a very large business this season. Many of them, if not all of them, are away behind with their orders, and they are still receiving new contracts faster than they are filling the old ones.

By the explosion of a boiler in David Young's saw mill, Amanda, Ohio, George Lape, Perry Lape, Simon and Amos Young were instantly killed, and Mrs. Simon Young, who was at the time 200 yards from the mill, was seriously injured.

The scarcity of walnut in the Eastern and Middle States has sent the prospector westward, and the Indian Territory now contributes this wood, of which it is no uncommon thing for these hardwood dealers to sell a dozen car loads without removing them from the track.

The present year has seen something of a boom in white cedar. It began early, and has lasted well through the season, with apparent vigor enough to carry it forward into another in pretty good shape. The cedar industry has prospered largely, if not mainly, as a result of the activity in railroad building.

On Friday morning, Sept. 30th, at the age of 83, occurred the death of Joshua Rathbun, one of the oldest and best known lumber merchants in the Albany market. Deceased was the founder and senior member of the Hardwood firm of Joshua Rathbun & Co., and conducted a wholesale business in the Albany lumber District since 1845.

A company has been organized at Sault Ste. Marie, Mich., to utilize the power of St. Mary's river, connecting Lake Superior with Lake Huron. There is a fall of eighteen feet in a distance of about three-quarters of a mile. It is proposed to cut a water power canal from a point above the falls to a point below, from which an almost unlimited flow of water can be obtained. It is said that the capital, $1,000,000, is secured, and that the canal is to be completed in two years.

The confidence in a good trade next season throughout the country is shown in the extensive preparations for work in the woods this winter. If the signs are worth anything, more than the average stock of logs will be put in and the supply now back will ensure an early commencement of sawing at all the mills. Under these circumstances a very large trade will be necessary next season to sustain the values which now prevail. There is little disposition to shade now, and lumber may be said to maintain a steady value all around.

Lumber shipments from Muskegon, Mich., and suburban ports, this year show the following monthly totals: April, 42,753,000 feet; May, 78,331,000 feet; June, 84,263,000 feet; July, 94,406,000 feet; August, 84,514,000 feet; September, 73,665,000 feet; total, 457,932,000 feet. Shingle shipments were as follows: April, 15,390,000; May, 49,695,000; June, 37,861,000; July, 44,126,000; August, 46,475,000; September, 26,950,000; total. 220,524,000. Other totals for the six months were as follows: 22,989,000 lath, 26,253 cords of slabs, 816,000 pickets, 15,900 railroad ties, and 845 tons of sawdust. On one day nearly 6,000,000 feet of lumber were shipped. It will be seen that July was the heaviest month, but that a large average was maintained from May to September, inclusive. In addition to these figures there has been an important increase in rail shipments over any previous year.

EUROPEAN NOTES.

Business in the pitch pine trade seems dull and sales very difficult to effect.

The Quebec built wooden barque *Jane Law*, 1,273 tons, belonging to Mr. David Law, has been sold to a Glasgow firm, the purchase price being stated at £500. The *Jane Law* was built at Quebec in 1869, and was subsequently employed in the timber trade, but during the late depression she has been laid up in Garelock. On Saturday the barque was towed to Glasgow, where she will receive a thorough overhaul previous to loading coal for Demerara. Another timber ship, named *Forganhall*, 1,070 tons, belonging to Greenock, built at St. John, N.B., 1857, was exposed for sale, by public roup at Greenock, at the upset price of £450, but there being no offer at that price, the sale was adjourned.

The quantity of Quebec log timber at Glasgow is shown to be lighter on the whole than at the corresponding date last year and the one previous, which is due to the very restricted imports of logs from Quebec to Clyde this year; and prospective imports are so limited that the diminution in stock compared with former years may be expected to become more marked. As regards the consumption of Quebec log timber of late, the following is an approximate note of the principal items:—

	Quarter ending 30th Sept., 1887.	Quarter ending 30th Sept., 1886.
Waney boardwood	2,800 loads.	3,600 loads.
Yellow Pine Timber	3,800 "	4,400 "
Red Pine	700 "	600 "
Oak	1,000 "	1,300 "
Elm	310 "	500 "
Birch (Quebec and lower port)	550 "	750 "

Of Quebec deals it will be seen there is a big stock, while the quantity of lower port is moderate. The consumption for the past quarter has been about 140,000 pieces of the former and 180,000 pieces of the latter.

NEWS NOTES.

H. Dinning & Co., ship builders, Quebec, have assigned.

Saw and File works are shortly to be established at Peterborough, Ont.

The *Register* wants a copper shop on an extensive scale established at Norwood Ont.

It is said that one of the lumbering firms now doing business at Keewatin, will erect a large barrel factory during the coming winter.

Mr. E. H. Smith has sold 200,000 feet of his fine Basswood lumber and will begin shipping it on Monday next.—*Burk's Falls Arrow.*

The Christy Lumbering Company, of Muskoka, have purchased the Strickland limits north of Minden, and commenced operations in the township of Hindon and Oakley.

The Lake of the Woods Milling Company's lumber mills at Keewatin, are to be lighted with Edison's incandescent electric lights, the plant to be furnished by Mr. A. J. Lawson, of Montreal.

Mr. Campbell, of South River, has a mill in full operation under the superintendence of Mr. Fred. Thomson, which next season when in full blast, will have an output of 3,500,000 feet.

One of the fingers of H. Clegg was cut off obliquely by a saw in Gilmour's mill at Crow Bay, Seymour. The bone was cut even by a surgeon while the sufferer was under the influence of chloroform.

Mr. J. E. Gould, of Uxbridge and Coboconk, Ont., has a big contract on hand in supplying the Grand Trunk with 300,000 railway ties. It will give the wood trade in the north country a regular boom this winter.

The Parry Sound Lumber Company are busily engaged in building another new mill. They intend to put in three of the best shingle machines and a planer. The mill is being erected on the flat behind the company's east tramway.

The big mill now run by Messrs. Melville and Cooper closed down after a most successful season's run, says the Collingwood *Bulletin.* During the time it was in operation from the 25th of May to the 6th of October it cut about 6,000,000 feet of very superior stock.

The Hastings Saw Mill Co. have been incorporated at Victoria, B.C., with $150,000 capital. The incorporators were Messrs. W. C. Ward, R. H. Alexander, C. J. Dupont, F. S. Barnard, J. C. Nicholson and J. L. Raymur, with head offices at Victoria.

The cooper shop belonging to the Imperial Oil Co. at Petrolia, Ont., was totally destroyed by fire October 29th. The loss is about $3,000, fully covered by insurance. About 40 coopers were employed in the shop, who lost all their tools. Cause of the fire unknown.

Frank Loucy, of Minden, met with a fatal accident while working in Michigan. He was engaged loading a car with timber, when he slipped and fell and a log fell on him. A fellow workman, a stranger, brought the body home.

Cars loaded with lumber for the United States have been detained at Moncton, N. B., on account of some technical infringement of the law governing custom entries. A penalty of $250 is provided for, and this the authorities threaten to enforce, unless all the regulations are complied with.

Exports for the quarter ending with September, from Chatham, Ont., to the United States, were of the value of $119,287. Forest and farm furnished nearly all of them. Some of the principal items are:—Staves, hoops etc., $53,902.34; Lumber and planks, $7,879.45; Logs, $5,109.00; Wood $3,409.

Bangor, Maine, has a new enterprise. Every mill on the river wastes great quantities of saw dust. It has not been available for shipping because of its bulk. Now a hydraulic press has been invented to press the sawdust and reduce its bulk some 75 per cent., and in this shape it can be easily handled.

Notice is given from the Department of Crown Lands, Toronto, Ont., that timber berths in Livingston, McClintock, Lawrence, McLaughlin, Hunter, Bishop, Devine, Butt, Biggar, Wilkes, Balantyne, Chisholm, Cainsbay, Pentland and Boulter townships will be offered for sale by public auction on Thursday, December 15th.

The outlook for next year in London, England is encouraging. Considerable sales have already been made of various descriptions of goods, including white battens, at the highest rates current this season. Telegrams recently received from Australia report a decided recovery in the timber trade there, so that a good demand for the higher qualities of deals may be anticipated; but it is too late for shipments to be made this season, as nothing but bright and well-seasoned goods are suitable for that market.

At Pembroke, Oct. 28th, Walter Beatty's sash and door factory, together with Angus' paint shop, Shield's hotel, Mr. Beatty's lumber yard and other properties were destroyed by fire. Mr. Beatty was one of the largest contractors of the place, and his loss at this time of the year will be more particularly felt. His loss is estimated at $17,000; insurance $2,500.

An Ottawa despatch says: In order to insure exporters of lumber and other goods from Canada making their entries as required by law, it has been ordered that a penalty of $200 shall be incurred by any infringement of the rules, and as a first step the collector at Moncton, N.B., has detained a number of Intercolonial railway cars with a view to carrying it into effect. Hitherto the Customs athorities have had much difficulty in getting exporters to comply with the regulations in many ports.

Some of the industrial enterprises carried on and improvements being made at and about Nashwaak, N. B., are described in the St. Stephen *Courier.* The Alex. Gibson, jr., saw mill, containing five gangs, is running at its full capacity, giving employment to sixty men, and with a fair head of water cuts about 150,000 feet a day. It is carried to St. John from whence it is shipped to all parts of the world. Further down the river there is a three gang steam lath mill, which is said to be the largest of the kind in America. Over fifty men are employed, and the average daily output is 120,000 laths.

The activity with which lumbering operations are to be carried on this coming season can be judged from the fact, says the Manitoulin *Expositor,* that in addition to large shipments already reported, the Atlantic on her last trip up left five cars of lumbermen's supplies at Meldrum Bay and three at Cockburn Island and that there are about eight cars to be shipped to those ports yet.

Mr Robert Conners, the big lumber operator of the St John, is preparing to carry on heavy operations this winter in the Temiscouata lake region. He has struck districts covered with pine and spruce which have never been lumbered on before, and expects to cut 12 or 15 millions this winter. His lumber will be put in Lake Camino, which is connected with Lake Temiscaouta. He has seventy men in the woods at present.

Hall Bros. began as general storekeepers at Feversham, Ont., in 1883. The senior member of the firm had much experience in preaching but none in storekeeping. The other brother was a farmer, not a very much better equipment for business life. They bought a saw and grist mill and a store, paying about $7,000 for the same. In 1886 the mills were rented and the lessee lately absconded. They are understood to have lost by him, and have made an assignment.

The present condition of the timber trade in London may, we consider, be fairly regarded as in a healthier state than for some years past. A good deal of unsoundness has been removed, and the trade has been conducted in a quieter and more cautious manner than before. Stocks also have been kept in moderate compass, and the buying has been of a hand-to-mouth character. Prices have remained fairly steady, with an occasional slight advance in some descriptions, which, with the lessened number of failures, has enabled the trade to be carried on with some profit.

According to the statement received from the Export Lumber Company, New York, the amount of white pine lumber exported from there from January 1 to September 30 was 48,396,000 feet. The River Platt took the largest amount—12,562,000 feet—and the other ports, numbering 75 or so, all the way from 3,574,000, down to 3,000 feet. The shipments were larger than for the corresponding period in 1886, but not so large as in the two succeeding years. The heaviest shipments were made in March, when 7,289,000 feet were sent abroad.

St. John, N. B., is again stirred up to the importance of having a dry dock. In 1882 the local Government passed an Act providing a subsidy of $50,000 for such a dock, and in the same year the Dominion Government passed an Aet providing for a subsidy of two per cent. for twenty years on the cost of construction, the subsidy not to exceed $10,000 a year. The company formed to build the dock are desirous that the Government should make them a loan of $200,000 at four per cent interest, holding a first lien on the land, dock and revenues as security. It is estimated that the dock will cost about $300,000.

It is rumored among lumbermen that the E. B. Eddy Manufacturing Company of Hull, Que., will this winter purchase the extensive timber limits of Messrs. McLachlin Bros. on the Upper Ottawa. The price mentioned is in the neighborhood of $2,000,000. For a number of years back the E. B. Eddy Co. have had an insufficient supply of saw logs and have been compelled to purchase from jobbers and other lumbermen. This season the company ran short of logs and were somewhat hampered in their operations. In consequence of this the firm have, it is said, decided to purchase the extensive limits already mentioned. It is estimated that the lumber out of this district during the coming winter will reach 780,000,000 feet.

A general opinion exists that f.o.b. business is finished for the season, and with, perhaps, a few stray transactions, we do not expect to hear of the closing of further contracts this autumn, as neither sellers or buyers are prepared to make sales at the sacrifices rendered necessary by the high freights. On the one side a disposition is manifested to carry on through the winter with a small stock, tn the hope that the loss in the volume of business will be more than compensated by an increased profit, while, on the other side, shippers seem determined to show their ability to carry over their stocks till next year, and benefit by the spurt which would probably thereby be given to opening prices.—*London (Eng.) Exchange.*

The Canadian patent law enâcts that the importation into Canada of goods protected by a Canadian patent, after the expiration of one year from its date, shall void the patent. The Commissioner of Patents, however, has power to grant, upon petition filed before the expiration of the year, further time, not exceeding one year, within which to import the goods. It is the practice of the office to grant not more than six months at a time. The law also requires that Canadian patents must be put in operation within two years of their date on pain of voiding the grant, but it empowers the Commissioner of Patents to extend the time upon petition filed before the expiration of the two years. This privilege is used somewhat extensively, a year being generally granted upon one petition.

We have received a communication from Mr. A. C. Manzer, New Westminster, Brit. Columbia, giving an account of a big shipment of big timber from that place to Shanghai, China, by the British Barque Penshaw, Capt. Parker. We cannot give it in detail, but will summarise it.

42,000 feet	1 and 1¼x6	T and G.
28,000 "	1 and 1½x12	20 to 40 feet
84,000 "	2x10 and 12	24 to 40 "
7,000 "	3x6	24 to 40 "
320,000 "	3 to 12x6 to 16	30 to 40 "
56,000 "	4 to 12 x 8 to 16	45 to 50 "
63,000 "	6 and 10 x 16	51 to 60 "
14,000 "	18x18	61 to 70 "
14,000 "	20 and 22 sq.	71 to 80 "
21,000 "	14x14	85 to 90 "
21,000 "	16x16	88 to 90 "
21,000 "	20, 22 & 24 sq.	81 to 90 "
7,000 "	24x24	91 to 100 "
700,000 feet.		

UNITED STATES GENERAL REVIEW.

Since our last issue trade in all sections is reported more active. As the close of the season approaches, more activity is manifest on the part of dealers here to complete their stocks for winter business; on the part of manufacturers who ship by water to clean their docks as far as possible, and upon the part of contractors and consumers to clean up the work in progress. Reports from the East indicate a very active October business. Sales have been larger than was anticipated, and dealers who thought they had stock in pile adequate to all winter demands find that they will need to seek the supplementary sources afforded by car shipment long before navigation opens in the spring. Many are straining every nerve to replenish before the lakes freeze, but freights are advancing and prospects are dubious for a protracted season of navigation on the lakes and canals. It is safe to say that there is no surplus of stock in Eastern yards. A telegram received here a day or two ago asked for figures on 5,000,000 lath to be loaded on vessel for Eastern market, which would indicate that the Eastern market was not plentifully supplied with that article. Quotations of $2.05 in reply would indicate that the dealers here do not care so largely to deplete their present stock at figures below present quotations of $1.90.

From the southeast portion of this State we learn of heavy sales during October, depleting the yards far beyond earlier calculations, and traveling men assure us that this is but an index of the general condition throughout the State. It is now generally conceded that the corn crop will be from 25 to 35 per cent. larger than was feared a month ago, and this has given rise to greater buoyancy of feeling on the part of the consuming community, which is buying lumber more freely. From nearly every section of the West we have reports of an increased demand for lumber, which indicates an exhaustion of all stock now in wholesale yards long before another season's supply can replenish it. The readiness with which lumber is now handled by rail to all sections of the country, precludes the necessity on the part of retail dealers in the country to lay in large supplies in the fall, and present appearances indicate that there will be a lively car trade throughout the winter. The advance in freights added to the inclemency of the weather (the past two weeks having been among the most disastrous upon the lakes which we can recall in the past thirty-seven years) will no doubt retard the movement of a large part

of the lumber at Lake Superior ports, which had been counted upon as a portion of the available stock of this and other lake markets. This will be available for early spring trade. It is early to speak of the result of the season's work at the mills, but what with low water in most of the streams of the Northwest, and the shutting down of mills with an average loss of at least a month of the sawing season, we doubt if the increased capacity and the facilities afforded for night sawing through the use of electric lights will compensate to bring the season's cut up to a full average.—*Chicago Lumber Trade Journal.*

Condemned Saws in Perfect Mills.

TAKE two saws from the same maker, that are alize in size, guage, speed, feed and hammering, and running in the same kind of timber. One saw works well when often the other will not work at all. They, being alike, should certainly run near enough alike that neither should be condemned. What can be the trouble? To take the theory of some saw makers, we can not get out of the trouble, they claiming that no two saws can be made to run alike, same size, etc. We take it for granted that they allow us the discrimination, or the assertion would not be made ; so when we find that two saws do not run alike, there is a vast difference in the saws somewhere.

When we take into consideration temper, teeth, etc., we find often why two saws made to run alike do not. We hear a great deal said about more teeth, theories being set forth claiming the more teeth the saw has the more feed it can stand, and make better lumber. To show how a great many are thus deceived when certain conditions are not considered. I know of a man who has a good mill, making good lumber, running on four-inch feed in yellow pine. This idea of teeth struck him and he concluded to increase his capacity. He made due allowance in his estimation of how much more he could cut, and so he cut his claims in half. He was running 50 teeth in his saw, but concluded to order 90 teeth. He ordered of the same saw maker, and the saw came, hammered properly, and to speed. It was tried. It wouldn't go straight. Several trials were made. Saw heated so badly on the rim that it was impossible to run it. So it was sent back to the saw maker and he couldn't tell why the saw did not go. The trouble was the saw had too many teeth, and the feed (4-inch) was not sufficient for each tooth to cut a chip but cut, or rather scraped, the dust so fine that it escaped on each side of the throat of the teeth, and binding between saw and board, heated the saw. If this saw could have had the feed increased to eight inches it would have worked better. Both saws were alike. One run well ; the other would not run at all.

But, says one, they were not alike, one having 40 teeth more than the other. We will then take them of the same number of teeth, speed, feed, guage, timber, etc., hammered alike, and yet one saw will run well and the other will not, one being of a milder temper than the other. The mild temis soon condemned, the higher temper running well. The trouble is this : the mild temper expands more from centrifugal force, and from the start is weaker on the rim and soon lets down ; the higher temper remaining more firm, has slightly changed in its adjustment, The other is laid aside or sent back to the saw maker. The mill man is impressed that saw making is a kind of guess work, and that occasionally they make a good one. I am not claiming the high temper to be the best of the two when certain things are taken into consideration. The milder temper might have suited him best ; speed might have been high enough to crack the higher temper, then the milder temper would have been the best saw. Two saws can be made to run exactly alike even when there is a slight difference in the temper. There are saw makers that claim to make saws to run alike, and so they do. This little difference in temper is considered something, and the saw is hammered a little more open, and when a man jumps up to twice as many teeth on the same saw, the saw maker notifies him that the saw will not work satisfactorily and explains why ; and if the saw is sent to him he does not blame the saw maker if it does not go right. There can be a little more deviation to this teeth business when a man is sawing soft timber, but in hardwood the teeth are confined to a limit.—*Foreman, in The Woodworker.*

A Steam Wagon.

At Auburn, Maine, is a novelty in the shape of a common wagon, having all the appearance of a common Concord wagon, with the exception that a part of the boiler and its covering will show above the body of the wagon. All the motive power is concealed under the flooring. The power is furnished by two small engines of about three-horse power ; the boiler is made from iron pipe in spiral form ; the wagon body contains two seats, easily holding three each. A small tank for holding water is placed in the forward end of the body in a place especially adapted for it, and a small bunker for coal on the side and end.

The Kiln a Positive Necessity.

Where time is of little consequence and ground room of no value, hardwood manufacturers can air their lumber generally to good advantage In fact, some varieties of wood present a better appearance by air-drying, as the kiln is apt to crack some woods and develop the defects, especially if any haste is attempted in the process. This is clearly the case with cherry, and kiln-dried stock will run more to the lower grades than if air-dried. But there is a southern wood—the North Carolina pine—that requires the kiln to bring it to a state where it is proper to use in house finish. Boards which have been on sticks 60 days and put in the kiln will shrink one-eighth of an inch in width in a twelve-inch board. Sawyers who understand the nature of the wood, saw 12¾ inches for 12-inch boards, and practical results have shown that the shrinkage in thoroughly drying amounts to that. Any lumber sent to market without being fully kiln-dried is almost sure to give dissatisfaction in the working, as the matching will soon begin to gape and unseemly seams will sour even a sweet tempered man. This is doubtless the cause of the numerous complaints from the eastern markets, especially New York. There is only one proper method of curing North Carolina Pine and that is to dry it in a kiln before shipping. The evidence before us is convincing upon the point and it is and will be impossible for shippers to send lumber to market which has been on sticks for a number of months and ship as kiln dried without running onto a snag, and in the end injure their own business. Every mill should be equipped with a kiln. The present requirements of the market make it a positive necessity

Band Mills and Small Logs.

All reports of band saws hitherto have been in regard to putting them in, and of their wonderfully successful and economical operation after they have been set up, and now, for a change, comes the news that one has been tried and found not to be the right thing in the right place. The superintendent of the Penoyer Brothers' saw mill, at Oscoda, Mich., who has had a band saw under his charge for some time past, is quoted as saying that in his judgment it is not the thing for small logs, with which rapidity of manipulation is of more consequence than the highest economy of sawdust. Though this has not been determined upon, it is thought likely that the proprietors of the mill in question will remove the band saw, which has never been put forward as a desirable machine for small, cheap timber. It has been omitted from the equipment of some new mills of the most modern construction, in the building of which no expense has been spared, simply because the timber to be cut is not good enough to warrant the additional expense of band sawing. Those who have in mind the purchase of band saw mills, will do well to make some figures before they place an order, especially if their pine runs largely to small logs of medium, or low grade. For the cutting of such, a circular saw is doubtless the cheaper tool, and will remain so until pine is a good deal scarcer than it is now. Sawdust is worth saving, it is true ; but sawdust worth $25 a thousand will justify a greater expense in saving it than will that which could not be sold for more than $9 or $10. There are two sides even to band saw economy, and it is not wise to rush blindly into a trial without counting both the cost and the profit. To do so may save a disagreeable later surprise should it happen that the cost sums up the larger total.—*Timberman.*

Sawing by the Thousand.

In nearly all the saw mills which "saw by the thousand," lumber is not manufactured as it should be, and there is a great deal of unnecessary waste. The interest of the mill man are not naturally those of the log owner. The mill man generally wants to get as many thousand logs through the mill in a day as possible, and he is not particular whether the lumber is well made or not, or how much material goes into sawdust or mill wood which might go into lumber. The log owner is interested in getting as much good mercantile lumber out of his logs as possible, and he does not care particularly how long it takes to accomplish it so long as he pays for the work by the thousand. Lumbermen who will take the pains to go to the mills where the mill men for the most part cut their own timber, and job and retail their own lumber, will have it demonstrated to them very quickly that better lumber is made in these mills. —*Indianapolis Wood Worker.*

Glasgow, Scotland.

GLASGOW, Oct. 22.—Business on the Clyde is quiet, but there is a little more doing with firm prices. First class square pine is in moderate stock, and ship-builders seem more disposed to supply themselves. There was a sale at Port Glasgow by Hunter & Sheriff on the 20th, chiefly waney boardwood, red pine, pitch pine and spruce deals, when fairly satisfactory prices were realized.

Among the Manufacturers.

The Gutta Percha and Rubber Manufacturing Co., of Toronto, call attention to the fact that Mr. T. McIlroy, Jr., who was their manager, in now no longer in any way connected with the Company, nor authorized to sell or purchase the goods made by the Company. Their advertisement appears in this issue of the LUMBERMAN.

Messrs. Geo. F. Haworth & Co., of Toronto, are pushing work on their leather belt factory, and expect to have it ready for operation early in December. This factory is located in the four-storey brick building at 11 Jordan street, lately occupied by the Grant Lithographing Company. It is being equipped with the best and most efficient machinery, and will be conducted by experienced men.

We have much pleasure in drawing the attention of our readers in general, and the members of the Art Preservative in particular, to the advertisement of the Toronto Type Foundry, which appears on third page of cover. As is stated elsewhere the new outfit with which this paper is printed was supplied from this foundry, and is a fair index of the class of material handled by this firm. Our plant is on the point system of interchangeable type bodies and works admirably. A long personal acquaintance with Mr. J. T. Johnston, the manager of the Toronto Type Foundry, enables us to recommend him with confidence to our contemporaries of the press, as a courteous and obliging caterer to the wants of the craft, and deserving of the most liberal patronage.

The current issue of THE LUMBERMAN contains an unusually large amount of additional advertising, all of which is intended to prove of considerable interest to our readers. Prominent among these is the full page display of Chas. Esplin, Minneapolis, Minn., manufacturer of the Esplin Band Saw Mill. This gentleman having made arrangements with the Wm. Hamilton Mfg. Co., of Peterborough, Ont., for the manufacture of his celebrated band mill, is now able to supply the trade of Canada with complete machines on the shortest notice. The enterprise of the Wm. Hamilton Co. in supplying the latest class of machines is to be commended.

After an absence of a few months the announcement of the Montreal Saw Works again appears on back of cover. This firm is too well and favorably known to need an extended notice here.

The DodgeWood Split Pulley Co., Toronto, who recently sent specimens of their pulleys to Australia for exhibition, are in receipt of numerous enquiries from that country regarding them, and also from parties in San Francisco, California. The article finds much favor in Sidney and other Australian markets, and a good trade is being worked up for them there.

Messrs. Eastman Bros. & Co. of Boston, Mass., are advertising in this issue of THE LUMBERMAN for a large variety of hardwood lumber. We have much pleasure in directing attention to the same.

Steam vs. Water Power.

The cost of steam power in small amounts is greater than in large amounts, but for mills requiring 500-horse power or more as economical results can be obtained with steam as with water, in almost every case. To this add the advantage of a uniform, steady power, independent of the rise and fall of a river, and the saving which this may mean, also consider the better results attained by steam power and we can plainly see why this statement is practically proved at Fall River and elsewhere, and there is no better proof than this, that steam mills can successfully compete with other mills driven by water power.—[*Chas. T. Main, in lecture before New England Cotton Manufacturers Association.*

Gilmour vs. Paradis.

The Gilmours have appealed their case against Father Paradis to the Judicial Committee of the Privy Council. The hearing will not take place till next spring. Mr. Dalton McCarthy, Q. C., will appear for the Gilmours. Father Paradis has been transferred by his ecclesiastical superiors from his parish, Egan, on the Upper Gatineau, to Quebec.

To raise steam to a pressure of 90 pounds, the water must be heated to a temperature of 324° Fah. If a quarter of an inch of scale intervenes between the shell and the water, it would be necessary to heat the fire surface of the boiler nearly 600° or 100° Fah., above the maximum strength of iron.

A Canadian journal has taken a vote among its readers on the question of annexation to the United States. Out of nearly a thousand answers over seven hundred oppose the step while only about two hundred favor it. Votes taken on this side of the line would probably give similar results. Until decisive majorities in both countries favor it a union is quite out of the question. It is an issue of years, of generations.—*Philadelphia North American.*

TRADE REVIEW.

Toronto, Ont.

TORONTO, Oct. 31st—Notwithstanding the apparent stringency of the money market, the building trade and consequently that of lumber, is very good; in fact it may be said to be exceptionally so. How long this state of affars may continue it is hard to say. The demand for lumber of all ordinary grades remain as great if not greater than last month. The complaint of lumber dealers regarding cars is to a great measure done away, the railway companies supplying them in fair numbers. We are having very fine weather, during which the time lost last summer may be to a certain extent redeemed. The continuance of this will afford work to a great many who, but for it, would have been unemployed. Car load lots are finding ready sale. The quantity of lumber unloaded in the railway yards is, comparatively speaking, very small, the Midland noticeably. The Grand Trunk railway continues to charge the 5 cents per thousand for each week and any part thereof. Prices in the yards are the same as the previous month.

CAR OR CARGO LOTS.

1¼ and thicker clear picks, American inspection	$34 00@35 00
1¼ and thicker, three uppers, American inspection	40 00
1¼ and thicker, pickings, American inspection	30 00
1X10 & 12 dressing and better	20 00 22 00
1X10 & 12 mill run	15 00 16 00
1X10 & 12 dressing	14 00 16 00
1X10 & 12 common	12 00 13 00
1X10 & 12 spruce culls	10 00 11 00
1X10 & 12 maple culls	9 00
1 inch clear and picks	24 00 26 00
1 inch dressing and better	18 00 20 00
1 inch siding mill run	13 00 15 00
1 inch siding common	12 00 13 00
1 inch siding ship culls	10 00 11 00
1 inch siding mill culls	8 00 9 00
Cull scantling	8 00 9 00
1¼ and thicker cutting up plank	22 00 25 00
1 inch strips 4in to 8in mill run	14 00 15 00
1 inch strips, common	11 00 12 00
1¼ inch flooring	14 00
1½ inch flooring	14 00 15 00
XXX shingles, sawn	2 40 2 50
XX shingles, sawn	1 40 1 50
Lath, Sawn	1 80

YARD QUOTATIONS.

Mill cull boards & scantling	$10 00	Dressing stocks	14 00@15 00
Shipping cull boards, promiscuous widths	12 00	Picks Am. inspection	30 00
" stocks	13 00	Three uppers, Am. inspect.	40 00
		B. M.	
Scantling & joist, up to 16 ft	13 00	1½-in. flooring, dres'd	25 00 30 00
" 18 ft	14 00	1½ " " rough	14 00 15 00
" 20 ft	15 00	1¼ " " dres'd	23 00 25 00
" 22 ft	16 00	" " undres'd	14 00
" 24 ft	17 00	" " dres'd	16 00 20 00
" 26 ft	18 00	" " undres'd	12 00 14 00
" 28 ft	19 00	Beaded sheeting, dressed	18 00 20 00
" 30 ft	20 00	Clapboarding, dres'd	12 50
" 32 ft	21 00	XXX sawn shingles	
" 34 ft		per M	2 75 2 90
	22 50@22 50	Sawn Lath	2 25
" 36 ft	24 00	Red oak	20 00 25 00
" 38 ft	27 00	White "	25 00 30 00
" 40 to 44 ft	30 00	Basswood, No. 1 & 2	18 00 20 00
Cutting up planks 1¼ and thicker dry	25 00 26 00	Cherry, No. 1 & 2	50 00 60 00
" board	18 00 20 00	White ash, 1 & 2	25 00 30 00
		Black ash, 1 & 2	20 00 25 00

Montreal, Que.

MONTREAL, Oct. 30.—Though business has been quiet and the amount small, prices have been fully maintained. On the other hand there has been no rise, though it is looked for. The exceptional low water has reduced the cut at the mills, and if there is anything like a satisfactory demand prices must go up. The setting in of winter will probably cause an improvement.

Pine, 1st qual'y ₱ M	$38 00	40 00	Basswood, run of log culls out per M	$18 00	20 00
Pine, 2nd " "	28 00	30 00	Oak, per M	40 00	50 00
Pine, shipping culls ₱ M	14 00	16 00	Walnut, per M	60 00	100 00
Pine, 4th quality deals ₱ M	10 00	12 00	Cherry, per M	80 00	100 00
Pine, mill culls, ₱ M	8 00	10 00	Butternut, per M	35 00	40 00
Spruce, per M	10 00	13 00	Butternut, per M	35 00	40 00
Hemlock, per M	9 00	10 00	Birch, per M	20 00	25 00
Ash, run of log culls out per M	20 00	25 00	Hard Maple, per M	25 00	30 00
			Lath, per M	1 50	00 00
			Shingles, 1st, per M	2 00	3 00
			Shingles, 2nd, per M	1 00	2 00

Detroit, Mich.

DETROIT, Oct. 27.—There is some slackness of business, with full stocks at the mills, but prices remain firm, especially in the lower grades. Dry lath have advanced, and there is a demand for materials for car building.

Uppers, Selects, Stocks, etc.

Uppers, 4-4	$45 00	Shop, 5-4, 6-4 & 8-4	$25 00
5x4, 6x4 & 8x4	45 00	Fine common, 4x4	31 00
3 & 4 in	50 00	5x4, 6x4 & 8x4	33 50
Selects, 4x4	38 00	Stocks, 1x12 & 1x10, No. 1	19 00
5x4, 6x4 & 8x4	40 00	1x12, & 1x10, No. 2	16 00
Shop, 4x4	22 00	1x12, & 1x10, No. 3	13 00

Flooring, Siding, Ceiling, etc.

Flooring, select common	22 00	Roofing, D & M	16 00
No. 1 common	18 00	Siding, clear	21 50
No. 1 fencing	16 50	A	20 50
Ceiling, select common	25 00	B	18 50
No. 1 common	22 00	C	13 50
No. 1 fencing	20 00		

Bill Stuff and Culls.

Bill stuff, ordinary sizes:		26 to 28 ft	14 00
12 to 16 ft	12 00	30 to 34 ft	16 00
18 to 20 ft	12 50	Ship culls	12 00
22 to 24 ft	13 00	Mill culls	10 00

Shingles and Lath.

Shingles, clear, 18 in. Ex	3 75	6 in. stocks clear, Ex	4 00
10 in. clear, 18 in.	3 00	5 in. stocks clear, Ex	4 80
6 in. clear, 18 in.	2 75	Lath	2 50

Add for surfacing one or two sides, $1.

Hamilton, Ont.

HAMILTON, Oct. 30.—The situation remains practically unchanged. Building operations have been brisk during the season, but the demand from that source is now coming to an end with the season.

Mill cull boards and scantlings	$ 9 00@10 00	Dressing stocks	$ 6 00 18 00
Shipping cull boards, promiscuous widths	10 00 12 00	1¼ flooring, rough	16 00 18 00
Shipping cull stocks	13 00	1½ flooring, rough	16 00 18 00
Scantling and joist up to 6 feet	13 00	1¼ flooring, dressed	25 00
do up to 18 feet	13 50	1½ flooring, dressed	32 00
do up to 20 feet	14 00	1 flooring, dressed	23 00
do up to 22 feet	15 00	Beaded sheeting 1	28 00 30 00
do up to 24 feet	16 00	Picks, Am. inspection	30 00
do up to 26 feet	17 00	Three uppers Am. In.	40 00
do up to 28 feet	18 00	XXX sawn shingles	2 60 2 70
do up to 30 feet	20 00	Sawn Lath	2 25
Cutting up plank 1¼ and thicker, dry	20 00 25 00	Red Oak	20 00 25 00
Cutting up boards	20 00	White Oak	25 00 30 00
		Basswood No. 1. & 2.	18 00 20 00
		Cherry No. 1 & 2	50 00 60 00
		White Ash No. 1 & 2.	25 00 30 00
		Black Ash, No. 1 & 2.	20 00 25 00

Goderich, Ont.

GODERICH, Oct. 28th.—The state of the trade here is very similar, in one respect at least, to that given by your Toronto correspondent in the CANADA LUMBERMAN of 7th inst. Business might be good and brisk if dealers could but obtain cars as they require them. The car service at this point is in a wretched condition, and only those interested can understand the worry and trouble and in not a few cases serious loss, resulting, not alone to the shippers, but to their numerous customers and to the ultimate users of lumber scattered over the whole country.

Shipments of lumber to this port are nearly over for the season. Probably four or five cargoes, say one million feet, will come in yet. There will then be in the yards about nine or ten million feet of pine lumber of the usual grades. Dealers sell only in car or cargo lots.

PRICES IN CAR LOTS.

1 inch Mill Culls	$8 00@ 8 50
1x6-8-10 & 12, common	12 00
1x6-8-10 & 12, dressing	16 00
1x14, and wider, common	12 00
1x14, " " dressing	16 00
1¼ dressing	16 00
1½ "	16 00
1¼ Norway pine flooring	14 00
1½ " " "	14 00
1 inch clear and picks	26 00
1 inch clear and picks 4 to 8 inch	25 00
1¼ and 1½ clear and picks	35 00
Lath 1½x4 feet	1 85

Philadelphia, Pa.

OCT. 29.—Trade is satisfactory, is not very brisk, and prices are fully maintained, the stocking up for the winter helping to strengthen the market. White pine is generally strong, and yellow pine is decidedly active. In hemlock the consumption is heavy, the supply being hardly equal to the demand, so that an advance is anticipated, There has been a large business in lath, with rather weak prices. Shingles have been active at full prices.

White Pine.

Mich. uppers, 1 to 2 in., dry	$50 00@52 50		barn quality	22 50	25 00
2½, 3 & 4 in	55 00	60 00	Common plank	20 00	22 00
S'lcts, 1¼ to 2 in.	42 50	45 00	⅞ box boards, wide	14 00	16 50
Selects, 1 in.	41 00	43 00	⅝ siding, selected	27 50	30 00
12 in. flooring quality	30 00	32 50	Culls, 12 in.	15 50	17 00
barn	19 00	23 00	Wide	15 00	16 00
Edge barn, all widths	18 00	20 00	Narrow	12 50	14 00
			No. 1 moulding	36 00	38 50

Cargo Lots.

Yellow pine edge bds	14 00@16 00	Scantling and plank	20 00 22 00
Heart face boards	19 00 21 00		

Hemlock Boards and Scantling.

Edge boards	10 50@11 50	Scantling, 2x3 & 2x4,	
12 in. stock	11 00 13 00	16 & 18 ft	12 00@13 00
Fencing, 6in., 16 ft.	11 00 13 30	3x4, to 12, 12 to 20 ft.	11 50 12 00

Shingles and Posts.

Cypress shingles, 24 in. heart, d & b	13 00@18 00	Cedar shingles, 30 in. hand dressed	35 00 40 00
24 in. sap, d & b.	10 00 12 00	Chestnut posts, 9 ft.	32 00
		7 ft.	28 00

HARDWOOD.

Walnut.

Nos. 1 & 2, 1 in., good dry, Indiana	$87 50@ 95 00	Reject or common, 1 in., 1¼ and up	60 00 65 00
1¼ & up	92 50 100 00	Culls, 1 in.	30 00 35 50
Nos. 1 & 2, ⅝ in.	72 50 100 50	1¼ in. & up	30 00 35 00

Poplar.

Nos. 1 & 2, 5/4 in. good wide, Indiana	25 00@27 50	Nos. 1 & 2, 1¼ in. & up, good wide, Ind.	32 50 36 00
1 in.	28 00 32 50	Columns, 5x5 & up clear	35 00 35 00

Oak.

Nos. 1 & 2, 1 in., good western, straight	32 50@35 00	Nos. 1 & 2, 1¼ in. & up, good western, straight	35 00 37 50
quartered	47 50 52 00	quartered	45 00 50 00

Ash.

Nos. 1 & 2, 1 in., good western	37 50@40 00	Nos. 1 & 2, 1¼ in. & up, good western	40 00 42 50

Yellow Pine—Yard and Wholesale.

Sc'tlg, 2x4 to 12x14	22 50@25 00	Flooring, 1 in., Va.	17 00 19 00
Plank, 1¼ to 2 in.	23 00 27 50	1 & 1¼ in., Ga. & Fla. cargo run	22 00 24 00
Fl'g, 1 & 1¼ in. No. 1	30 00 32 50		

Cherry.

Nos. 1 & 2, 1 in., good	62 50 70 00	Nos. 1 & 2, 1½ in. & up, good	70 00 80 00

New York City.

OCT. 29.—There is an active business, as the dealers are filling up their winter stocks. White pine is steady, with good sale. The export trade has been somewhat dull, one of the largest shipments recently being over 200,000 feet of Melbourne. Spruce and hemlock are in good demand, and the market is strong. Lath is in light supply and held firmly.

Black Walnut.

⅝ in., all clear	$82 00@ 85 00	Culls, 1 inch	$36 00@ 38 00
1 and 1¼ inches	94 00 97 00	Culls, thick	38 00 39 00
1½ and thicker	98 00 105 00	Counter tops, 18 in.	
Rejects	52 00 55 00	and over	110 00 150 00

Poplar, or White Wood.

⅝ in. 10 inches and over	22 00@24 00	1¼ to 2 inch	29 00@30 00
¾ in. coffin boards	27 00 28 50	2½ and thicker	31 00 33 00
1 inch, 10 inch and over	27 00 29 00	Common 1 to 2 inch	21 00 22 50
1 inch, 8 in. and over	26 00 28 00	Saps, 1 inch	23 00 25 00
		Culls, all thickness	15 00 18 00

Dressed Poplar.

½ inch panel	24 50@25 00	⅜ in. clg. 4 to 6 in	21 00@21 50
⅝ inch panel	27 00 28 00	½ in. clg. 4 to 6 in	24 00 24 50
¾ inch panel	29 00 30 00	⅝ in. clg. 4 to 6 in	27 00 28 00
4, 5, 6 inch casing	30 00 31 00	¾ in. clg. 4 to 6 in	29 00 30 00
7, 8, 9, 10 inch casing	32 00 33 00	⅞ in. clg. 4 to 6 in	30 00 31 00

Ash.

1 inch, white	38 00@ 40 00	Strips, clear	28 00@ 30 00
1¼ to 2 inch	39 00 40 00	Black ash, good	26 00 28 00
2½ to 4 inch	40 00 42 00	Black ash, culls	10 00 12 00

Oak.

1 inch plain sawed,	37 00@ 39 00	inches and over	50 00@ 53 00
1¼ to 2 inch	38 00 43 00	Thicker	52 00 54 00
Thicker	41 00 42 00	Strips under 6 in.	38 00 40 00
Quarter-sawed, white, all clear, 6			

Cherry

⅝ in., white & clear	65 00@ 70 00	1½ and thicker	85 00@ 90 00
1 inch	76 00 79 00	Counter tops, 18 in.	
1 inch strips	40 00 43 00	and over	100 00 115 00
1¼ to 2 inch	80 00 86 00	Culls, all thickness	18 00 20 00

Miscellaneous.

Chestnut, clear	35 00@ 38 00	Redwood California	
Chestnut common	22 00 23 00	plank	55 00@ 58 00
Basswood white	28 00 32 00	Hickery, old growth	50 00 60 00
Basswood common	18 00 23 00	Hickery, 2nd growth	70 00 80 00
Maple, clear	25 00 30 00	Elm	20 00 22 00
Birch, clear	33 00 36 00	Sycamore	25 00 28 00
Birch, 1s and 2s	28 00 30 00	Sycamore quartered	35 00 40 00
Cottonwood	19 00 21 00	Gum	38 00 41 00
Redwood, California boards	55 00 58 00	Butternut	45 00 50 00

Buffalo and Tonawanda, N. Y.

BUFFALO, Oct. 29th.—There is an evident improvement in the market, the approaching winter bringing in orders more freely. The demand from the east in particular is better. Prices are firm, for with rather lighter stocks than usual, holders are not disposed to make sacrifices. Canal shipments are nearly over and there is a great scarcity of cars.

The Tonawanda trade is good, there being a brisk demand for all lines except uppers. Shingles are in short supply.

Norway Pine—Rough.

No. 1, 1 & 1¼ in.	19 00@20 00	Stocks No. 1, 1 & 1¼ in	21 00
No. 2, 1 & 1¼ in.	15 00 15 50	No. 2, 1 & 1¼ in.	17 00
No. 3, 1 & 1¼ in.	11 50 12 00	No. 3, 1 & 1¼ in.	12 00
		Scantling 2x4 to 2x12 12 to 16 ft	13 00
		Timber, 4x6 to 12x12 16 00	20 00

White Pine—Rough.

Uppers, 1 in.	$44 00@46 00	Shelving, No. 1, 13 in.	
1¼, 1½ and 2 in.	44 00 47 00	and up	31 00
2½, 3 and 4 in.	55 00 60 00	No. 2, 13 in. & up	22 00 29 00
Selects, 1 in.	39 00 40 00	Fine common, 1 in.	32 00
1¼, 1½ and 2 in.	39 00 40 00	1¼, 1½ and 2 in.	32 00 35 00
2½, 3 and 4 in.	45 00 50 00	Common, 1 in.	16 00 19 00
Cuts, No. 1, 1 in.	25 00 28 00	1¼ and 1½ in.	17 00 20 00
1¼, 1½ and 2 in.	32 00 33 00	2 in.	20 00 22 00
2½, 3 and 4 in.	37 00 40 00	Coffin boards	17 50
No. 2, 1 in.	15 00 17 00	Box, 1 in.	12 00
1¼, 1½ and 2 in.	21 00 22 00	1¼ in. & thicker	13 50
Moulding, 1 in.	28 00 32 00	A stocks, 1x10	29 00
1¼, 1½ and 2 in.	28 00 32 00	1x12	29 00
Siding strips, 1 in.	38 00	B stocks, 1x6 to 16	17 50
		C stocks, 1x6 to 16	13 50

Dressed Lumber.

	No. 1.	No. 2.	No. 3
Base and Casing under 6 inches	$33 00	$23 00	$16 00
Base and Casing, 6 inches	34 00	25 00	17 00
Base and Casing, 6, 7 and 8 inches	40 00	29 00	18 00
Flooring, 1 and 1¼ inches, 2½ to 5 in. wide	30 00	20 00	15 00
Ceiling, ⅜ in., 2½ to 5 inches wide	33 00	23 00	16 00
Ceiling, ⅝ in., 2½ to 5 inches wide	28 00	22 00	14 00
Ceiling, ½ in., 2½ to 5 inches wide	24 00	18 00	13 00
Philadelphia Fencing	39 00	30 00	21 00
Bevel Siding, 6 inches	23 00	21 00	11 00
Bevel Siding, 5 inches	23 50	21 00	17 00
Bevel Siding, 6 inches	23 00	19 00	14 00
Novelty Siding, 6 inches and over	40 00	23 00	16 00

Shingles and Lath.

Shingles, 18 in. XXX	3 85@ 3 90	Lath, pine No. 1	2 10 2 15
XX	2 85 2 90	No. 2	1 70
X	1 25	Norway	1 80
Shingles, 16 in. XXX	3 00	Hemlock	1 00
XX	2 10		
X	00		

Chicago, Ill.

CHICAGO, Oct. 29th.—Though the arrivals of cargoes have been heavy for the season they did not hang on hand, and there was no occasion to sacrifice them. In a few instances there was a little shading in order to hasten a vessel away. Many dealers are well stocked, but there are enough whose stocks are low or incompletely assorted to absorb the supply. Strips and boards are in especial demand but must be dry, for green is hard to sell. Piece stuff is selling from $10 to $12, the latter price, or even better, for long stuff.

Shingles are in good demand and lath steady, with dry in request. There are some complaints of insufficient car accommodation. The local demand continues good, and altogether the market shows strength with a favorable outlook.

The × Gutta × Percha × and × Rubber × Manufacturing × Company × of × Toronto.

Offices : 43 YONGE STREET, TORONTO. - - Factories : PARKDALE, ONT.

SOLE MANUFACTURERS OF

RUBBER "MONARCH", "RED STRIP" AND "LION" BRANDS OF BELTING

Particular attention given to special Belts for Lumber Mills.

Our celebrated "Maltese Cross" Rubber; "Baker Fabric" and Ajax Cotton; "Giant" and Light Linen, and Fire Hose constantly in stock.

LUMBERMEN'S * HEAVY * RUBBER * CLOTHING, * OUR * OWN * MANUFACTURE.

Address all Communications to THE GUTTA PERCHA & RUBBER MFG. CO. OF TORONTO, 43 Yonge St.

Saginaw River, Mich.

BAY CITY, Oct. 28.—Trade has been dull and stocks have accumulated faster than they have moved off. The shipping season is, however, now nearly over, which should have its effect. Some weakening of prices, especially for good lumber, has been apparent. Strips, shingles and lath have remained firm, and there has even been an advance in shingles. Complaints of short car accommodation have been heard.

CARGO LOTS.

Uppers	36 00@38 00	Norway	9 00 10 50
Common	15 00 20 00	Box	10 00 10 50
Shipping Culls	8 00 10 00	Straight measure	12 00 23 00
Mill Culls	6 00		

YARD QUOTATIONS—CAR LOTS DRY.

Drop Siding.

Clear, ⅞ in	42 00@43 00	C, ⅞ in	30 00
A	33 00 35 00	D	19 00
B	28 00		

Flooring and Siding—Dressed.

Flooring, clear, d & m	40 00	Siding, clear, ½ in.	22 00
No. 1	33 00	A	20 00
No. 2	30 00	B	17 00
No. 3	20 00	C	14 00
No. 4	13 00	D	12 00

Finishing Lumber—Rough.

Three uppers, 1 in.	43 00@45 00	Fine common, 1 in.	28 00 33 00
1¼ & 1½	44 00 46 00	1¼ & 2 in.	33 00
Selects, 1 in.	35 00 37 00	C, 7, 8 & 9 in.	25 00
1¼ & 2 in.	38 00	Base, 2 to 9 in. No. 1	40 00
		No. 2	30 00
		No. 3	20 00
		Coffin boards 16 in. and over	16 00

Joist, Scantling and Timber.

12 to 18 feet	10 00	22 feet	12 00
20 feet	11 00	24 feet	13 00

Plank and timber, 12 inches wide, $1 extra.

Wide Select and Common—Rough.

C (No. 1 com.) 13in. and up	28 00	D (common) 14 in. and up	16 00

Lath, Shingles and Pickets.

Lath, No. 1	1 40	Country brands XXX	3 25 3 35
No. 1	1 10	Clear butts	2 25 2 35
Shingles, river brands		P'kts, 2 to 2½ in rough	12 00 13 00
XXX	3 40@ 3 50	Dressed	20 00
Clear butts	2 40 2 50	1¼ in. square, dressed	14 00 19 00

Albany, N Y

ALBANY, Oct. 30th.—The lumber market has remained quiet, and even dull in uppers, though lower grades have been in more demand. The high lake freights have kept lumber back at the mills, but recent arrivals have helped to fill the yards, becoming heavier with the advancing season. Hemlock boards are in demand but are firmly held and there is considerable activity in cull hemlock and spruce. Shingles are scarce and are advancing in price.

Minneapolis, Minn.

MINNEAPOLIS, Oct. 28.—Trade is only fair and there is some weakness in the market. The demand has been below the average, and would have been still worse but for some impetus given by railway construction, which is now falling off. Shingles are scarce and firm. The railways are busy moving the crop and have not much accommodation for timber.

London, England.

LONDON, Oct. 22.—Prices remain steady but the looked-for advance has not arrived, heavy sales without reserve checking the tendency upwards. Buyers show more readiness, while holders are not disposed to give way.

Liverpool.

LIVERPOOL, Oct. 22.—The docks look rather more busy with recent arrivals, among them being the P. G. Carvill from Quebec with a large cargo of square and waney pine deals and oak. The other late arrivals have been chiefly spruce deals. Business is not brisk and there is not much sign of improvement at present.

CANADIAN HARDWOODS FOR CARRIAGE BUILDING.

THE following is the conclusion of the interesting letter addressed by Mr. G. N. Hooper, President of the Institute of British Carriage Manufacturers, to the Canadian Minister of Agriculture, the commencement of which appeared in our last issue.

Many years ago some French merchants discovered a great waste going on in England. Immense quantities of coal-dust could be had at the collieries almost for the asking; they secured it, mixing it with some simple compound, they had it compressed into brick-shaped lumps, and now use it largely for heating the furnaces of their steam boilers. I would suggest that the waste sawdust, chips, &c., instead of choking the flow of the river, be compressed, converted into charcoal, and sent to England, where such fuel is valuable and necessary for many trades, especially for metal workers, and where its use might be indefinitely extended, could a regular abundant supply be relied on at moderate price.

Abundant and cheap charcoal in many parts of continental Europe enables the people to carry on many metal trades which cannot thrive without it. Canadian charcoal might relieve England of a difficulty, and help to establish and extend various profitable branches of trade now neglected for want of it.

England is at present largely dependent on Sweden for "safety matches," where a lower quality of wood seems to be utilized, possibly by the use of improved processes of splitting, and the Swedish matches have the further advantage of being "safety matches," lighting only by friction on the specially prepared surface of the boxes.

This seems a trade that should naturally fall to the lot of Canada, and it probably only requires a little tact, energy and perseverance to secure it.

I was in some parts of Canada surprised, almost, indeed, painfully startled, at the apparent want of care to avoid the risk of setting fire to factories and workshops. In many cases I saw iron forges being worked on floors of wood, the ceilings also of wood. I had never in any part of England or of Europe seen such, to my mind, hazardous risks of house burning incurred. Invariably, when I remarked on this, the owner, occupier, or manager smiled, or passed off the incident with the answer "No danger, we always do so." In England, fortunately for us, other ideas prevail. Let us hope that they will spread; that our Canadian friends will not need to keep harness continually slung over the backs of horses at their admirable fire engine stations, ready to run out at thirty seconds' notice, lest some neighbor or dear relative's life should be sacrificed by one of the most horrible forms of death.

Before I conclude let me cast a glance at the effect of good home social legislation. Driving through Hamilton, my coachman remarked: "Hamilton is a prosperous place, sir, they are very strict about the liquor here. 'Tis drink that makes and keeps a country poor."

I had an opportunity of reading an extract from the law forbidding gambling in Canadian railway carriages; could such a regulation be put in force in steamers crossing the Atlantic, many a well-to-do young emigrant or visitor might have the contents of his purse preserved for his own use instead of enriching the professional card sharpers and gamblers who haunt the ocean lines and are constantly on the look out for young dupes.

Before concluding, I desire to express my cordial and grateful thanks to all those gentlemen who kindly assisted me with letters, information or advice.

Very imperfectly, I am aware, have I endeavored to throw out a few ideas, hints, and suggestions that may possibly turn to the mutual advantage of colonists and the mother country; had time permitted I might have carried my inquiries and investigations further; but if, as a wandering member of the Council of the London Chamber of Commerce, I am permitted to assist in promoting trade and friendly and profitable intercourse between the capital of the Empire and a colony as loyal and patriotic as Canada, I shall not have made a journey of 9,000 miles in six weeks entirely in vain.

THE COMING WINTER'S CUT.

The following is a carefully prepared estimate of the out-put of logs which will be got out in 1887-8. The gentleman who prepared it is himself engaged in the lumber trade and knows of what he speaks.

Beginning with the Ottawa and its tributaries the following is the calculation :—

Canada Lumber Co., 80,000,000 feet; Bronson & Weston, 60,000,000; Gilmour & Co., 60,000,000; J. R. Booth, 70,000,000; McLaughlin Bros., 75,000,000; J. & B. Grier, 45,000,000; Richard White, 20,000,000; Booth & Gordon, 20,000,000; Hurdman Bros., 50,000,000; Hamilton Bros., 30,000,000; Perley & Pattee, 50,000.000; E. B. Eddy, 60,000,000; Alex. Fraser, 15,000,000; A. Barnet, 200,000 square feet; Thistle & Fraser, 150,000 square feet.

ON FRENCH RIVER.

J. McLean, 4,000,000; Ontario Lumber Company, 7,000,000; New York & Tonawands Lumber Co., 7,000,000.

PARRY SOUND, SOUTH RIVER AND WHAUAPITAE.

J. Jackson, 3,000,000; Beck & Bates, 4,500,000; J. R. Booth, 6,000,000; Alex. Fraser, 2,500,000; S. McKay, 4,000,000; Emery Bros., 5,000,000; A. Coburn & Fraser, 2,000,000; Timmins & Gorman, 100,000 sq. feet; John Dolan, 30,000 feet logs; — MacKay, 3,000,000.

STURGEON RIVER.

J. R. Booth, 5,000,000; Booth & Hale, 3,000,000; J. R. Booth (Deschenes Creek), 1,000,000; Edward and Charles Moore, 6,000,000.

Besides the above, Mr. Campbell, of South River, has a mill in full operation under the superintendence of Mr. Fred. Thomson, which next season when in full blast will have an output of two millions and a-half feet.

The above does not by any means represent all that will be done in the Ottawa lumber world for the year 1887-8. The above table represents the cut of the chief firms, but there are many smaller concerns which will likely turn out between ten and twenty millions.

In the Parry Sound district, nearly all of Mr. Booth's cut will be done by jobbers, and in fact the same may be said of the other firms there. Everything promises well for the season, and if there is an ample but not too much of a snowfall the work will go ringing along.

This year, owing to the extreme lowness of the water, many improvements have been made on creeks and other small tributaries, in order to facilitate driving, and the lowness of the water gave the lumbermen an abundance of opportunity to make the improvements thorough and permanent. These improvements will be a great aid in getting the season's cut of logs safely out to the main streams. With the exception of what will be cut on the Whauapatae, all this vast quantity of lumber will come down the Ottawa; the Whauapatae cut taking the waterway of the French River, Lakes and St. Lawrence River to market.

Mr. Bolier says that the Georgian Bay Lumber Company will put a large number of men into the woods this winter and will get out in all 200,000,000 feet of logs. The fire has damaged over 15,000,000 feet in the company's limit.

Oxford & New Glasgow Railway

SECTIONS.

1st.—Birch Hill Road to Pugwash Junct'n..13 miles.
2nd—Pugwash Junction to Pugwash..... 5 miles.
3rd—Pugwash Junct. to Wallace Station.. 7 miles.
4th—Wallace Station to Mingo Road.....17 miles.

Tenders for Grading, Bridge and Culvert Masonry, Fencing, etc.

SEALED TENDERS, addressed to the undersigned and endorsed "Tender for Oxford and New Glasgow Railway," will be received at this office up to noon on Friday, the 18th day of November, 1887, for the grading, bridge and culvert masonry, fencing, &c.

Plans and profiles will be open for inspection at the office of the Chief Engineer of Government Railways at Ottawa, and also at the office of the Oxford and New Glasgow Railway at Wallace, Cumberland Co., Nova Scotia, on and after the 10th day of November, 1887, where the general specification and form of tender may be obtained upon application.

No tender will be entertained unless on one of the printed forms, and all conditions are complied with.

This Department does not bind itself to accept the lowest or any tender.

A. P. BRADLEY,
Secretary.

Department of Railways & Canals,
Ottawa, 20th October, 1887.

Notice to Contractors.

SEALED TENDERS, addressed to the undersigned, and endorsed "Tender for Hospital at the Royal Military College, Kingston," will be received at this office until Monday, 14th November, for the several works required in the erection and completion of the Hospital at the Royal Military College, Kingston.

Plans and specifications can be seen at the Department of Public Works, Ottawa, and at the office of Messrs. Power & Son, Architects, Kingston, on and after Tuesday, 25th October.

Tenders will not be considered unless made on the form supplied and signed with the actual signatures of tenderers.

An accepted bank cheque payable to the order of the Minister of Public Works, equal to *five per cent. of amount of tender*, must accompany each tender. This cheque will be forfeited if the party decline the contract or fail to complete the work contracted for, and will be returned in case of non-acceptance of tender.

The Department does not bind itself to accept the lowest or any tender.

By order.
A. GOBEIL,
Secretary.

Department of Public Works,
Ottawa, 21st October, 1887.

Notice to Contractors.

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for Post Office at Trenton, Ont," will be received at this office until Thursday, 17th November, for the several works required in the erection of the Post Office at Trenton, Ont.

Specifications can be seen at the Department of Public Works, Ottawa, and at the Office of G. W. Ostrom, Esq., M.P.P., Trenton, on and after Saturday, 29th October, and tenders will not be considered unless made on form supplied and signed with actual signatures of tenderers.

An accepted bank cheque payable to the order of the Minister of Public Works, equal to *five per cent. of amount of tender*, must accompany each tender. This cheque will be forfeited if the party decline the contract or fail to complete the work contracted for, and will be returned in case of non-acceptance of tender.

The Department does not bind itself to accept the lowest or any tender.

By order,
A. GOBEIL,
Secretary.

Department of Public Works,
Ottawa, 26th October, 1887.

J·L·JONES
WOOD ENGRAVER
10·KING·ST·EAST·
TORONTO
SEND·FOR·PRICES·

HARDWOOD LUMBER WANTED.

100 thousand feet 2, 3 and 4 inch Rock Elm.
100 " " 1¼, 1½ and 2 inch Brown Ash.
50 " " 1½ and 2 inch Red Oak.
50 " " 1 and 1¼ inch Stained Basswood.
100 " " 1 to 4 inch Maple and Birch.
100 " " 1 inch 1"x13"x15" Plain Sycamore.
Also Maple and Birch Flooring.

EASTMAN BROS. & CO.,

11 Central St., Boston, Mass.

HENRY PORTER,

MANUFACTURER OF

Leather Belting,

432 Visitation Street,

MONTREAL, QUE.

SCRIBNER'S LUMBER AND LOG BOOK; revised, enlarged and improved; nearly a million copies sold. This is the most complete book of its kind ever published. It is designed expressly for *Ship and Boat Builders, Lumber Merchants, Saw Mill Men and* LUMBER AND *others*, containing Tables for the measurement of Scantling, Boards, Plank, Cubical Contents of Square and Round Timber, Saw Logs, reduced to Board Measure by Doyle's Rule, Specific Gravity and Weight of different Woods, Measurement LOG BOOK of Wood and Price Per Cord, Stave and Heading Bolt Table, Hints to Lumber Dealers and Mechanics, Selection of Standing Trees, Defects of Timber, Felling Trees, Cubic Measurement, Speed of Circular Saws and Power of same, Growth of Trees, Cutting Fuel, Splitting Rails, Price Table of Lumber, AND THE Standard Log Table, Care of Saws, Filing Saws, Land Measure, Strength of Timber, Stone Wall Table, Weight of Flat and Round Bar Iron, Tables CANADA LUMBERMAN of Wages by the Month, Board or Rent by the week or day, Interest Tables, etc. Sixty Pages of New Tables and Illustrations added, with other improvements by Daniel Marsh, Civil Engineer. Book alone TO END OF 1888 FOR $1.25. Post-paid for 35 cents.

WANTED! The undersigned is prepared to purchase any quantity of Black Ash, Red Birch, Red Oak and Basswood.

ORDERS SOLICITED FOR

HOUSE ⁝ BUILDING ⁝ AND ⁝ FURNISHING ⁝ GOODS

Crown Jewel Flour—Unexcelled for Family Use.

If your Grocer does not keep it, order direct from us.

THE attention of Steam Users is directed to our preparation of CEDAR OIL for removing Scale and Sediment from Boilers, lessening the quantity of fuel used, and prolonging the life of the Boiler.

THE RATHBUN COMP'Y,

DESERONTO, ONTARIO.

WANTED AND FOR SALE.

Announcements in this department will be inserted at the uniform rate of ten cents per line, each insertion, payable in advance. For three or more consecutive insertions of the same advertisement a discount of 25 per cent. will be allowed. Eight words should be counted as one line.

RARE CHANCE—FOR SALE IN TOWN OF Mitchell—planing mill, lumber yard and established building business; buildings nearly new; modern machinery; growing town, and good country; power furnished to cabinet factory; annual rent $500; long lease; good bargain will be given as the proprietor has determined to retire from the business. THOS McLAY, Mitchell, Ont.

PLANING MILL FOR SALE—GOOD TOWN on railway, in Eastern Ontario; no opposition. FENNEL & WEBBER, 41 Toronto Arcade, Toronto.

TIMBER LIMIT FOR SALE IN ONTARIO—Write to J. RALSTON, 31 John St., Hamilton.

STEAM SAWMILL FOR SALE—CARRIAGE Steamfeed; capacity 60,000 feet day and night; situated on the Ottawa river, east of Pembroke 4 miles; fitted up with improved machinery; run ten months; siding from C. P. R. into yard; about ten acres of land in connection; seven dwelling houses; boarding house and blacksmith shop; limit well timbered, white and red pine, tamarack, cedar, hardwood, etc.; area of limit 25 square miles. Apply to JAS. B. DICKSON, Pembroke, Ontario.

SECOND-HAND TIGHT BARREL STAVE and Heading outfit, for sale cheap. Address Box 110, Cleveland, Ohio, U. S. A.

FOR SALE—A STEARNS NO. 2 CIRCULAR Mill, friction feed, with five head blocks, carriage and track for long timber; two 60-inch Hoe patent and one solid saw, all in first-class condition. HENRY HOWARD & Co., Port Huron, Mich., U. S.

FOR SALE—A SPLENDID WATER POWER—may be used for any manufacturing business; at present used as saw and shingle mill; one mile from station. Addrses CHAS. GRASLEY, Belfountain, Ont

NAPANEE CEMENT COMPANY
MANUFACTURERS OF
Hydraulic Cement
PARTICULARLY adapted for Dams, Erection of Chimneys, Foundations, Culverts, Cisterns, Cellars, etc.
NAPANEE, ONT.
NAPANEE CEMENT CO., Limited, ** NAPANEE, ONT.

Auction Sale of Timber Berths.

DEPARTMENT OF CROWN LANDS.

(WOODS AND FORESTS BRANCH.)

Toronto, 18th October, 1887.

NOTICE is hereby given that under Order in Council Timber Berths in the following Townships, viz.: Livingstone, McClintock, Lawrence, McLaughlin, Hunter, Bishop, Devine, Butt, Biggar, Wilkes, Ballantyne, Chisholm, Canisbay, Pentland, and Boulter, will be offered for sale by Public Auction on Thursday, the Fifteenth day of December next, at 12 o'clock noon, at the Department of Crown Lands, Toronto.

T. B. PARDEE.

NOTE.—Particulars as to locality and description of limits, area, etc., and terms and conditions of sale, will be furnished on application personally, or by letter to the Department of Crown Lands.

No unauthorized Advertisement of the above will be paid for.

CHARLES ESPLIN,

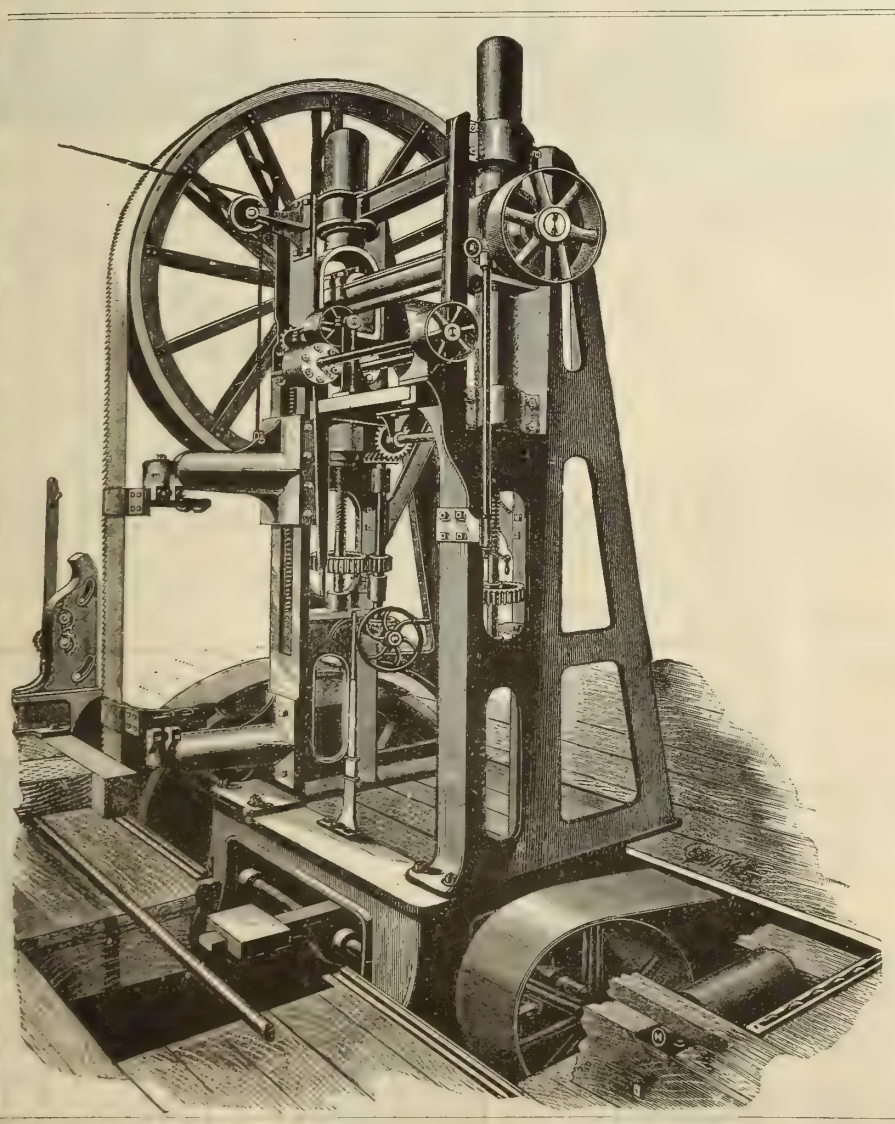
MILLWRIGHT * AND * MECHANICAL * ENGINEER,

Patentee and Builder of the

ESPLIN BAND SAW MILL

The Only Perfect Mill in Use.

THE following statement of Dimensions will give some idea of its proportions: Diameter of Wheels, 8 feet; diameter of lower and top Wheel Shafts, 5⅜ inches; length of Lower Shaft, 8 feet 6 inches; length of Top Wheel Shaft, 8 feet 4 inches; length of Bearings for Wheel Shafts, 18 inches; Weight of Mill alone, 22,000 Pounds.



ENDORSEMENTS

IN ABUNDANCE.

The Following is Only a Sample:

ASHLAND, Wis., Nov. 10th, 1886.

CHAS. ESPLIN, ESQ.,

Minneapolis, Minn., U. S. A.

DEAR SIR,—The band mill placed in our saw mill by you we consider the best and most complete band mill we know of. It has advantageous features which we have not seen in any other mill. The strength of all its parts is ample for every demand upon it. It is massive. The guide arms in their proportions and adjustments seem beyond improvement. The drive wheel by taking up the tension of the saw from below is a great advantage gained. The long distance between the bearings of the upper wheel shaft steadies the motion and the whole machine moves with ease and steadiness.

We have never seen lumber so perfectly manufactured as made by this band mill. The mechanic that planned it and the company that manufactured it deserves the congratulation and thanks of all manufacturers of lumber,

Very respectfully,

SUPERIOR LUMBER CO.

John H. Knight, Secretary-Treas.; D. A. Kennedy, Supt. and General Manager.

Address, CHAS. ESPLIN, care of Wm. Hamilton Mfg. Co., Peterborough, Ont.,

OR TO MY AMERICAN OFFICE:

623 Franklin Ave, Minneapolis, Minn.

The Ontario Canoe Company, Limited.

PETERBOROUGH, ONTARIO.

Manufacturers of all kinds of PLEASURE, FISHING and HUNTING

CANOES Patent Cedar Rib Canoes, Patent Longitudinal Rib Canoes, Basswood Canoes, Folding Canoes, Paddles, Oars, Tents, etc., etc.

GOLD MEDAL LONDON FISHERIES EXHIBITION, 1883.

J. Z. ROGERS, President and Managing Director.

CANOES FOR LUMBERMEN designed to carry any amount of Goods and Chattles, and Strongly Built, made to order on Short Notice.

Send 3 Cent Stamp for Illustrated Catalogue.

JAS. T. MILNE,

MILLWRIGHT AND DRAUGHTSMAN

BUILDER OF

Milne's Oscillating Steam Gang,

AND SOLID WHEEL BAND MILL.

These Mills, in Strong Timber Frames, containing Foundation, Engine and Sawing Movements, and all improvements so long desired by the Lumber Trade, built at any point in America.

PLANS, SPECIFICATIONS AND ESTIMATES ON APPLICATION.

JAS. T. MILNE, PETERBORO', ONT.

FLATT & BRADLEY,

Manufacturers and Wholesale Dealers in

TIMBER, LUMBER,

Bill Stuff, Shingles and Lath.

ALL KINDS OF HARDWOOD CUT TO ORDER.

White and Red Oak, Hickory, Hard and Soft Maple, Cherry, Whitewood, Ash, Chestnut, Walnut, Butternut, Sycamore and Elm in Stock.

VESSEL MASTS OF ALL SIZES A SPECIALTY.

Mills at Casselman, Ont., Canada Atlantic Railway. Office: HAMILTON, ONT.

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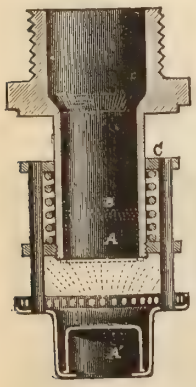

AUTOMATIC

FIRE EXTINGUISHERS!

We are prepared to give estimates for equipping MILLS, FACTORIES and WAREHOUSES, with the latest improvements in AUTOMATIC SPRINKLERS.

INCREASED SAFETY *and a* REDUCTION IN INSURANCE PREMIUMS *is a result of protecting buildings in this manner.*

R. MITCHELL & CO., MONTREAL.

DAVID H. HENDERSON, President; NORMAN HENDERSON, Vice-Pres.; CHAS. H. WALTERS, Sec.-Treas.

THE HENDERSON LUMBER COMPANY.

LIMITED.

MANUFACTURERS AND DEALERS IN

BRIDGE AND TIMBER DIMENSION

Sawn Lumber, Clapboards, Shingles and Lath.

PACKING CASES AND BOXES A SPECIALTY.

Office and Mill: William Street, - - MONTREAL, QUE.

Galt Machine Knife Works.

MACHINE KNIVES

OF EVERY DESCRIPTION FOR

Planing, Moulding & Stave Cutting.

SEND FOR PRICE LIST.

PETER HAY, - - - GALT, ONT.

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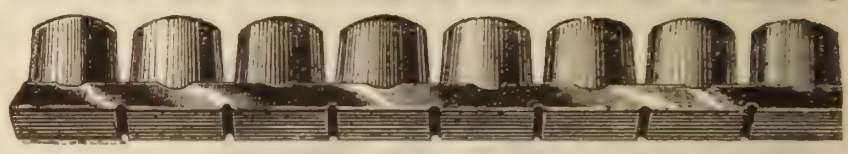
COPPERINE.



A NON-FIBROUS, ANTI-FRICTION BOX METAL, for Machinery Journal Bearings. Guaranteed Copper-Mixed, and to do work that no other metal can. Hardware Stores all keep it; if not order direct.

ALONZO W. SPOONER, Patentee and Manufacturer, PORT HOPE, ONT.

JAS. LACY & CO.,

CANADA DOCK,

LIVERPOOL, = = = = ENGLAND,

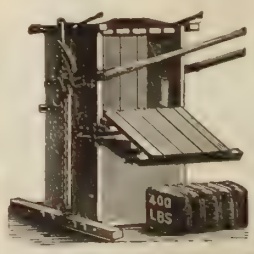
Are prepared to buy all classes of

HARDWOOD LUMBER

Either in Log or Dimension Stuff for Prompt Cash.

OFFERS INVITED.

S. S. KIMBALL,



Manufacturer of

CHAMPION STUMP and STONE EXTRACTORS,

Cultivators, Hay Presses, Etc.

SAFES A SPECIALTY.

Send for Circular.

577 CRAIG STREET, P. O. Box 945.

MONTREAL, QUE.

AMERICAN CHOPPING AXES.

From the HUBBARD & BLAKE MFG. CO., DUNN EDGE TOOL CO., and PLANT BROS., warranted to be the best in the world.

THE RUNNER CROSS-CUT SAW

Each Saw of Warranted Temper and Fast Cutting.

MACHELL & TOMPKIN'S FILES COMPOUND CUT

Especially adapted to Lance Tooth and Patent Cross-Cut Saws.

GEORGE STETHEM, * * * PETERBOROUGH, ONT.

Dealer in Lumbermen's Hardware and Tools.

SCRIBNER'S LUMBER AND LOG BOOK

Over One Million Sold.

MOST complete book of its kind ever published. Gives measurement of all kinds of Lumber, Logs, Planks, Scantling; cubical contents of square and round Timber; hints to lumber dealers; wood measure; speed of circular saws; care of saws; cord-wood tables: felling trees; growth of trees; land measure; wages, rent, board, interest, stave and heading bolts, etc. Standard book throughout the United States and Canada. Get the new illustrated edition of 1882. Ask your book-seller for it. Sent post-paid for 35 cents.

G. W. FISHER, Box 238, Rochester, N.Y.,
or A. G. MORTIMER, Peterboro', Ont.

GRATEFUL—COMFORTING.

EPPS'S COCOA.

BREAKFAST.

"By a thorough knowledge of the natural laws which govern the operations of digestion and nutrition, and by a careful application of the fine properties of well-selected Cocoa, Mr. Epps has provided our breakfast tables with a delicately flavored beverage which may save us many heavy doctors' bills. It is by the judicious use of such articles of diet that a constitution may be gradually built up until strong enough to resist every tendency to disease. Hundreds of subtle maladies are floating around us ready to attack wherever there is a weak point. We may escape many a fatal shaft by keeping ourselves well fortified with pure blood and a properly nourished frame."—*Civil Service Gazette.*

Made simply with boiling water or milk. Sold only in packets by Grocers, labeled thus:

JAS. EPPS & CO., Homœopathic Chemists, London, England.

TO AGENTS

THE CANADIAN NEEDLE COMPANY 46 and 48 Front St. East, Toronto, get up the Neatest, most Complete and Best Selling Needle Package in America. Send 25 cents for sample of New No. 4, finished in Fine Plush. Particulars sent when stamps are enclosed for reply.

Don't worry if you are out of employment, write to Mr. Kowdy, 41 Wellington St. East, Toronto. Send stamps for reply.

TORONTO MILLING EXCHANGE

IF you want to *Buy, Sell, Trade or Rent a Saw or Grist Mill*, send full particulars to me. I am a practical mill man. I advertise extensively, and my facilities for handling mills are unsurpassed by any in the Dominion. I also furnish contractors, sawmillers and others with men. All orders by mail promptly attended to. Write for particulars.

JOS. TUER, 101 York Street, Toronto, Ont.

YOU can live at home, and make more money at work for us, than at anything else in this world. Capital not needed; you are started free. Both sexes; all ages. Any one can do the work. Large earnings sure from first start. Costly outfit and terms free. Better not delay. Costs you nothing to send us your address and find out; if you are wise you will do so at once. H. HALLETT & Co., Portland, Maine.

CHARLES A. BRAMBLE, D. L. S.

Fredericton, New Brunswick.

SURVEYS AND REPORTS UPON TIMBER Lands in any section. Can effect sale of properties occasionally if desired. References from former employers.

SHINGLE MACHINES

Best in the Market for **Sawing Shingles, Heading or Box Stock.** No complicated parts to get out of order. 36-inch saw. Send for circular before buying.

B. WATERMAN & SON,
Taberg, New York.

Notice to Contractors.

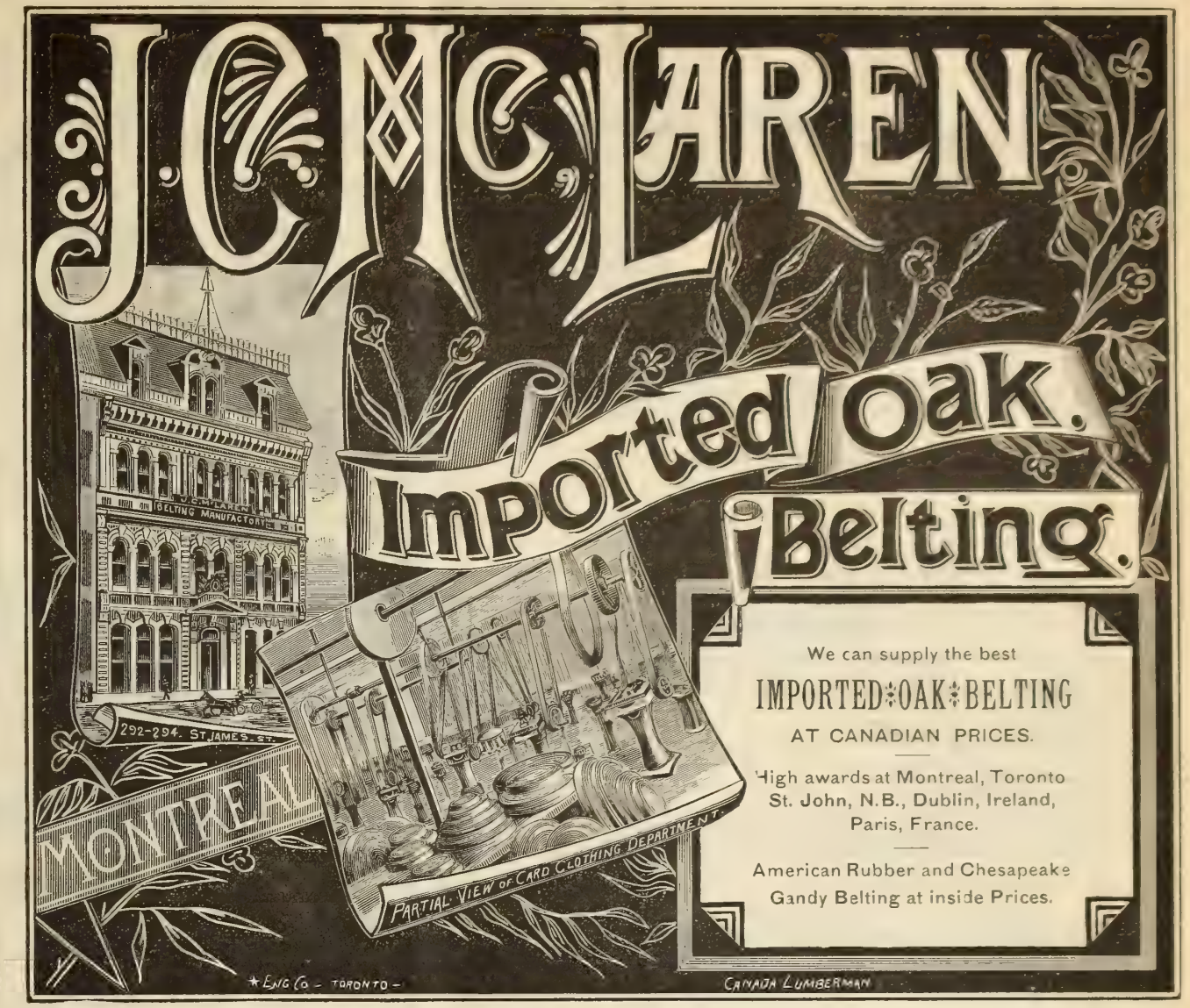
SAULT STE MARIE CANAL.

CONTRACTORS intending to tender for works of construcuion of the canal proposed to be formed on the Canadian side of the Saint Mary's River, are hereby informed that Tenders will be received about JANUARY next, and that the most favorable time to examine the locality will be between the present time and the early part of November next.

When plans, specifications and other documents are prepared due notice will be given. Contractors will then have an opportunity of examining them and be furnished with blank forms of tender, etc.

By order,
A. P. BRADLEY,
Secretary.

Department of Railways and Canals,
Ottawa, 24th August, 1887.



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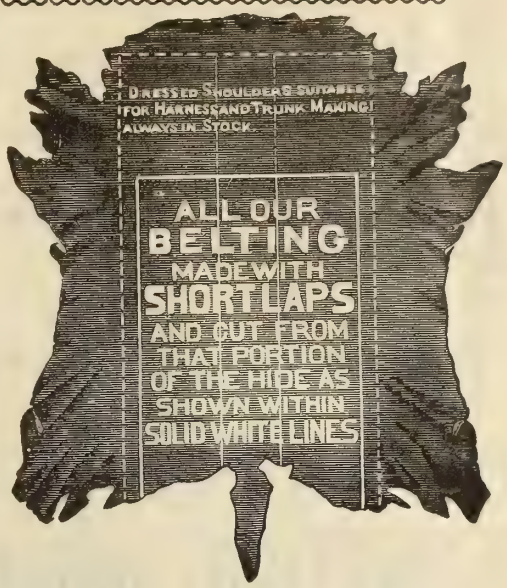

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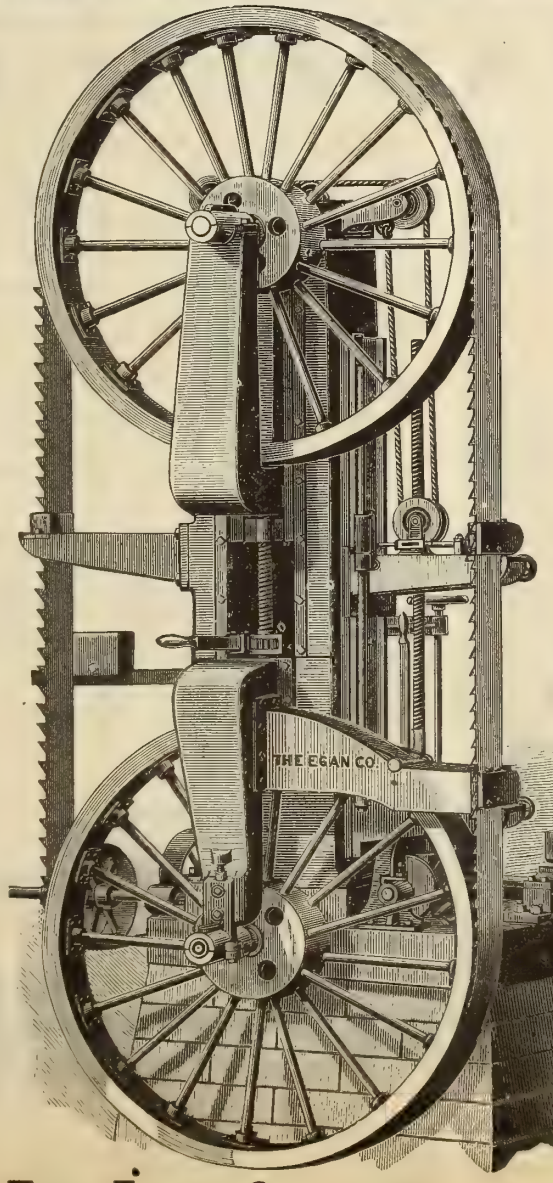

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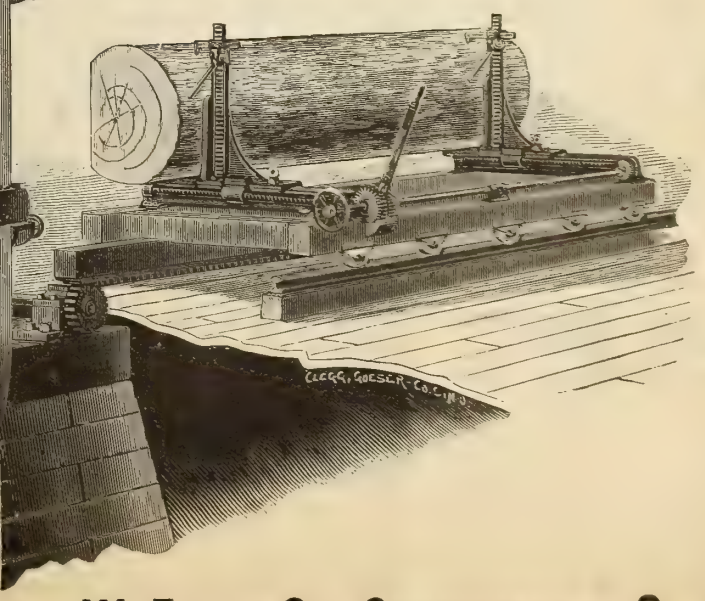

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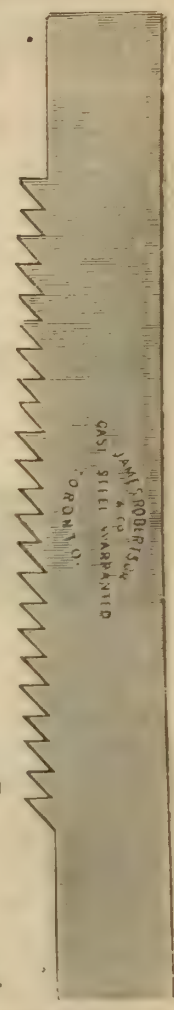

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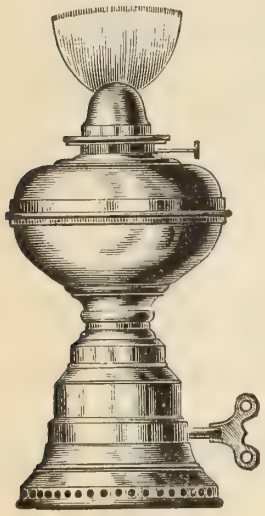

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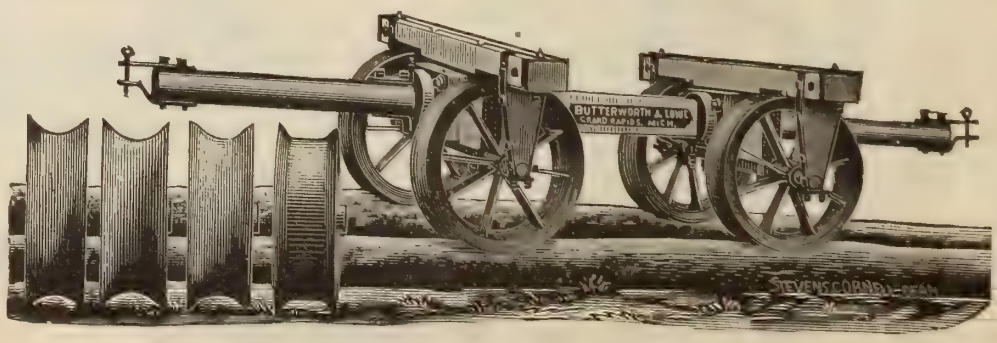

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THE CANADA LUMBERMAN.

VOLUME VII.
NUMBER 12.

PETERBOROUGH, ONT., DECEMBER, 1887.

THE CANADA LUMBERMAN

PUBLISHED MONTHLY BY

ARTHUR G. MORTIMER,

OFFICE: OPERA HOUSE BLOCK, PETERBOROUGH, ONT.

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One Copy six months, in Advance, - - - - - 50

Advertising Rates Furnished on Application.

THE CANADA LUMBERMAN is published in the interest of the lumber trade and of allied industries throughout the Dominion, being the only representative in Canada of this foremost branch of the commerce of this country. It aims at giving full and timely information on all subjects touching these interests, discussing these topics editorially and inviting free discussion of them by others.

Especial pains are taken to secure the latest and most trustworthy market quotations from various points throughout the world, so as to afford to the trade in Canada information upon which it can rely in its operations.

Special correspondents in localities of importance present accurate report not only of prices and the condition of the market, but also of other matters specially interesting to our readers. But correspondence is not only welcome but is invited from all who have any information to communicate or subjects to discuss relating to the trade or in any way effecting it. Even when we may not be able to agree with the writers we will give them a fair opportunity for free discussion as the best means of eliciting the truth. Any items of interest are particularly requested, for even if not of great importance individually, they contribute to a fund of information from which general results are obtained.

Advertisers will receive careful attention and liberal treatment. We need not point out that for many the CANADA LUMBERMAN with its special class of readers is not only an exceptionally good medium for securing publicity, but is indispensable for those who would bring themselves before the notice of that class. Special attention is directed to "WANTED" and "FOR SALE" advertisements which will be inserted in a conspicious position at the uniform price of ten cents per line for each insertion. Announcements of this character will be subject to a discount of 25 per cent. if ordered for three successive issues or longer.

Subscribers will find the small amount they pay for the CANADA LUMBERMAN quite insignificant as compared with its value to them. There is not an individual in the trade, or specially interested in it, who should not be on our list, thus obtaining the present benefit and aiding and encouraging us to render it even more complete.

WHILE the timber supply of the Northern States is gradually and surely giving out, dealers are watching for the most contiguous markets for future supplies. From casual observation many would come to the conclusion that Canada, with its boundless forests and excellent water-ways, would prove a tempting field for Northern capitalists, but while quite a number have taken advantage of the forests of this country, by far the greater number have gone into the South. That is not only the nearest field, but the vexatious customs duties which would be experienced by Americans operating in Canada are avoided. For the past three years or more there has been going on a very quiet, but enormous traffic in Southern timber, and this will increase in volume and strength each succeeding year. The South abounds in cheap timber, the choice purchases, it is said, being now already taken up. It is only a question of time before Southern timber will have a stumpage value that will be counted in dollars instead of as now in cents.

IN the *Timber Trades Journal* we find two items of information that should have an interest for the trade on this side of the Atlantic. Our contemporary's Stockholm correspondent says: "There are several orders in the market for Australia from both the Gefli and Soderhamn districts, and good payable rates are being offered." Again in its letter from its correspondent in Christiania we read as follows: "The improved prospects for shipments to Australia (principally of white flooring)—." Now why should this important Australian trade be left to Norway and Sweden when Canada is even better able to supply the market. The Atlantic coast of the Dominion is at least as well situated for the trade as the Scandinavian countries, and the Pacific coast is far better situated especially as regards distance and time of transit. We observe also that the United States secure a large portion of this profitable trade, of which Canada might surely obtain the lion's share if not a virtual monopoly. It should be remembered that there is a large demand for coniferous lumber in Australia, where, though there is abundance of hardwood, there may be said to be no pine, and though New Zealand is better provided in this respect the supply there is not in excess of local requirements. It is a market that Canadians should develop, giving due attention to the kind of goods that suit the Australians. That the chief demand is for goods more highly manufactured than when they come from the saw mills makes care in shipping advisable, but adds to the value of the trade.

QUEBEC, where so much timber has been handled for the last half century, has seen many changes of late years, notably in the rapidly decreasing traffic in square timber, deals and staves. Many of the extensive docks which have done service for so long are now going to ruin, and adding to the many other signs of decay which abound throughout the ancient Capital. A recent visit among the timbermen of Quebec convinced THE LUMBERMAN of the fact that the wood trade was demoralized in the extreme, with little prospect of future revival. It may be said that the trade here depends entirely on the European markets, and partially through the depression in the old country, and also the fact that Norway pitch pine has come into such strong competition with Canadian timber, the outlook is of the gloomiest description. The Norway pine is not only placed on the English market at a lower price than the Canadian, but is also considered a more suitable wood for the purposes for which it is required. In addition to this there are other things militating against the Quebec dealers. A few years ago a very large trade in deals was carried on, but gradually this branch of the timber trade has been transferred to Montreal, the latter city, it is said, affording cheaper dockage and improved facilities. Then again, the Quebec operators have only to look back to find an extensive and prosperous stave trade, now almost, if not quite, *nil*. All these things considered the prospects for the future do not look very encouraging. Still, while such a state of affairs exists, we have not yet heard of any financial embarrassments of a serious nature, and all to whom we conversed, while seriously lamenting the depression, showed, so to speak, a "stiff upper lip" and were waiting, Micawber like, for something better to turn up. Doubtless before very long a different and more profitable branch of the wood trade may assume sufficient proportions to compensate the timbermen of Quebec for the losses sustained in the withdrawal of the trade above enumerated.

OUR Toronto contemporary, the *Mechanical and Milling News*, has evidently not studied the question of Commercial Union from a lumberman's standpoint, as the following paragraph will demonstrate:

> "How often we find the news columns of our daily papers contradicting most effectually the arguments advanced in their editorial columns. As a case in point, the *Mail* gives as one reason for its advocacy of Commercial Union that it would benefit Canadian lumbermen, while the Ottawa correspondent of that journal, who is coming in contact constantly with leading lumbermen, states that 'of late years the demand for Canadian lumber has been very great in the United States, and *as the supply is gradually becoming limited*, the lumbermen at Ottawa know that *they can have a good market for all the lumber they can cut*.' In view of the above satisfactory condition of affairs, it would be interesting to know what use our lumbermen would have for Commercial Union."

In reply to the query contained in the above paragraph, "what use would our lumbermen have for commercial union?" the answer is not hard to find. As our contemporary is doubtless aware there is at the present time a duty of $2 per thousand feet on all lumber entering the United States from Canada. This duty virtually comes out of the pockets of the Canadian manufacturer, for the reason that lumber from this country has to be placed on the American market at the same price as it can be obtained for at Buffalo, Tonawanda or any other point. If the Americans pay the duty in the first instance it is deducted in the price of the lumber and the Canadian shipper finds himself this much short on every thousand feet of lumber exported. Not only would Commercial Union be a great saving to the trade in this way, but it would also open up a greater market for coarse lumber, the production of which is too great for the home market, and cannot be exported owing to the high duty referred to. We are quite aware that the demand across the lines for Canadian lumber is great, but it would be considerably greater were the custom houses along the frontier abolished. Not only this, but a fair margin of profit would then be realized by the manufacturer, instead of allowing this money to go into the exchequer at Washington.

FROM various quarters there come complaints of inadequate railway accommodation to move lumber promptly, but this is by no means general. The lumbermen and dealers of Canada may well be thankful as they compare their position in this respect with that of their neighbors. From one after another of the centres of the trade complaints of lack of cars to move them are heard, till the cry seems universal. Crowded piling grounds, delays in delivery to buyers, and other difficulties affecting business at this important season, are the result. It must of course be admitted in fairness that the railway companies should be allowed some consideration if in a busy season they do not have cars ready at the moment they are wanted at every point on their extensive and complex system. Such a period is the fall when dealers are clearing off their heaviest summer cut, vessels are delivering all they possibly can before navigation closes, and dealers are stocking their yards for the winter, while the great movement of the crops is also taking place. If, however, some consideration and a few days' delay should be accorded, there is no excuse for a shortage of rolling stock causing a serious and prolonged check to business. The evil is so much greater than customary that it is impossible to avoid the conclusion that while there has been a great and rapid extension of railway mileage, undue parsamony has prevented the supply of adequate rolling stock in proportion to the increased work. It is not sufficient for the companies to allege that if they supplied cars and staff sufficient to meet on the instant all the demands of the briskest season much of it would be idle at other periods. By their charters they have been granted almost a monopoly of the carrying business, and this and other privileges have been given on the understanding that they meet the business requirements of the public. They are not at liberty to consider merely what stock and what staff they may most profitably maintain. The Canadian lines as a rule are giving less cause for complaint in this respect than are those of the United States, and hope not only that readiness for the service of the public will be continued but that any present shortcomings may be remedied.

ONE of the most striking features of the lumber industry of this continent is the great and rapidly increasing development of operations in the Southern States. This extraordinary activity in the southern forests is making its mark not only locally but in distant places. The industrial progress on the spot is of course adding greatly to the demand on the spot, but from Chicago and other northern cities of the trade comes the cry that the South is becoming a formidable competitor in neutral markets,—that in States where the white pine was formerly the main timber of commerce, the yellow pine is fast growing in favor and increasing in consumption. Nor is the increased demand for the product of the southern forests confined to this continent; it is more and more gaining a hold in the European market. This is a movement which Canadian lumbermen will naturally watch with interest, but there is another aspect of the question with which they are fully as much concerned. Not only have the forest products of the South been greatly augmented of late, but equally marked has been the demand for their timbered lands by operators at a distance. The lumbermen of the Northwestern States have been and are investing heavily in the yellow pine forests, and the area thus held in the South by northwestern lumbermen must aggregate an enormous average From these facts Canadian lumbermen may draw the conclusion that their brethren of the northwestern pine States, however contradictory may be the reports as to the extirpation of their forests, are looking forward to a scarcity of standing timber as an event of a not far distant future. It tells the same tale as their efforts to obtain timber limits in Ontario. The lesson that our limit holders and mill owners may learn from these indications is that before very long the supply of pine in this country will be in greater demand and of greater value. With such a prospect they will do well to cut cautiously and not be in too great haste to sacrifice valuable property without obtaining adequate remuneration. To force their goods too rashly on the market may be a losing policy in the long run for more reasons than one. It will be wise to consider the future as well as the present, and in this way be guided by the experience of the past in other States of the Union.

FROM more than one locality in the United States there come accounts of the adoption of the practice of baling sawdust. At Manistee the machine used is an ordinary power hay press worked by steam. In Canada there are not such large cities near the mills to afford a good market, but surely a certain quantity could be sold. It would be worth the while of some of our millowners conveniently situated to see if they cannot adopt this process. What is now a source of expense might be made to produce a revenue, and the complaints would be avoided of the effect of the mill refuse in the rivers.

THE Ottawa *Journal* is very much chagrined because THE LUMBERMAN failed last month to give credit for an article which was reproduced from that journal, eminating from an Ottawa lumber manufacturer. We can assure the *Journal* editor that we had no intention of hurting his feelings, as the omission was not intended. Were we to use "cuss words' every time an article was stolen from this journal without due credit, we think our prospects of "climbing up the golden stairs" would be slim indeed. Dear *Journal*, we sympathize with you.

AT length the great Nova Scotian log raft has been successfully launched. This time the ways, which last year yielded to the enormous weight, necessitating the reconstruction of the raft, did their duty and the large mass was floated. Mr. Robertson, the patentee, has so much confidence in the success of the tow to New York, that he has already commenced the construction of another raft on the same ways. If his hopes are verified, a revolution of no slight importance will be effected in the trade, for the example will no doubt be followed with the advantage gained from the experience of the costly preliminary failures. The conveyance of three million feet of timber by means of one tug would certainly be economical, if the risk should be shown not to be too great. Log rafts on this principle may perhaps be used on the great lakes to enable United States mill owners to carry out their desire of supplying their mills from Ontario forests.

THE merchants of St. John and Halifax are making renewed attempts to induce the Dominion authorities to foster trade with the West Indies and South America by granting subsidies to steamship lines. There is every appearance that their efforts are likely to be successful. This matter has a considerable interest for the lumbermen of our Dominion. A deputation from St. John, N. B. while recently addressing the Montreal Board of Trade to obtain its co-operation, pointed out that not only was there at present an export of Canadian lumber and other wooden goods from the Maritime Provinces to the countries in question but that also there was a far larger export from the United States a considerable portion of which was the product of Canada. The deputation urged very reasonably that this trade if carried on direct would be more profitable to Canada. The trade should use its influence to support this movement.

IN addition to the immediate destruction of property caused by the forest fires which have wrought devastation in so many limits this year, an indirect bad effect has been produced. From several quarters we hear of lumbermen making preparations for getting out an unusual quantity of logs, because their limits having been burned over the trees have been killed and must be at once felled to escape the ravages of the "borer." This must have a tendency towards a glutted supply, besides disturbing the calculations of mill owners, who had aimed at sparing their forests so as to reserve a supply of logs for their mills as long as possible. The loss and inconvenience thus caused will be an additional incentive to maintain and even improve the means that have been adopted for guarding against forest fires. The laws on this subject should also be rigorously enforced.

REFERRING to our remarks on the increased mileage and stumpage tax in the province of Quebec, the *Miramichi Advance*, of Chatham, N. B., asks:—"What would the LUMBERMAN say if Quebec operators had to pay $8 per square mile as rental and $1.25 per M. for spruce as the New Brunswick government forces our lumbermen to do?" It certainly appears on the face of it, that these demands upon the lumbermen are excessive, and that our contemporary has reason to say "The Quebec government is moderate and merciful in comparison with ours." To compare the two systems with exactitude it would be necessary, however, to take other circumstances into consideration. One of the worst features of the Quebec increase is that it prejudicially effects property that was acquired, has changed hands and has been accepted as security on the basis of the old dues, the value being suddenly and unexpectedly diminished by the increased tax. Those who now acquire timber limits in the Province of Quebec will not be subject to this wrong, for they will value the limit with reference to the amount of the rental and dues. Not having immediate access to information as to the dues formerly exacted in New Brunswick, we cannot say whether the same injustice has been done there. It would seem so from the language used by the *Advance*, which says:—"Our government knows that its victims cannot at once withdraw their capital, and they seem determined to secure as much as possible of it while it is within their reach." This is where the injustice comes in; it is no valid excuse to say that the leases are only for the year, since relying on the established practice and custom, men have in good faith invested capital for their operations, have bought limits, or have advanced money on them, and now find that their confidenee in receiving fair play has been misplaced. We would be glad to learn from our contemporary what changes, and when, there have been made in the New Brunswick timber dues.

THE market reports and other information have shown that there has been generally an active business in shingles. Though there has certainly been no diminution in the output, values have been fully maintained, sales have been readily effected, and there has been a steady demand. With a few local exceptions such has been the satisfactory condition generally of this branch of the trade. The natural result has followed; from many different qnarters we hear of orders for new machinery, the erection of new mills and enlarged operations among the shingle manufacturers. There is evidently room for expansion and it is well that advantage should be taken of the opportunity. It should, however, be borne in mind that the business may be overdone, and that any exaggerated increase of production must weaken the market even if it does not glut it. The steady demand for shingles that has prevailed seems to speak of increased building operations, more especially in residences of the class for which this kind of roofing is used, and therefore is an indication of progress and industrial prosperity.

BESIDES their general interest as Canadians, the lumbermen of the Dominion have a special interest in the proceedings of the Joint Fishery Commission now in session at Washington. Even if not adopted, it is certain that reciprocity will be considered as a means of settling the long-pending controversy as to the enjoyment of our fisheries. Whatever restrictions may be established, lumber would undoubtedly be included in the articles on the free list as it is already in the standing offer in our statutes. Such a change must necessarily effect the trade materially, though the extent of the benefit is a matter as to which there is some difference of opinion. Then besides the remission of the United States duty on lumber, any reciprocity even in natural products only would largely effect our lumbermen by their being able to import pork, beef, coarse grains and other supplies without paying the present Canadian duties, which with the prices now ruling would be advantageous to them. As the Commission is conducting its deliberations in private some little time must elapse before the results are made public. Our readers will await their publication with very natural interest.

AT this season it is necessarily impossible to form even an approximate estimate of the log cut for the coming winter, and the amount that will be brought to the mills. Much must depend upon the snowfall, which may be either too large or too small, and much also upon the supply of water for driving. Last winter many operators found that the work in the woods did not come up to their expectations, and an unusually large quantity of logs were detained by a deficiency of waters which also, in some water-power mills, diminished their cut of lumber. But though the result cannot be predicted, it is at least certain that preparations have been made for a large cut this season. The reports from different centres show that generally extensive operations are contemplated. Another strong indication to the same effect is the fact that men for the camps are in demand and there is even some difficulty in obtaining the required number, the common notice on the office door, "No more men wanted," having been rarely seen. With a favorable winter in the woods and spring on the streams and rivers, a large supply of logs may be anticipated, the cut being augmented also by the numerous logs "hung up" this year. A fairly prosperous season, with anticipations of a further improvement of general business, have contributed to this activity. Though there was nothing that could be called a boom, prices were well maintained, there was a steady demand, and a healthy, if not very active, business. The official returns for ths Dominion show that the exports of "produce of the forest" amounted in October to a value of $2,534,855. The home consumption also has been considerable. Altogether the results of the season's business have been satisfactory, and there are favorable anticipations for the future.

THERE is shortly to take place an important sale of timber limits by the province of Ontario, including forests in the heart of the Province that have not hitherto been opened to the lumberman, almost the last in a virgin state in that region. There should be a keen competition for these limits, for they are well timbered, well situated, and are almost the last in the settled portion of the province to be obtained at first hand. It is, however, very desirable that before the sale there should be authorative information as to the conditions on which the purchasers are to hold the limits, as to the stumpage and other dues to which they may be liable. It has been extensively rumored that the Mowat administration contemplated following the example of Mr. Mercier in asking increased payments from the lumbermen. It has even been surmised that Mr. Mowat would avail himself of the opportunity of the meeting at Quebec to consider this subject with a view to similar action. If there was any such consultation its results have not transpired. In view, however, of these rumors and of the action of the Governments of Quebec and other Provinces it is only natural that some incertitude and anxiety should prevail among the Ontario lumbermen. Under these circumstances it is very expedient that before the sale, which is to take place on December 15th, full information should be given as to the terms on which the property is to be held, and as to the rentals and royalties reserved by the vendors. These terms should even be embodied in the conditions of sale. This is the only fair course alike to the purchasers and the vendors. The lumbermen acquiring the property would know exactly what they were buying, and could not have their calculations vitiated by demands for increased payments which they did not contemplate. The province would gain by obtaining the full value of the property by competition unrestrained by the belief that the purchase was a lottery. Business nen would not dream of selling property on such loose terms as to make bidders uncertain and therefore timid, and the provincial authorities should adopt the same business-like policy.

WE find that the London, (Eng.) Board of Trade returns for October are more favorable, both as regards imports and exports, which have swollen considerably. The total declared value of the imports is £30,550,307, against £29,054,399 for the corresponding month of last year, or £1,495,908 more. The increase is chiefly in raw materials for textile manufactures, but is also striking in articles of food and drink, dutiable, metals, tobacco, and manufactured articles. The receipts of cereals from the United States have fallen off largely, and those from the British East Indies and North America are also less. On the other hand, consignments from Russia have about doubled, and those from Australasia are rather larger. For the ten months the total imports are valued at £294,953,817, against £285,468,148 last year, showing an increase of £9,485,669. The exports for the month amounted to £18,736,201, as compared with £18,224,823 last year—an increase of £511,378. Nearly all the items are larger, but the growth of business is largely seen in metals and articles manufactured therefrom (except machinery), and in machinery and millwork. The shipments of cotton piece goods to India continue to diminish, and there is also a decline in those to Egypt, Turkey, and Greece, while to China and Japan and to the European continent the quantities are more important. For the ten months the total exports are valued at £181,835,615, against £177,740,793 last year, being an augmentation of £4,094,822. Turning our attention to that department with which we are more directly associated, says *Timber*, we find that the import of hewn timber for October was 164,985 loads, as compared with 149,150 loads for the corresponding month of 1886, an increase of 15,835 loads. For the ten months ending October 31st, the figures give 1,476,460 loads for 1887, as compared with 1,368,275 loads for 1886, an increase of 108,185 loads. Taking sawn timber for October, the figures give 475,177 loads for 1887, as compared with 605,849 loads for 1886, a decrease of 130,672 loads for the present year. For the ten months ending October 31st, the returns give 3,380,038 loads for 1887, as compared with 3,244,657 loads for last year, an increase of 85,381 loads. The falling off in sawn timber is general in all districts from which we draw our supplies; the only exception to the statement being the United States, which gives a slight increase. For October the importation of staves has been smaller than last year at corresponding date, and the returns for the ten months show an importation less than half the quantity imported in 1886 up to the same date. The importation of mahogany shows a much lessened quantity, the return for October giving 2,197 tons less than in the same month of last year, while of the ten months, the statistics are 31,684 tons for 1887 as compared with 41,010 tons for 1886, a decrease of 9,326 tons, or a declared value of £20,000 less this year than there was last. On the whole the returns show a more favorable state of affairs.

Erastus Wyman and the Lumber Trade.

Mr. Erastus Wyman—or Sir Erastus Wyman as some Canadians hope by-and-by to hail him—has been down to the Ancient Capital, in Quebec, giving his views on the question of Commercial Union. From a report of his speech, comprising several columns, THE LUMBERMAN has extracted the following views as expressed by him regarding the timber interests:

"In the matter of lumber no greater boom could happen to Canada than to break down the barrier which shuts her out from fair competition with the neighboring Republic. The lumber question in the United States was rapidly assuming great inportance. It was alleged by some that within twenty-five years almost the entire stock of available lumber would disappear. The protection which had been afforded to the lumber interest in that country had been practically destruction, because they could in no sense replace the rapidly disappearing forests. The charge against Canadian lumbermen of two dollars a thousand had been a serious impediment, and, if for no other thing, unrestricted Reciprocity should be encouraged. The demand for lumber was likely to be very great. The growth of the great cities absorbed yearly more and more, aside from the treeless prairies, and the activity in providing homes and the necessity for enlarged building operations at almost every point in the neighboring republic made it the very best, as it was the nearest, market for the products of the forests of Quebec. There was not a lumber merchant in the city of Quebec, there was not a holder of lumber land throughout the Dominion, but would be benefited by an open market at a point so contiguous, so cheaply reached, as the points of receipt in the United States. If this was true with regard to lumber, what might not be the result in regard to all manufactures of which wood forms the bulk of the raw material. In the article of furniture Canada aught to be the greatest producing region on the Continent. She possesses no less than sixty-nine different varieties of wood, and throughout Quebec there is an infinite supply of the most attractive kinds of wood for interior decoration. The beautiful birdseye maple, the black ash, the oak and basswood, are all in abundant supply. Is there anything in the matter of furniture, the shape or form, taste or color, which the American possesses that the Canadian does not possess? Is there any device in beauty of construction, in strength, in skill, or in excellence, that could not be imitated in Quebec for the supply of the wants of the United States? Plenty of manufactories in the United States employ French Canadians, Germans, and foreign labor, in the production of the most elegant furniture, and it is safe to say to-day that in the large establishments of New York, Boston and Philadelphia, where could be found the most elegant furniture in the world, that seven-tenths of the labor employed is foreign labor, and that twenty-five per cent. of that is French-Canadian labor. The cheapness with which the furniture could be shipped West and distributed throughout the North-Western States and Territories, as compared with the cost of shipment from other Atlantic ports, would give us an enormous advantage at this point, while the cost of labor, of raw material, and the cheapness of power would be an advantage of the greatest possible value. It might not be that in the finest grades of furniture Quebec could compete, although in that it is difficult to see what barrier there is, but for the bulk of the supply of Western needs in furniture Quebec would have a great advantage. If in lumber and in furniture Quebec possessed advantages from her lecation and abundant supplies of wood, what would prevent her from being the greatest ship-building port of the Continent.

A Monster Raft.

The great raft that was launched at Two Rivers, N. S., November 15th, is 585 feet long, 62 feet wide and 37 feet deep, and weighs 9,000 tons. There were four ways 1,200 feet long, and the raft went slowly at first, but gathering speed ran a thousand feet, until she floated. She made the run in thirty-four seconds without the slightest strain, did not part a single chain nor spring the vast structure an inch. She was taken in tow by the tug Neptune, and the cradle removed at once. The raft draws 19½ feet, or six feet less than was expected. It was in 1883 that Hugh R. Robertson, of Two Rivers, conceived the idea of building a raft somewhat in the form of a ship, composed of logs cut in full lengths and firmly secured by chains. In the following year Mr. Robertson drew a plan of the proposed raft and patented it in the United States, Canada, Great Britain, Norway and Sweden. Early in 1885 Mr. Robertson visited New York and contracted with Wilson Godfrey, of 91 Wall street, for the construction of a raft afloat on the shore of the Bay of Fundy. In November of the same year B. B. Barnhill, of Two Rivers, N. S., contracted to furnish the lumber required for the raft and to build it ready for launching, according to plans and specifications prepared by Mr. Robertson. Mr. Barnhill began at once to prepare a place for the raft near the head of the bay—a place called "Finger Board," about six miles down the bay from the Joggins and about three from Shulee. The spot was admirably adapted for the purpose, and soon workmen were engaged in the construction of the raft. The raft was completed in August, 1886, and was almost as large as the Great Eastern, and full a third heavier. It contained over two million feet of lumber, being over 400 feet in length, 50 in width at the centre and 33 in depth, and 25 in diameter at either end. On the 31st of July, 1886, the first attempt was made to launch the raft, but it did not move. A second attempt was made the following day and the large mass ran down the ways nearly two hundred feet. There it remained, owing to the breaking of the ways. Several other attempts were made to launch the raft but without success. Then Mr. Robertson, who felt satisfied of the practicability of the scheme, decided to tear it apart and rebuild it. This was done and the new raft was finished a few days since. It is much larger than the first structure, being over 500 feet in length and containing about three million feet of timber. Its general form resembles that of a fat cigar, somewhat fastened at its upper and lower sides, with the pointed end cut off. It is one solid mass with the exception of movable interstices necessary in the packing of round lumber, in trees cut as long as they grow, from 30 to nearly 100 feet in length. The timber has been stowed with its small ends generally towards the end of the raft, which helps to give the proper taper, and it is so interlapped that great strength is attained to hinder the structure breaking in two. The patentable point in this system of rafting is the adjustment of the chains which bind the whole together. The main or centre chain runs from one end of the raft to the other, and it is that by which the structure is to be towed. The lateral chains are used to prevent the raft from working apart longitudinally by the action of the waves. The encircling chains are attached to the lateral chains, and are to prevent the raft from flattening out while afloat.

The Hon. William Goold, of Portland, the historian, has unearthed some ancient records showing that the timber raft above referred to has had some predecessors, says the *Industrial Journal*, of Bangor, Me. All of them were successfully launched but came to grief before reaching their destination. In 1792 a raft containing about 1,000 tons of timber was built at Swan island, in the Kenebec, by Dr. Tupper, a somewhat noted eccentric character. It was made by treenailing square timber together in the form of a ship's hull, and was ship rigged, the intention being to send her across to England. At that time no manufactured lumber was admitted into Great Britain; hence the timber in the raft was simply squared with the axe, to make it stow well. The ship or raft lay at Bath for some time, it being difficult to get men to go in her. She finally went to sea, however, carrying a small vessel on her deck. But off the Labrador coast her crew got frightened by bad weather and abandoned her. She was afterwards boarded by men from a passing vessel and found to be in good order, and it was suspected that she was deserted without sufficient cause. Two other similar attempts were made from the Kennebec, and both vessels went safely across, but foundered on the English coast, under the same suspicions of fraud as in the case of the Tupper ship. In 1825 the ship Baron of Renfrew was launched at Quebec, having made a previous unsuccessful attempt when she stopped on her ways, owing to the grease being consumed by fire from friction. She was towed down to the island of Orleans and anchored. Her dimensions are given as follows: Length, 309 feet; breadth, 60, feet; depth, 38 feet internally and 57 feet externally; tonnage, 5,888 tons; draft when launched, 24 feet; cargo on board when launched, 4,000 of timber. She was ship rigged, with four masts, and was perfectly flat bottom, and with a keel of about 12 inches; wall sided, sharp forward and rather lean aft, and looked more like a block of buildings than a ship. She sailed in August 1825, in command of a Scotchman, a half pay lieutenant in the British navy. October 27 the Baron of Renfrew drove on shore on the coast of France, near Calais, and went to pieces. And thus closes the record of ocean timber ships up to the Nova Scotia raft.

The Motive Power of the Future.

It is a recognized fact that the steam engine makes use of only a small fraction of the amount of fuel that is burned to run it. The nature of the machine is such that this fact is a necessary one. The fault does not lie in the workmanship, for the actual loss of power from imperfections in this respect is found (by the indicator) to be only about twelve or fifteen per cent. The cause of the low efficiency lies too deep to be overcome by any mechanical device, and it has often been remarked that the motor of the future must work on an entirely different principle.

Mr. Edison has invented a motor which transforms heat into mechanical energy without the intervention of either boilers, pistons or cylinders, and he is very hopeful of improving it so that it may become of practical use. We have examined drawings of it, however, and have become [illegible] The motor is electrical in nature, and [illegible] it is necessary to heat and cool a piece of iron very rapidly We doubt if this can be satisfactorily done

The hot-air engine is very inviting, but men like Ericsson and Siemens, after years of thought, have not brought it into successful competition with steam, although they were well acquainted with the theory of its action, and were vastly better prepared to make experiments than the fathers of the steam engines were.

The wind mill is too uncertain in its action to [illegible] steam, though the fact that it consumes nothing must become a very weighty consideration in its favor when our coal supply gives out.

The tide mill has never been very widely adopted, and has [illegible] anyone thinks of it seriously as a rival of steam; but it is [illegible] theless possible to construct one that can produce power enough for the entire United States. A reservoir forty [illegible] square, at or near the head of the Bay of [illegible] where the tides are very great, would contain sufficient water to [illegible] 700,000 horse power for twelve hours; and this might [illegible] tributed electrically and sold in every State in the [illegible] When coal has become scarce the construction of such reservoirs may be attempted, so that power and light and perhaps heat also, generated in Nova Scotia, may be sold all over the continent.

Power obtained in this way would not come from nothing. If a tide plant like that we have suggested is ever constructed, it will lengthen the time of day. It will slow down the earth's rotation just as certainly as a big gear wheel would, if placed on the earth's axis and made to drive machinery; though the effect would be so slight, owing to the immense size of the earth, that the increase in the length of day would not be measurable for thousands of years.

The gas engine has proven itself very convenient in many places, and oil and powder engines are also in use; but all of these use fuel, so that, equally with the steam engine, they fail to solve the great problem that must face the world sooner or later, when the coal is gone. The engine of the future must draw its energy from some of the forces of nature, and it seems that it must be operated by wind, waves or tides, or by rivers, ocean currents or the direct rays of the sun.—*Power.*

CHIPS AND SAWDUST.

THE art of paper making has reached a point where a tree may be cut down, made into paper, and turned out as a newspaper, in thirty-six hours.

IT is no use to expect shafting (and especially heavy shafting) to run well when it is crooked or the couplings are out of truth. The power used by this alone often amounts to a serious item of expense.

A BRITISH authority on the circular saw says: When having saws hammered, be sure they are placed in competent hands; we have seen saws that have been hammered by so-called experts that might have been better done by a blacksmith's striker.

THERE is a good reason to suppose that there may be, not long hence, a craze for cypress the same as there has been for other woods from time to time. Cypress as a finishing lumber has this advantage over the hardwoods, or even over yellow pine—it is almost as easily worked as white pine.

A REMARKABLE imitation of black walnut has lately been made from poor pine, the quality and appearance of the article being such as almost to defy detection. To accomplish this one part of walnut-peel extract is mixed with six parts of water, and with this solution the wood is coated. When the material is half dry a solution of bichromate of potash with water is rubbed on it, and the made walnut is ready for use.

WOOD decays very rapidly when exposed to the alternate action of air and water, such as in the case of tidal rivers, but this is not the case when it is immersed in deep water or in still water that is not changed. The air contained in such water becomes exhausted of its oxygen, and the process of decay is arrested, or may never take place to any extent. Accordingly, it is found that piles driven in deep water, or in clay or mud, will remain sound for almost an indefinite length of time.

A MAN from Michigan, who was admitted to the Royal palace, at Amsterdam, Holland, passed—if he or the newspapers don't lie—through a door hung on brass hinges and secured by a brass lock, made in a Massachusetts factory, and saw the following further evidences of the spread of United States art and industry in the old world:—A chair from Grand Rapids, Michigan, and a spittoon (he called it a "cuspidor,") from Baltimore, stood near. Over the mantel, which was of American design, hung a landscape by a Philadelphia man, Thos. Moran, and upon it were a Colorado stag vase and a box of Michigan tooth-picks.

THE NEWS.

ONTARIO.

—The box factory at Waubaushene is again in operation.

—The Parry Sound Lumber Co. are building a new shingle mill.

—John Harrison's saw mill, at Owen Sound, has been burned.

—Mr. T. P. Pearce, Marmora, is building an extensive lumber mill at that place.

—Mr. C. H. Harrison, Norwood, is about starting an extensive sash and door factory.

—Beatty's sash and door factory, at Pembroke, recently destroyed by fire, is being re-built.

—Cedar blocks, for paving streets, are being manufactured quite extensively at Norwood.

—The sash and door factory belonging to John Leath, Ridgetown, has been destroyed by fire.

—The Big Mill at Deseronto has closed down for the season, having been running since April 21st.

—A new sash and door factory at Campbellford, built by Mr. Jas. Benor, is nearly ready for work.

—The Midland and North Shore Lumber Company's mill at Parry Sound has been closed for the season.

—Considerable progress is being made towards the organization of a Lumber Board of Exchange in Ottawa.

—The railroad ties cut this season by the Rathbun Company's mill, at Campbellford, are being shipped to the State of New York.

—Work on the new shingle mill, at Deseronto, is being pushed forward. It is a substantial three-storey building with cupola.

—Messrs. Bronson & Weston, the well-known Ottawa lumbermen, are seeking incorporation as the Bronson & Weston Lumber Company.

—It is reported that Mr. Booth, of Pembroke, has sold his limit, known as the old Mackie limit, to Mr. W. R. Thistle, of Renfrew, for $25,000.

—Messrs. Thompson & Ellis, of Fenelon Falls, have sustained a heavy loss by the sinking of two scows loaded with provisions for the shanties.

—Mr. George Brooks, of Barrie, is building a saw mill at Melville Bay, on the Lake Huron shore, about 12 miles above Providence Bay.

—Mr. A. Irwin, Blenheim, during the months of September and October manufactured 100,000 barrels for the flour, apple and bean trade of that town.

—Jacob A. Shaver, of Ancaster, writes us that he is doing a brisk trade, and that the only trouble is short stock. He cuts about 8,000,000 feet per year.

—H. & J. D. Smith, of Stratford, are erecting a new saw mill in that city, which will, it is expected, be in operation about the beginning of the new year.

—On Nov. 6th, 1000 cords of firewood, a lot of lumber and a large barn, owned by Kerr & Davis, near Beamsville, were burned. The saw mill near by was saved.

—John Armstrong, of Chaffey, has secured the contract from the Northern and North-western railway to supply 10,000 ties. This looks as if the Northern was improving.

—Both the Gilmour and Rathbun mills at Campbellford, have closed down for the season. The latter had been running scarcely five months, and every log has been sawn.

—Mr. Harman Mutchenbake, a young man 16 years of age, sawed 42½ M. feet of 16 inch shingles in 11 hours, at the new shingle mills at Rosseau Falls. Can this be beaten?

—Mr. Robert Harrison, Cavan, is adding a sash, blind, door and chair factory to his lumber mill, and is building a 50x30 foot extension to his works to accommodate his enlarged business.

—Mr. E. W. Rathbun, the well-known lumberman of Deseronto, recently delivered an able address in Oswego, strongly opposing Commercial Union between Canada and the United States.

—Owing to the excessive lowness of the water in Chats Lake, Messrs. McLachlin Bros. have been compelled to shut down their steam saw mill which will lessen their cut by at least a quarter.

—The lumber firm of McCraney & McCool, of Toronto, has admitted Mr. Robt. S. Wilson as partner, and opened a branch at Ottawa, where Mr. Wilson will be resident manager. The firm has mills at Oakville, Burlington, Bronte, and Huntsville, and makes a specialty of long bill stuff and dressing and the higher grades of pine. The style of the firm is now McCraney, McCool & Wilson.

—Mr. H. J. Russell, for many years Inspector of Crown Timber agencies and Collector of Timber Dues, died at Ottawa, during November, aged 82 years. He was the father of Mr. Lindsay Russell, Surveyor-General of Canada.

—Scott, Scott & Co. have just completed a very successful season's sawing at their Medonte mills, the output being four millions. Shipping is being proceeded with vigorously, and they have got well into the bush work for next season's stock.

—Messrs. Hurdman Bros., of Pembroke, deny the report, which has in some way gained circulation, that an epidemic exists in their shanties, in the form of typhoid fever, and that the rumor of any death taking place in such, is entirely false.

—Lumbering is going to be carried on extensively in the Lake Megantic district this winter. Dudley's company alone will take out eight million feet. Beatty & Co. bought a whole township on the other side of the boundary line, and they are busy building now.

—Reynolds & Scord's saw mill at Reynoldsville, on the Twelve Creek, three miles south of St. Catherines, together with the adjoining barrel heading factory and lumber piles, were completely destroyed by fire in the early part of November. Loss about $15,000; insurance, $5000.

—Mr. Boyd's lumbering operations in the Haliburton district, back of Peterborough, will be very extensive this year, so much pine having been killed by the fires. He will cut more logs than he can saw, and will have to warehouse them in the woods. The firm will run about eight shanties in this district, says the *Post*, and some of them will employ a hundred men.

—Mr. Norman Barnhart, manager for M. Boyd & Co., of Bobcaygeon, reached Lindsay with a gang of about seventy men from the lower provinces, and at once engaged a special train and was whirled northward to the seat of the firm's lumbering operations in the township of Snowden. It is now probable that the firm will have about six hundred men engaged during the season.

—The last of the mammoth whitewoods growing near Chatham, in Kent county, once famous for big trees, was cut recently on the farm of Mr. C. W. Richardson, measuring sixty-two hundred feet board standard. It was trucked to Blenheim and shipped thence to Chatham *via* Erie and Huron. Old lumbermen tell the *Planet* that it is the largest tree that has come to Chatham in the past fifteen years.

—The lumber firm of Messrs. Bronson & Weston have obtained, according to the *Evening Journal*, a lease of the small island in the Ottawa river below the Chaudiere docks, and opposite Blyth's Point, and will next spring construct extensive docks over the entire island which will be used in future as a lumber piling ground, for which purpose it is admirably suited.

—For some time past Ottawa lumbermen and others have been petitioning Parliament for the construction of a permanent iron bridge to replace the present suspension bridge across the Ottawa river below the Chaudiere Falls. It now seems that steps are being taken towards that end, the cost of the new structure being estimated at $40,000. The new bridge when completed will be of great benefit to the lumber trade in particular.

—At the lumber camp of Mr. George Massey, says the Parry Sound *Star*, a jobber for the Georgian Bay Lumber Co., Jno. Armstrong's team during the space of 49 days skidded 5,436 logs. All the different lumber companies are busily engaged in taking supplies to their lumber camps, most of which are now in full running operation. The cut of logs during the coming winter will in all probability be the largest for some years past, and a busy season and good times generally will be the result; particularly so if the demand for lumber and good prices rule next summer.

—Letters patent under the great seal of the Province of Ontario have been issued incorporating the Lakefield Lumber and Manufacturing Company with a capital stock of $300,000. The first directors are Messrs. Roland C. Strickland, Percy W. Strickland, C. J. Bloomfield, W. H. Casement and F. R. Barlee, all of Lakefield. The objects of the company are to acquire the mills, limits and business of Messrs. R. & G. Strickland, to carry on the business heretofore carried on by them, and to more thoroughly develop the Lakefield water power. The chief place of business will be at Lakefield.

—The following notes regarding lumber operations at Wyevale come to hand: A number of shanties are in full blast here. Mr. C. Varty employs a large gang of men, who under the management of his foreman, Mr. Jas. Crawford, are cutting and delivering logs on the beach. Mr. Alex. Hill has taken the contract of cutting next summer's stock for Messrs. Hogan Bros. It will be the largest since the mill was built. Messrs. A. & R. Flemming have about fifty men employed in cutting and drawing cordwood. They are building a large shanty and intend employing as many men as can be had. Anybody wishing to obtain work should come to Wyevale where they will find a winter's employment and good wages.

NEW BRUNSWICK.

—John F. Carter's saw mill, at Bathurst, has been burned.

—The saw mill belonging to John Carter, Bathurst, was destroyed by fire Nov. 1st. Loss, $5,000; insurance, $2,000.

—The St. John *Telegraph* publishes a long interview with Mr. Alex. Gibson, New Brunswick's lumber king, regarding unrestricted trade with the United States. Mr. Gibson seems to strongly favor such a policy.

—The Fredericton *Gleaner* understands that one of the heaviest lumber operators on the upper St. John is in serious trouble with the American customs' authorities for making alleged false entries at the customs' office, Fort Kent.

—The lumbermen of upper St. John are devising a plan to dam the river a short distance above the falls for the double purpose of holding their lumber in spring till the booms are swung and to assist in driving the lumber in low water. There is talk of a joint stock company for this purpose.

—A great disadvantage under which the lumbermen of the North Shore labor, says the St. John *Sun*, is the distance which vessels carrying lumber to the United States have to pass over before reaching their destination. Were the long and dangerous sail around the coast of Nova Scotia abolished by the construction of the proposed ship railway across the isthmus which connects that province with New Brunswick, all the wood now wasted in the manufacture of deals in the shape of slabs and edgings, could be profitably converted into laths, pickets and other short lumber. As the matter now stands, it does not pay to ship short lumber from the north to the States. On the Restigouche as well as on the Bonaventure there are large quantities of the finest cedars. Hundreds of millions of white cedar of large size on the Bonaventure River.

—The cut of logs at the headwaters of the Kennebec (Maine) this season will be above an average, between 100,000,000 and 125,000,000. Hon. J. Manchester Haynes, of Augusta, will cut about 14,000,000; Bradstreets of Gardiner, 10,000,000; Lawrence Bros., South Gardiner, 8,000,000; Lawrence & Philips, Somerset Mills, 7,000,000; E. Shaw & Sons, Bath, 12,000,000; McPheters, Grenville, 5,000,000; Clark & Milliken, Richmond, 5,000,000; Putnam L. Clason, Randolph, 4,000,000; E. Milliken & Sons, Augusta, 4,000,000; Fogg & Co., Bowdoinham, 4,000,000; N. Totman & Sons, Fairfield, 3,000,000; Omar Clark, Carratunk, 5,000,000. The above does not include all the operators, but nearly all the large ones. Lumbermen are now sending their teams into the woods.

—A contributor to an exchange writing from Blackville discourseth thus on the life of the hardy woodsman: The lumbermen are once more on the alert. Owing to the large exodus, a reason for which your correspondent does not dare to venture, good woodsmen are scarce, and wages consequently higher than for some years past. Every few days sees the departure of a crew for the "Big Hole," or the "North Pole," or some other bear haunt, and to the uninitiated it is indeed an affecting sight to witness the partings which are to consign man to the forest depths (from whence with a sufficiency of pork and beans, he will emerge in the springtime, a veritable baby elephant) and his better half to wood-cutting and stable work, while the snow endureth. And when the balmy days of March breathe an aroma of returning "bush-whackers," the affectionate wife eagerly scans the snow-covered hills until that beloved form, clad in snow-shoes and whiskers, appears, when she rushes to his outstretched arms with the sentimental expression of welcome—"John have you any gum?"

NOVA SCOTIA.

—The excavation for the Halifax dry dock is well nigh completed, and about 150 feet of the concrete walls have been laid. Every appliance known to modern handicraft in the conduct of large contracts is in operation at these works and progress is very rapid. The coffer dam is a complete success and none of the harbor water can find an entrance into the excavation. The dock will be finished and ready for service within two years.

—Dougald Dickey, nineteen years old, had his left arm caught in a circular saw and torn out at Beckman's mill, Halifax, Nov. 16th. The saw also inflicted a bad wound in his side. The young man lived for only half an hour afterwards. An inquest was held by Coroner Ligney, of Waverly, when a verdict of accidental death was rendered. Dickey belonged to Glenmore, Middle Musquoboboit.

—R. A. Gregory's mill, at Carleton, after some repairs, has resumed work, which will be continued about a month longer. Adams & Gregory's mill will run until the first of the year, when it will close down for repairs. Hayford & Stetson's mill will only run about a month longer. The Clark mill, it is expected, will run a few weeks yet. Warner's shingle mill is running night and day, giving employment to 25 men.

QUEBEC.

—J. B. Scott, lumberman, Nicolet, Que., has assigned for the benefit of his creditors.

—Mr. McLean's new steam saw mill at Otter Lake will commence cutting logs shortly.

—Water has been so low in the Missisquoi river that Messrs. Fuller & Hill, of Bolton, were obliged to stop work in their tub mill for some four weeks. They have turned out and sold over 60,000 butter tubs this season.

—It is now reported that the Cookshire Mill Company will put up a steam saw-mill at Sawyerville, to get the lumber on the Newport and Clifton branches of the Eaton River above there. It is supposed that 100,000 cords of lumber can be obtained on the said branches of the Eaton River, above Sawyerville and as the Hereford Branch R. R. runs through that place it will evidently help to build up Sawyerville and much of the adjacent country.

AMERICAN NOTES.

—New York's building will average this year about $1,250,000 per week. Philadelphia's account will run far behind, but may reach $21,000,000 or $22,000,000 for the year.

—Advices from Sault Ste. Marie are to the effect that there will be plenty of men for the woods in that region, and the log crop is estimated at 50,000,000 in excess of last winter.

—The lumber shipments from the Saginaw river for the season show a marked falling off as compared with any previous year since 1876, and the movement in shingles is the smallest since 1874.

—An Oshkosh, Wis., lumber firm has sold two thousand cords of pine slabs to a Chicago concern for $3.50 a cord. Oshkosh also sells her sawdust, bark and edgings to outside parties for good prices.

Although the receipts of lumber in Chicago have been greater by 136,000,000 feet than they were last year, the stock of lumber in pile in that city is about 20,000,000 short of what it was on Nov. 1st, 1886.

—The barge Waubaushene, in tow of the steam barge Isaac May, became waterlogged in Thunder Bay, Wis., October 29, and lost her deck load of lumber. She was bound from Serpent River, Ont., to Buffalo.

—The yellow pine manufacturers along the Atlantic coast are preparing for an increased production next year. The sap pine manufacturers are finding a good market for everything that they properly kiln dry.

—Saginaw capitalists and others are looking up and buying stumpages in the Duluth district, and the hope is created that the place which Proctor Knott made famous will again come to the front as a lumber producing point.

—Buffalo, N. Y., had received during the season to Nov. 1, 235,935,000 feet of lumber and 30,205,000 shingles, an increase of 2,250,000 feet of lumber, and a decrease of 14,000,000 shingles, as compared with 1886 to same date.

—The largest leather belt ever made or used in New England has just been furnished for the Boston Cordage Works. It is 120 feet long and three ply, four feet wide and weight 1,500 pounds. Over 100 hides were used in its construction.

—There is a deep-seated conviction, says *The Timberman*, in the minds of most Chicago dealers that $12.50 is as little as piece stuff can be sold for. It has averaged to cost $10 all the season, and $2 will not let the handler out with a profit.

—A colossal stick of timber from Puget Sound has been contributed to the Mechanics' Exhibition at San Francisco. Its length is 151 feet, and it is 20x29 inches through. It is believed to be the longest piece of timber ever turned out of any saw mill.

—It is reported that Southern lumber is constantly trenching on territory which for a long time was mostly supplied by white pine. The white pine dealers are, however, shipping lumber in great quantities from Chicago and more northern points of supply.

—No one knows, or can form an idea of, the volume and value of the Southern lumber trade, says the *Southern Lumberman*. We all know that it is immense; that it is growing, and we also know that all classes of Southern lumber are selling below their actual value. To use a Southern phrase, "we are fooling away what we already have."

—Everywhere lumber shippers are kicking about the scarcity of cars. Thousands of cars have been added to railway equipment during the year, but the famine has not abated and business is hampered. In the Saginaw valley 2,500 more cars could be used to-day than the railways can supply, and at Buffalo, Tonawanda and other points the lack of cars is a painful reality.

We are promised something wonderful in steam engines [illegible]

into its own boiler; at least, so its inventor claims, and the London *Engineer* and the *Iron Age*, after elaborately explaining the invention, appear to think that there is some foundation for his hopes. The invention is simply to use the steam and then put it back into the boiler again. Take a case in point: The "City of Rome" burns about 400 tons of coal daily. This coal costs from $1700 to $1800. Run under the system at work by this last invention the same steamer could be run at a cost of $200 daily. This item alone is enough to prove the value of the invention. It will cheapen the carrying trade, give more room for coal, do away with one-fourth or fifth of the space required for boilers, and reduce the cost of coaling stations for the navy. When applied to engines on shore, it will be equally revolutionary in its effects, and unless the invention can be applied to engines now in existence, we may, in a short time, see all the engines in the world worth nothing more than what they will bring for old iron.

NEW BRUNSWICK BUDGET.

Special correspondence to the CANADA LUMBERMAN.

Navigation has closed on the St. John river, and with it the work of the Fredericton Boom Company, and St. John River Log Driving Company. Both corporations handled about as much lumber as last year. The returns of the Fredericton Boom Company show: 118,000,000 superficial feet rafted, 97,000,000 feet of which were rafted at the booms, the balance by Tapley Brothers, as agents for the company, who collected and rafted what lumber went by the booms during the freshet of the spring.

In round numbers the quantities rafted for the leading lumbermen are:

W. H. Murray,	St. John,	27,000,000	feet.
Miller & Woodman,	"	15,000,000	"
Hayford & Stetson,	"	15,000,000	"
E. G. Dunn,	"	11,000,000	"
A. Cushing & Co.,	"	6,000,000	"
A. F. Randolph,	Fredericton,	10,000,000	"

The St. John River Log Driving Company handled in all 103,851,580 feet, made up as follows:

From Grand Falls	59,576,642	feet.
" Salmon River	417,187	"
" Aroostock Falls	30,363,631	"
" Tobique River	10,761,827	"

All logs being driven clean within their limits except the jam that formed in the Aroostock Falls last spring of about twelve million.

The statements above give no idea whatever of the total quantity of lumber moved on the St. John river this season, but only represent what was cut above Fredericton and freighted to St. John direct. In addition about 31,000,000 ft. got above Fredericton were what we call bank logs, and rafted at brows and sawn in mills along the river. Alexander Gibson manufactured, say, 22,000,000 feet on the Nashawaak, and about 20,000,000 were got on the tributary below Fredericton, making the total quantity got to market this season on the main river and tributaries in the vicinity of 191,000,000 superficial feet.

* * *

This winter the log cut will be larger than usual, but not nearly so many American logs will be got out, while the quantity of Provincial logs will be greatly increased. The reason of this change is that the U. S. Treasury Department has done away with the regulations which allowed Provincial lumbermen to bond their teams on going into the woods and have them cancelled when returning in the spring. Now duty is demanded of every team. By this move it was supposed that the St. John manufacturers, in order to get their complement of American logs, would be forced to employ American labor and Aroostook county (Maine) reap the benefit of it. The result is as we state, the quantity of American logs is greatly reduced.

* * *

It is almost impossible to give a reliable estimate of what this winter's cut will be. As near as we can get at it St. John manufacturers will get 23 million feet of Provincial logs above Grand Falls, and about 48 millions of American, which includes some seven millions hung up last year, from the Aroostook 30 millions of new logs (American), and fifteen million, from Tobique (Provincial). The largest operation will be that of Robert Connors at Cabano Lake on timber lands held by W. H. Murray and Millar and Woodman from the Quebec government. He will cut ten million feet of Spruce. They will probably be the largest cut this season and will average about 7½ to the thousand. Contract figures for Spruce are somewhat higher than formerly and are from $9.00 to $9.50 for American, and $7.75 to $8.25 for Provincial.

* * *

There will be considerable sawn lumber wintered in St. John. Dry shipping pine boards are very scarce and held at $15 per thousand. Randolph & Baker's and George E. Barnhill's mills [illegible]

CONTEMPORARY COMMENT.

We feel deeply indebted to our contemporaries of the pre[illegible] for the very kind reception tendered THE LUMBERMAN. Space will not permit of our republishing all the flattering notices sent us, and we have therefore simply taken the "marrow from the meat," which will suffice to show the esteem in which this journal is held. Such encomiums make us feel that our labors towards making this journal a cre[illegible] terest in which it is published have not been [illegible]

A very handsome and useful publication.—*Bryson Advance.*

It is a fine specimen of the typographical art, and is highly creditable to the publisher in every way.—*Deseronto Tribune.*

Excellently printed, ably edited.—*Elora Expre[illegible]*

The November number comes out resplendent in a new [illegible] throughout and presents an exceedingly at[illegible] It does one good to turn over its pages and admire the excellence of its typography. It gives a large mass of information. *Pict[illegible] Times.*

It is always prompt in giving full and timely information on all subjects touching the lumber interests, and presents as handsome a typographical effect as any trade journal in the country.—*Canadian Manufacturer.*

It presents a most creditable appearance. Editorially is as ably conducted as usual, and is a welcome exchange.—*Sherbrooke (Que.) Examiner.*

In addition to making a very fine appearance typographically, several new departments have been added, and the scope of the journal enlarged. On the whole it is an exceedingly creditable publication, and reflects great credit on the ability and energy of the proprietor.—*Peterborough Daily Review.*

The handsomest trade journal in Canada. The advertisements are the neatest we have seen except in specimen sheets from [illegible] foundries.—*Peterborough Morning Time*

It is well and carefully written, and as bright and neat as new type can make it.—*St. Catharines Daily News.*

It is one of the handsomest and best publications on the [illegible] tinent.—*Bruce Reporter.*

Its typographical appearance is a delight to a careful printer's eye, and a credit to Canadian journalism in every way.—*Bridgetown (N. S.) Monitor.*

Everything about it appears neat, clean, and in every way a credit to the publisher.—*Meaford Monitor.*

The trade journal of Canada's staple trade ought to commend itself. It bears evidence of being carefully conducted.—*Patent Review.*

It comes out in a beautiful new dress of type, and is worthy of commendation both in an artistic and literary sense.—*Peterborough Daily Examiner.*

Always full of news and looking well.—*Brockville Evening Recorder.*

Beautifully printed on fine paper, and full of information of interest to all engaged in the lumber business.—*Fenelon Falls Gazette.*

It is gotten up with a taste and skill highly creditable to its management. Replete with news and ably written.—*Trenton Advocate.*

Its mechanical appearance is second to that of no paper of the class on the continent, and it is an excellently edited and compiled journal.—*Essex Centre Liberal.*

It has made solid advance in prosperity as well as literary excellence. In typography it is a credit to home craft.—*Kingston Daily Whig.*

It may be said to be typographically faultless, and has reached a point in the art of typography attained by few journals and surpassed by none on the continent. Its editorial matter compares favorably with its typographical appearance.—*Lakefield Chronicle.*

It compares favorably with any trade publication on the continent.—*Nipissing Times.*

Its general appearance, as well as in the range and quality of its contents, is a credit to the special interest in which it is published. *Miramichi Advance.*

It is an excellent journal and should be patronized liberally by the trade generally.—*Parry Sound Star.*

It is well printed and brim full of interesting reading matter, and is a journal which should be in the hands of every manufacturer, contractor and mechanic.—*Cannington Gleaner.*

It looks very handsome.—*Aurora Borealis.*

It is as pretty a journal as can be seen anywhere, and its contents are such as to deserve all the aid which a good typographical appearance can give.—*Dundas Standard.*

Nous accusons reception du dernier numero du CANADA LUMBERMAN, publie a Peterborough, Ont. Ce journal s'occupe exclusivement du commerce de bois. Il contient les prix du bois et donne beaucoup de renseignements sur la qualite du bois dans differentes places. Ce journal annonce qu'il a des correspondants particuliers dans toutes les localites importantes, afin de mettre le lecteur au courant de tout ce qui se passe dans le commerce de bois.—*La Presse.*

The attention it gives to the interests of the class for which it is published deserves the success it is achieving.—*Brockville Daily Times.*

Well printed; ably written.—*Gladstone (Man.) Age.*

Its mechanical make-up is excellent, and altogether it is a worthy representative of an important interest.—*Bobcaygeon Independent.*

It is greatly improved: is a live publication, and carries several carefully edited departments.—*Albert (N. B.) Maple Leaf.*

Nous accusons reception du CANADA LUMBERMAN, journal industriel publie a Peterborough, Ontario. C'est un journal d'une grande importance pour la classe a laquelle il s'adresse et tres bien fait. Nous le recommandons a ceux qui ont des interets dans le commerce de bois, et aussi a ceux qui veulent se tenir au courantdes maahineries nouvelles offertes aux industriels. L'abonnement n'en est que de $1 par annee. Pour plus amples informations s'adresser a M. A. G. Mortimer, editeur, a Peterborough, Ontario.—*L'Union, St. Hyacinthe, Que.*

Notre estimable confrere de Peterborough, le CANADA LUMBERMAN, nous arrive cette semaine avec une toilette tout a fait nouvelle et tres elegante, l'indice d'un excellent etat de prosperite, ce dont nous le felicitons cordialement. Le CANADA LUMBERMAN, est publie dans les interets du commerce des bois et des diverses industries qui en decoulent. Il est le seul journal du pays qui traite exclusivement de cette branche si importante. En souhaitant longue vie au confrere, nous exprimonsl'opinion que tous les commercants de bois du pays devraient etre ses abonnes.—*Le Moniteur du Commerce.*

It is a valuable publication to all who take an interest in lumbering and manufacturing, and is a credit to the publisher.—*Penetanguishene Herald.*

A handsome publication, of which the lumber and kindred trades have every reason to feel proud. May its light ever shine.—*Port [illegible]*

NEWS NOTES.

—The building in Calgary during last season aggregates $270,000, largely in residences.

—The season's cut in McGibbon's mill, Penetanguishene, amounted to 3,000,000 feet. They ran from 15th April to 12th November.

—September showed a fire waste of over $8,000,000 in the United States and Canada. Lumber interests contributed something like $1,000,000 to the total.

—At Tay Creek, N. B., an elm tree was recently blown down which was four feet in diameter, and measured 36 feet to the first limb. The trunk contained 4,000 feet board measure.

—Messrs. Miller & Woodman are building what is said to be the largest shingle mill in New Brunswick. It will be 165 feet long and 80 feet wide, and there will be 20 shingle machines in it.

—Messrs. J. R. Booth & Co. have completed laying the side tracks through their new piling grounds on the line of the extension of the Canada Atlantic Railway and the grounds are now ready for use as soon as the extension is completed.

—Alexander White, aged 19, son of Mrs. A. White, of Alice, while engaged in raising a scoop bearer on a building in Smith's shanty, Pettewawa, was instantly killed. The bearer slipped, striking him on the side of the head. He lived for about half an hour, bleeding to death, and never spoke.

—A saw mill at Rochesterville, a suburb of Ottawa, owned by Mr. A. G. Jones, and many thousand feet of lumber, the property of Mr. J. R. Booth, have been destroyed by fire. The loss on the mills and building, with planed lumber, will amount to $8,000. There is insurance, but only to a third of the amount. The loss on the lumber will be heavy.

—An extensive fire has taken place in the saw mills belonging to Messrs. Hurdman & Co., at Ottawa. Both mills were completely destroyed. Eddy's mill had a narrow escape. No idea can be formed of how the fire originated. The loss is put at $75,000, with an insurance of about $35,000. The burned buildings were not of great value, the chief loss arising from the valuable machinery they contained.

—An occasional correspondent from Madawaska, N. B., writes: The rush for the woods has started in full blast. There will be more extensive operations in long and short lumber this season than usual. Men are scarce. Oats, hay, and beef rule in price about the same as last year. G. V. Hammond is making things lively in his parish just now. Mr. Ward has started his new steam mill and it works like a charm. He is erecting a track above Grand Falls bridge to the mill, in order to better facilitate the moving of lumber.

—In fitting up mills and workshops, one of the most important items to be considered is the belting, and upon this portion of the plant depends, to a great extent, the satisfactory working of the machinery, for if the belting is good all will run smooth and evenly. We hear that Messrs. Robin & Sadler, of Montreal and Toronto, are to supply the entire outfit of leather belting for the immense flour mill at Keewatin, now being completed by the contractors, E. P. Allis & Co. of Milwaukee, who have without doubt, placed their belting order in good hands for execution.

—A large colored map, 6 feet by 9, showing the canals of Canada and the connecting and competing canals of the United States, as well as the Canadian water power, will shortly be issued by the Department of Inland Revenue. The main map is planned on a scale of three miles to the inch, there being shown in addition an enlarged map of each canal. Tables and other smaller maps in the main map also show canals proposed as well as defunct, profiles, lockages, and tables of comparative sizes of locks. The map was designed by Mr. F. K. Blatch, of the Department, who has been engaged on the work for three years.

—The following revised estimate of the amount of lumber cut by different lumber firms at the Chaudiere during the past season, furnished by the *Mail* correspondent, which is about fifteen per cent. less than the cut of 1886, the latter, however, being the largest turned out at the Chaudiere for twenty years previous:—Bronson & Weston, 65,000,000; J. R. Booth, 70,000,000; E. B. Eddy Manufacturing Company, 69,000,000; Perley & Pattee, 70,000,000; Hurdman & Co., 56,000,000; Grier & Co., 35,000,000. Although the cut this season is almost up to the cuts of former seasons, the disadvantages in the shortness of the log cut during last winter have had the effect of leaving most of the firms without a customary reserve fund of logs to begin work next summer, and should the supply of logs secured this winter be not up to the standard there will undoubtedly be a considerable shortness felt next summer. The lumbermen are, however, very confident of the coming season being a prosperous one, and have placed unusually large gangs of men in the woods, with the intention of

European Financial Statistics.

Americans will see in the following financial tables some powerful reasons why European producers emigrate from Europe by hundreds of thousands annually. Enormous governmental expenditures and national debts make the burdens of taxation unendurable and force the citizens of European countries to seek work and homes in other lands where wars are fewer and taxes lighter. Here is the showing from official records:

	Annual Expenditure.	Army and Navy.	Interest on National Debt.	National Debt.
Austro-Hungary	£97,337,071	£13,867,743	£23,066,909	£523,908,381
Belgium	12,652,396	1,964,716	4,146,502	84,677,042
Denmark	2,734,432	914,701	567,431	10,845,755
France	147,417,416	34,201,118	50,697,092	1,435,011,000
German Empire	34,830,775	22,660,123	915,175	28,407,000
German States	94,917,042	.....	14,246,565	352,727,179
Great Britain	92,223,884	39,388,594	23,449,678	748,282,411
Greece	3,521,919	1,282,496	919,915	19,419,092
Holland	10,911,970	2,589,684	2,782,440	88,545,242
Italy	68,009,166	13,704,934	21,213,147	449,262,660
Norway	2,392,621	447,252	261,751	5,953,866
Portugal	8,470,731	1,512,234	3,208,353	115,384,009
Roumania	5,369,786	1,130,110	1,987,215	28,966,865
Russia	130,792,309	36,839,353	38,946,774	586,323,803
Servia	1,839,825	648,451	463,353	8,851,000
Spain	36,937,954	8,013,404	9,522,857	254,425,140
Sweden	4,712,777	1,464,125	596,000	13,726,088
Switzerland	2,102,160	686,613	74,710	1,428,539
Turkey	12,894,213	5,628,911	1,006,437	104,897,217
Tot. of all Europe	£770,068,447	£186,944,562	£198,072,304	£4,861,042,280

Is Steam the Best for Power?

The conversion of water into steam absorbs such a large amount of latent heat that many persons have endeavored to obtain some substitute which produces a vapor by absorption of less heat. Such attempts, to obtain economy of fuel, are not likely to be successful, not on account of mechanical defect, but because of the inherent physical properities of the vapors produced.

The mechanical value of the expansive force of different vapors, depends upon the bulks produced from equal bulks of different liquids, and although water absorbs in its conversion into steam a greater amount of latent heat than any other liquid, the amount of vapor produced, bulk for bulk, is greater than it is with other liquids. There still might be some gain were it not that for the equal volumes of these vapors, experiments have shown that the latent heat is very nearly equal.

There would, therefore, be no economy in using other liquids in place of water, even if they cost no more. On the contrary, there are reasons to expect that there would be a loss. The engine would take a definite volume, and hence a definite amount of latent heat, to keep it running in either case. In addition there would be to charge up against any other liquid the increased volume necessarily pumped into the boiler, against the boiler pressure, to keep up this definite volume of vapor. Were it not for the fact that this great difference in volume, between water and steam, is of immense importance in the economy of power, then there would be no economy in using steam over pumping cold air into the boiler and using hot air to run the engine. *Journal of Progress.*

THE WESTERN STATES.

Special Correspondence to THE LUMBRMAN:

ST. LOUIS, MO., Dec. 1, 1887.

Under favorable weather conditions the lumber interests of the Middle and Western States was equal in all respects to the anticipations during the month just ended.

Prices all through the section of country I write from have been firmly maintained. No change of importance either way is looked for until spring. Col. Philip Gruner & Bros'. Lumber Co. will increase their rafting business next season to 14,000,000 feet. The total receipts of white pine in raft this season has reached 209,000,000 feet. The hardwood trade is falling off some.

FRANK R. BIGNEY.

TAKE time to do repairs thoroughly. It will pay in the long run, although it will seem almost time wasted now.

London, Eng.

NOV. 19th.—There was a rather full room on Wednesday, at Messrs. Simson & Mason's sale, considering the limited quantity of unreserved goods to be submitted, which certainly seems to indicate more disposition on the merchants' side to acquire stock. The close of the season without any heavy increase to the stocks is evidently having a healthy influence on the trade here. The big rise in freights, coupled with the appearance of an early closing of the shipping ports, makes any heavy consignments now very unlikely.

There has been nothing in the state of the market here to induce speculation, although, if tonnage had been plentiful, season. There is a marked absence of Swedish deals from the sales lately. We do not know whether we may take this as an indication of any scarcity; but it, anyhow, is pretty plain proof that those who are stocked have no occasion to go to the sales to realize. Beyond a few odd lots here and there, the moderate quantity of Gulf red deals was a noticeable feature.

Spruce went low, but the 3rd pine was a bit better treated; 9 to 10 ft. planks at £8 10s. was certainly low, but sellers could hardly complain of some 13 feet that realized 20s. better.

The shipment, per "Jarlen," from Quebec. consisting of 24 lots of pine and spruce of the lower qualities, sold fairly well, being old stock. The four lots of unsorted Miramichi spruce. ex "Finland," offered without reserve, luckily enabled the auctioneer to dispose of five succeeding lots that had a holding price upon them.

The expected re-action which long before this period would in the ordinary fluctuations of trade have supervened on the severe depression from which the wood market has suffered seems as far off as ever. We are not alluding merely to a recovery of the market in respect to certain goods, which may have been only moderately traded in, with a consequent decline in the importation which has sunk below the demand, but in a general uprising in the demand for building timber throughout the country; not some large works here and nothing doing in another direction, but universal activity all over the kingdom. Such a return to prosperity of the building trade as would make itself felt on all and every description of imported timber. Before we can hope for such a happy result we shall have to witness a revival of the staple industries of England.

We do not notice any particular alteration in the dock deliveries except that flooring keeps active.

The importation is gradually thinning off and the cargoes at the tail end of the season are at present far short of the average quantity.—*Timber Trades Journal.*

Liverpool, Eng.

NOV. 17th.—The better feeling still prevails, and the general impression seems to be that there are good times in store for the timber trade. We are not too sanguine, but sincerely hope it may be so; up town and on 'change there is a still stronger tone, and many articles of produce have gone up considerably. Outward freights are better, and homeward freights from many places much improved; there is a good demand for shipping, and some of the large shipbuilders here, on the Clyde, and elsewhere, have recently received good orders. All these things help trade and are encouraging.

The arrivals have been few, there being only eight vessels, three of which are steamers with pine deals and boards from Montreal, two cargoes of spruce deals from Lower ports, one with mining timber to Garston, and two or three parcels of ash, maple, oak, teak, etc.

There have been several transactions in timber during the week. A parcel of common pine, per Narwhal, was sold at 18d., and some of better quality but smaller averaged 19½d.; a parcel of elm, per Abana., at 20d., and the oak, per same vessel, large and of good quality, to the Midland Railway Co. at 3/-. A parcel of Halifax birch has been placed at 16d., and I understand, this price was paid some little time since for the St. John's wood now landing.

The cargoes of spruce deals, per Volkfora and MacLeod, now discharging, are, I believe, still unsold, and the importers are asking high prices for them.

Low-Priced Boilers.

Low-priced boilers are not generally the cheapest that can be bought, although there is an almost universal opinion that they are. On the contrary they are, in the majority of cases, the dearest that can be bought. First-class boilers at the present time do not command an excessive price, no fancy profits are made on them, nor have been made for some years past. What then does it avail a man to buy a boiler for say $500, get an article made of the poorest material that can be worked, put together in the slouchiest possible manner, generally be stopped several times during the first year to have repairs made which never ought to have been needed, and would not have been required had the boiler been made properly, when by paying $200 more in the beginning he would have avoided all trouble, actually have expended less money at the close of the first year and probably have run his business uninterruptedly. It is needless to say that some manufacturers always buy the very best of everything they can get to do their work with. Such men always have the best of boilers and engines, they are cared for in the best possible manner, and it is generally noticed that they are, as a general rule, more prosperous than their slipshod brethren who are always after

EXCHANGE ECHOES.

The Timberman, Chicago.

Whether the log stock that is to be put in this winter will be equal to or exceed that gathered last year, is a question already exciting interest and comment among lumber makers and lumber dealers. Up to this time, all the signs point to the conclusion that there will be no decline in the output, notwithstanding there are in many of the districts in which large operations are carried on, a good many old logs that still await sawing, having, unluckily for their owners, been held back by low water in the streams until past the time for conversion into lumber this season. All over the pine territory, it is reported that extensive preparations are making for the input of logs, the news evidencing the fact that the sum of the loggers' intentions is, as it usually has been, to get in all that he possibly can, with the time, timber and means he has at command.

Mississippi Valley Lumberman.

A despatch from Calais, Me., recounts a curious complication that has arisen at Baring, in that state, over lumbering. The custom house officials there have seized a large amount of hemlock lumber, owned by H. F. Eaton & Sons, for alleged violation of the revenue laws. The lumber was manufactured and planed in mills now situated on the Canadian side of the river, but the owners claim that when the mills were built they were on the American side, and that time, dams and improvements have changed the course of the river. Some sixteen years ago the question of location arose and the authorities decided that the mills were American, and the present move is a great surprise. The mills have been shut down until a treasury decision can be obtained. If the present tactics of the customs officials continue it is the opinion of the best informed citizens that it will ruin the business of the American side of the St. Croix river.

Timber Trades Journal, London, Nov. 19th.

Up to the present we hear of nothing of consequence having been done in the f. o. b. trade in the English market for next open water. We expect London importers, who have been a bit cautious this year, will be encouraged to buy, owing to the moderate consignments which the closing season brings. The opinion seems to be that the first transactions for next year will be in flooring to the outports ; but in the London markets are excessive, and buyers will certainly have no need to hurry into cargo transactions. It is expected that there will be a scarcity of whitewood—though this is an unusual thing at the European ports—which, coupled with the advance in freights, will lead to a corresponding advance in the delivered price of flooring. It is possible that with the opening of the season lower freights may be quoted, notwithstanding the serious loss of Norwegian ships caused by the recent gales ; but the large quantity of goods wintering will stimulate the demand for tonnage as soon as the shipping season begins.

A Cheap Steam Box.

In nearly every shop, some form of apparatus for bending wood would be often used were it available. Where steam is at hand, there is not the slightest excuse for not having a steam box for use in wood bending.

Steam is so scarce in some shops, where the work is too great, and the boiler and engine too small, that the exhaust steam must be utilized. In a number of cases the writer has successfully used the exhaust for this purpose, by building a perpendicular box of plank and making doors for the introduction of the wood to be steamed.

In many shops the exhaust steam is allowed to escape from the end of a horizontal pipe and no notice is taken of what the steam comes in contact with during its absorption into the atmosphere. In all such cases the steam box will be a benefit in the preservation of surrounding buildings alone.

The steam-box in question was built of two-inch white pine planks, each 14 inches wide, two of them rebated upon their edges ¾ by two inches to receive the edges of the remaining two planks. This steam-box was 16 feet long. One foot from the bottom, a head of two-inch plank was cut in and finally nailed. This head was bored three or four times with a ¾-in. bit, to allow the water of condensation to escape. Just above the head, as the box stood on end, a hole was cut to receive the end of the exhaust steam pipe. A cast-iron flange was bolted to the steam-box and the pipe screwed into the flange, but if the exhaust pipe be of cast iron, the threaded flange may be dispensed with, and the cast-iron pipe bolted or lag screwed direct to the wood.

The plank forming one side of the box is not nailed into its rebate. Instead, it is cut into three feet lengths, excepting the top length, which is four feet long, and together with the bottom piece is nailed in place, leaving three loose sections of three feet length each. These sections were hinged on one edge and made fast when closed, by pins of wood, one to each section, which were placed in holes bored through the rebated plank, into the hinged section.

The box in question was fitted with iron hinges—common eight-inch hinges, the end of each hinge being bent around the corner of the rabated plank. If the writer ever constructs another steam box of this kind he will use brass hinges, so they will not rust out, a thing the iron hinges will do in six months unless they are kept well greased or tarred.

Suppose the stop moulding of a big circular window is so be made. This moulding can be got out straight, and bent into place by sawing into one side at regular intervals. With the steam box this moulding can be got out straight, steamed half an hour, and forced upon a form there to remain until cold.

A convenient way to make a form or mould is to cut out of plank, with a band saw, the shape desired. Now, nail pieces of board upon each side of the plank, letting the ends of the boards project six or eight inches, and placing them directly opposite each other. These bits of board must be distributed at the parts of the mould requiring pressure to be applied, and the location of these boards will call for the exercise of considerable judgment. Get a supply of common framing pins, and bore holes through the bits of wood large enough to allow the pins to pass freely. 1⅛-inch holes should be made for one inch pins, which are large enough for any ordinary work. Bore the holes just far enough from the form to allow the pin to go in, after the piece to be bended is in place. For ½-inch stock place the worm of the bit 15-16-inch from the edge of the plank form.

Stock to be bent should be left considerably longer than its finished length to allow plenty of room at the ends for the removal of poorly bent material. It is very hard to bend the extreme ends of the work, especially where the work is placed upon the convex surface of a mould. The convex side is usually used because the work can be easily forced into position thereon. To force work into the concave or hollow side of a mould requires enormous leverage and much time. It can sometimes be profitably done in the case of small, light work, and when the stock *must* be bended close to the ends of the various pieces. When concave moulds are employed, it will pay to make a follower, or convex mould to fit the hollow mould. This is forced against the stock to be bended, and when both molds are in contact with the work, sufficient pins are inserted to hold the moulds firmly together until the work is cold.

A cheap and efficient mould can be quickly made by sketching the desired shape on a plank, then boring holes at certain points and inserting pins therein. The steamed stock can be sprung between three of the pins, then others inserted until the work is brought to the desired shape. This method answers well for thick, heavy pieces, but with thin delicate stock it does not give satisfaction owing to the liability to *kink* or bend abrubtly where the pins engage the stock.

The several doors in the above described steam box, are for putting in different lengths of stock, one or more of them being opened as necessary.

A fine box nearly like the above, was seen by the writer in an eastern shop, but instead of standing vertical it lay upon its side, and the stock was inserted and removed at one end. In this case, the steam entered and was removed through wrought iron pipes five inches in diameter.

Small shops in which steam is not employed, make good use of the above described steam-box and generate steam in a 10 or 12 gallon iron kettle or pot. A wooden top is fitted to the kettle and cemented therein with "elastic cement." A pipe leads to the steam-box, and the kettle is supplied with water through a hole in the wooden top, after which the hole is closed with a plug. Although not as quick as the first box, this one will do good work.—*James Francis, in Woodworker.*

Something About Cordwood.

Ever since the country newspapers began, in a wooden country, to enlighten the hewer of the forest or to tell the agriculturist how to "tickle earth with a hoe that it might blossom into harvest," the subject of cordwood has possessed interest for the weekly writer. Abormally-sized eggs, supernatural pumpkins, luxuriant garden-grass, even over-corpulent hogs, never seemed of so much moment in the sanctum, whatever they might be to the grower, as a good supply of hickory or beech fuel.

> "The graceful elm, the energetic oak,
> The red-leaved maple and the slender pine,"

which a Canadian poet lovingly describes have all served, from time to time, to warm the hearts and toes of Solomon of Streetsville and others of his guild, and to awaken their thanks for such remittance in kind. But it has been reserved for the poet philosopher of the Bobcaygeon *Independent* to evolve, in a reverie, kindled by the flames of ash or elm, such a pœan in praise of cord-wood as we clip from his last issue. Whether regarded from a poetic, economic or even a merely spondulic point of view, this idyl concerning one of our great staple products cannot but be interesting. Before he scans it, let the reader think of the learned and genial writer sitting, meditatively, as a Canadian Ike Marvel, at his back-log fire, pondering, first, the SMOKE, signifying DOUBT (whether his sticks are going to burn) FIRE, signifying CHEER (at his having got even with another [illegible] DESOLATION (of fears whether he is going to have enough of such fuel for the winter.) Now he [illegible]

"The summer is over : the autumn leaves have fallen ; the pulse of Nature beats feebly and slow ; Arcturus is [illegible] in the northern heavens : Aurora has flashed her gleaming rays of violet and of gold from pole to zenith ; the icy breath of the paleocrystal seas has been borne in upon [illegible] about our cordwood? Ay, what about our cordwood? That is a very important matter, and every year it increases in importance, for the sources of our cordwood become fewer and more remote. There is not so much cordwood left in [illegible] commonly supposed. Of the thousand of miles of railway operated by the Grand Trunk Company the Midland is the only division that runs through a cordwood country, and only a portion of that division can supply fuel in considerable quantities. The city of Montreal is [illegible] from a dearth of cordwood. The price of wood in Montreal last week went up 50 cents a cord owing to its scracity. Maple in Montreal is selling at $8 a cord, birch at $7.50 and beech at $7. A large dealer has publicly declared that there is no cordwood to be bought throughout the country. Toronto has for its chief sources of supply the Victoria branch of the Midland, the district around Penetanguishene and the new extension of the Northern Railway. Two or three years will make a great reduction in those sources of supply, and then there will be the same condition of affairs in Toronto that now exist in Montreal. There are several facts connected with the cordwood trade which deserve notice. The wood itself is of no value. It realizes nothing. The man who cuts the cordwood, let us say on the Victoria branch, obtains $2 a cord delivered on the railway. That $2 is merely the value of the labor expended in cutting the wood and hauling it to the line, the wood itself counts for nothing, the man who cuts it giving the wood gratis. When the wood reaches Toronto it sells for $5 a cord, the $3 being consumed in freight and profit to the dealers. This is a subject upon which Toronto citizens would do well to reflect. The wood difficulty is becoming serious. They require a great heap of wood. Let them lay their heads together and the difficulty will be overcome."

But again, if cordwood as the years roll on, is growing scarcer, —and our worthy statistical brother in the neighborhood of Coboconk University, has shown that it is, he should be glad to find it growing more valuable to the farmer, the druggist, the builder, the scientist. The possibilities of cordwood are not yet all grasped. Paper, we know, is made from it ; works of art are modeled from the dust of it ; chemistry has found many recondite qualities in it. But there are more wonderful things still. Talk of dainty butter made from the scrapings of the London sewers, of handkerchief perfumes from crude petroleum ! Something quite as remarkable is going on to-day at Cadosia, in New York State. At that place, hardwood is now distilled in large works erected for this purpose. From the distillation there is produced, 1st alcohol ; 2nd acetic vapors which being mixed with lime, forms acetate of lime ; 3rd, tarry matters and naphtha ; 4th heavy tar used as fuel, and 5th, the refuse, which is fine charcoal. No more let the Northern sage say there is no value in wood—that "it counts for nothing." In the light of what has here been said (and sung) about the hard timber of the forests, surely there is, within the reach of every possessor of a belt of wooded land, to quote the words of another sage "a potentiality of wealth beyond the dreams of avarice."—*Monetary Times.*

Grinding vs. Filing Saws.

The majority of sawyers now grind their saws. It is quicker than filing, is cheaper, and leaves the saw in good shape. Some say "grind square across," and we have tried it, but we think it is better to have the front teeth a little "fleaming," even for hardwood, and more so for soft. According to our principle, as laid down in our cutters, this should be so. Saws that are filed by the average shop hand often look as though they could "gum it" better than they could cut with their teeth. Don't run a saw with the teeth half filed down ; gum your saws and keep them gummed. Some room must be left for the sawdust to fall into as the teeth cut it out. Give the saw a liberal set. If you are afraid of using up too much lumber, get a thin saw. Thin saws are the ones to do the work, but they must be kept out of the hands of cheap men. Many shop-owners have the idea that it is a saving to have one man furnish the brains to run the shop, and hire seventy-five-cent men to run the machines. This works well enough in theory; but in practice cheap hands will run every knotty or poor piece of stock available, and the cost of keeping their machines in order is more than equal to the amount saved from their pay. Put the best men in the shop that you can get. Establish a set of premiums for better work, and better methods of doing it, and your shop will pay.—*Mining and Scientific Press.*

TRADE REVIEW.

Toronto, Ont.

Nov. 29th, 1887.—During the current month correspondence interesting to lumbermen passed between Mr. Wragge of the G. T. R. and Mr. Wilson of the C. P. R. regarding the length of time allowed for the unloading of cars, as also the number of cars that the C. P. R. can place on Esplanade.

The length of time given to consignees to unload cars is from 7 a.m. to 5 p.m., or 9 hours, at the expiration of which the cars loaded, partly loaded or empty, will be withdrawn and replaced with fresh cars. Should any cars remain loaded or partly so a charge of $2.00 per car is made for replacing—all of which means that the city traffic of the G. T. R. has increased beyond the siding accommodation at the Company's disposal.

This arrangement does not commend itself to those lumbermen who have long distances to move their lumber. It is unfair to those in the northern part of the city to expect them to unload cars of lumber in so short a time. The condition in which the back streets are, the difficulty of getting teams at busy seasons and the hundred and one hinderances all go to consume the allotted time. The R. R. Co.'s exact too much and make no allowances in turn.

Trade has been fairly active, almost as good as the last month. Vessel lots are about done for this season. Prices remain firm and are about the same as in your last issue.

CAR OR CARGO LOTS.

1¼ and thicker clear picks, American inspection	$34 00@35 00
1¼ and thicker, three uppers, American inspection	40 00
1¼ and thicker, pickings, American inspection	30 00
1x10 & 12 dressing and better	20 00 22 00
1x10 & 12 mill run	15 00 16 00
1x10 & 12 dressing	14 00 16 00
1x10 & 12 common	12 00 13 00
1x10 & 12 spruce culls	10 00 11 00
1x10 & 12 maple culls	9 00
1 inch clear and picks	24 00 26 00
1 inch dressing and better	18 00 20 00
1 inch siding mill run	13 00 15 00
1 inch siding common	12 00 13 00
1 inch siding ship culls	10 00 11 00
1 inch siding mill culls	8 00 9 00
Cull scantling	8 00 9 00
1¼ and thicker cutting up plank	22 00 25 00
1 inch strips 4in to 8in mill run	14 00 15 00
1 inch strips, common	11 00 12 00
1¼ inch flooring	14 00
1½ inch flooring	14 00 15 00
XXX shingles, sawn	2 40 2 50
XX shingles, sawn	1 40 1 50
Lath, Sawn	1 80

YARD QUOTATIONS.

Mill cull boards & scantling	$10 00	Dressing stocks	14 00@15 00
Shipping cull boards, promiscuous widths	12 00	Picks Am. inspection	30 00
" stocks	13 00	Three uppers, Am. inspect.	40 00
		B. M.	
Scantling & joist, up to 16 ft	13 00	1½-in. flooring, dres'd	25 00 30 00
" " 18 ft	14 00	1½ " " rough	14 00 15 00
" " 20 ft	15 00	1¼ " " dres'd	23 00 25 00
" " 22 ft	16 00	" " undres'd	14 00
" " 24 ft	17 00	" " dres'd	16 00 20 00
" " 26 ft	18 00	" " undres'd	12 00 14 00
" " 28 ft	19 00	Beaded sheeting, dressed	18 00 20 00
" " 30 ft	20 00	Clapboarding, dres'd	12 50
" " 32 ft	21 00	XXX sawn shingles	
" " 34 ft	22 50@22 50	per M	2 75 2 90
" " 36 ft	24 00	Sawn Lath	2 25
" " 38 ft	27 00	Red oak	20 00 25 00
" 40 to 44 ft	30 00	White "	25 00 30 00
Cutting up planks 1¼ and thicker dry	25 00 26 00	Basswood, No. 1 & 2	18 00 20 00
" board	18 00 20 00	Cherry, No. 1 & 2	50 00 60 00
		White ash, 1 & 2	25 00 30 00
		Black ash, 1 & 2	20 00 25 00

Montreal, Que.

Nov. 29th, 1887.—At the beginning of the month operations in lumber were, on the whole, satisfactory, having almost exceeded expectations, particularly for local and country trade. Stocks were low, and prices inclined upwards. Towards the middle of the month we find the market in good condition, although not quite up to previous expectations. The general talk is of an advance, the impression prevailing being that contractors' purchases have been below what their requirements cannot fail to be. At the time of writing business is of fair volume, but the condition of the roads has rather restricted orders from the country. The expected advance has not yet taken place, but cannot be long deferred, though it is true it will only effect those who are compelled to purchase for immediate consumption, most dealers having already laid in their stocks.

The long continued complaints by shippere of lumber and other merchandise, of lack of cars and poor despatch on the railways, have attracted attention from railway men. The Freight Agents Association met in the Windsor hotel, last week, when the subject of delayed cars was discussed. Strangely enough, negligence on the part of the consignees was assigned as the cause of delay in transportation ; and the poor railroad men professed to be much inconvenienced by their delays. It was finally decided to allow consignees a specified time to unload and after its expiry to charge demurrage in all cases.

From the annual circular of the Export Lumber Company, Montreal and New York, we learn that during the season of 1887 40 vessels loaded with 25,879,330 feet of pine, sailed from Montreal for the River Plate, and that 15 vessels loaded with 7,719,058 feet of spruce sailed for the same destination from other ports on the St. Lawrence river. This makes the total output from that river to the River Plate 33,598,388 feet of pine and spruce, a larger quantity than has been shipped during any previous season, with the exception of 1884, when 36,938,548 feet was the output.

Pine, 1st qual'y per M	$38 00	40 00	Basswood, run of log culls out per M	$18 00	20 00
Pine, 2nd " "	28 00	30 00	Oak, per M	40 00	50 00
Pine, shipping culls per M	14 00	16 00	Walnut, per M	60 00	100 00
Pine, 4th quality deals per M	10 00	12 00	Cherry, per M	80 00	100 00
Pine, mill culls, per M	8 00	10 00	Butternut, per M	35 00	40 00
Spruce, per M	10 00	13 00	Butternut, per M	35 00	40 00
Hemlock, per M	9 00	10 00	Birch, per M	20 00	25 00
Ash, run of log culls out per M	20 00	25 00	Hard Maple, per M	25 00	30 00
			Lath, per M	1 50	00 00
			Shingles, 1st, per M	2 00	3 00
			Shingles, 2nd, per M	1 00	2 00

Ottawa, Ont.

OTTAWA, Nov. 28.—It is now estimated that the lumber cut at the Chaudiere for this season will be about 360,000,000 feet, a falling off of about 10 per cent. from last year's cut, which was the largest for many years. The short supply of logs, owing to the low water in the Ottawa, has caused the lumbermen to use up most of their reserve logs, and there is a possibility of a very short cut next season unless the winter is a good one and the water keeps high long enough in the spring to get down all the logs now stuck at various points and a good share of the winter's logs. The quantity taken out this year will be considerably above the average, unless the weather is unfavorable, as nearly all the lumbermen have sent larger gangs than usual in the woods. The following is a statement of the movement of forest product from this city for October, being the declared export to the United States, in feet, pieces, cords and value :

Sawed lumber, feet	18,473,443	$255,257.07
Lath, pieces	4,473,700	5,635.65
Railroad ties, pieces	13,239	2,776.00
Hemlock bark, cords	344	1,720.00
Telegraph poles, pieces	450	284.25
Fence posts, pieces	4,000	120.00
Total		$266,784.97

This shows a decrease in values as compared with October, 1886, of $28,000.

The distribution of the lumber was as follows :

For consumption, feet	14,777,974	$185,048.95
In bond for export	3,695,469	69,208.12
	18,473,443	$255,257.07

Of the lumber 10,426,876 feet was shipped by water and 8,046,567 by rail.

Dimensions, Inches.	*Per M.*
Mill culls, 10 x 1	
" 12 x 1	$8.00
" 12 x 1½	
" 12 x 2	
" selected 16 ft. long, above dimensions	8.50 to 9.00
Cull strips, 1 in. thick, 5 to 7 wide	7.00 to 8.00
Mill cut outs, 12 x 1	
" 11 x 1½	4.00 to 5.00
" 12 x 2	
Scantling, 2 x 4	
" 3 x 4	12.00
" culls, 2 x 4	
" " 3 x 4	7.00
Laths	1.25
Stock shorts, 12 x 1	10.00
1 inch siding outs, 1¼, 1½, 2	15.00
" outs from shorts, 1¼, 1½, 2	6.50 to 7.00
Outs from stocks, 12 x 1	
" " 12 x 1¼	10.00 to 12.00
" " 12 x 1½	
Shingles, X	1.25
" XX	2.00
" XXX	3.00
" cedar, No. 1	2.00 to 2.75
" cedar, culls	1.25
Difference in planed lumber, in waste and planing	5.00
Ditto, on average good stock	20.00 to 25.00

This good stock is not for local trade and cannot be purchased except by the million feet. Small quantities of good stock and good siding are sold locally by McLaren & Co. only as high as $40 per thousand feet.

Hamilton, Ont.

The followlng are the ruling prices of the yards here :

Mill cull boards and scantlings	$ 9 00@10 00		Dressing stocks	$ 6 00	18 00
Shipping cull boards, promiscuous widths	10 00	12 00	1¼ flooring, rough	16 00	18 00
Shipping cull stocks		13 00	1½ flooring, rough	16 00	18 00
Scantling and joist up to 6 feet		13 00	1¼ flooring, dressed		25 00
do up to 18 feet		13 50	1½ flooring, dressed		32 00
do up to 20 feet		14 00	1 flooring, dressed		23 00
do up to 22 feet		15 00	Beaded sheeting 1	28 00	30 00
do up to 24 feet		16 00	Picks, Am. inspection		30 00
do up to 26 feet		17 00	Three uppers Am. In.		40 00
do up to 28 feet		18 00	XXX sawn shingles	2 60	2 70
do up to 30 feet		20 00	Sawn Lath		2 25
Cutting up plank 1¼ and thicker, dry	20 00	25 00	Red Oak	20 00	25 00
Cutting up boards		20 00	White Oak	25 00	30 00
			Basswood No. 1. & 2.	18 00	20 00
			Cherry No. 1 & 2	50 00	60 00
			White Ash No. 1 & 2.	25 00	30 00
			Black Ash, No. 1 & 2.	20 00	25 00

Goderich, Ont.

PRICES IN CAR LOTS.

1 inch Mill Culls	$8 00@ 8 50
1x6-8-10 & 12, common	12 00
1x6-8-10 & 12, dressing	16 00
1x14, and wider, common	12 00
1x14, " " dressing	16 00
1¼ dressing	16 00
1½ "	16 00
1¼ Norway pine flooring	14 00
1½ " " "	14 00
1 inch clear and picks	26 00
1 inch clear and picks 4 to 8 inch	25 00
1¼ and 1½ clear and picks	35 00
Lath 1½x4 feet	1 85

Chicago, Ill.

Nov. 29.—The recent hurricane snow storm knocked the lumber fleet flat, so far as getting lumber into port went. The squadron was scattered all over the lake, driven into port wherever harbor could be reached, and on to shore in some instances. Losses were not as numerous or heavy as might have been expected. Steam barges and vessels did not begin to come into port in any considerable number until Wednesday, when there was a flock that made the harbor.

Up to the time of going to press, there had practically been no market this week, on account of a lack of cargoes to make one. Some lumber was sold to arrive. One cargo of White lake lumber, all common inch, with the better picked out, sold for $12.50 a thousand. Lath, to the amount of 1,500,000, went at $1.70 a thousand. Other sales were made Wednesday afternoon, at prices not obtained. The report was, that piece stuff was selling at $9.75 to $10.25 for short, and that prices generally were unchanged.

As near as the commission men can figure, there are about 25 cargoes more to come on the market, and that will wind up the season's bobbin.

CARGO PRICES.

Dimensions, short green	$10.00@10.25
Long joists	12.00@14.00
Cull piece stuff	7.50
No. 1 inch	19.00@20.00
Medium	13.00@15.00
No. 2	12.00@13.50
Selected	19.00@28.00
Shingles, standard	1.90@1.95
" extra	2.10@2.20
" choice	2.00@2.10
" cedar	1.05@1.85
Lath, dry	1.70
" green	1.50@1.60

Receipts of lumber and shingles for the week ending November 23, as reported by the Lumbermen's Exchange :

	LUMBER.	SHINGLES.
1887	26,067,000	3,691,000
1886	25,699,000	1,932,000
Increase	368,000	1,759,000

FROM JANUARY 1 TO NOVEMBER 23, INCLUSIVE.

	LUMBER.	SHINGLES.
1887	1,755,511,000	576,697,000
1886	1,613,777,000	729,367,000
Increase	141,734,000	
Decrease		152,670,000

STOCK ON HAND NOVEMBER 1.

	1887.	1886.
Lumber	577,330,746	599,877,947
Shingles	399,074,750	448,705,988
Lath	49,770,960	57,297,956
Pickets	899,017	1,013,599
Cedar posts	161,049	202,150
Hardwood	60,785,179	60,074,853

Saginaw Valley.

SAGINAW, Nov. 29.—The *Courier* says : The cargo market is at a standstill, no sales having been reported during the week. There is some little inquiry for stocks to hold over of certain grades, and no changes in quotations are reported. Nearly all of the mills have shut down and boats are getting away on the last trip of the season. The proportion of stock on the docks already sold for next season's delivery is believed to be small.

The car trade is active and business seems to be limited only by the ability of shippers to obtain cars. One thousand are wanted where 100 are secured, and the indications all point to an exceptionally large movement during the winter months. During the week 3,000,000 feet was sold by Bliss Bros. for local yards and rail shipment. Of this 500,000 feet goes to Flint and 1,000,000 feet to Detroit.

Shingles continue firm at previous quotations with limited stocks on hand.

CARGO LOTS.

Uppers	36 00@38 00	Norway	9 00 10 50
Common	15 00 20 00	Box	10 00 10 50
Shipping Culls	8 00 10 50	Straight measure	12 00 23 00
Mill Culls	6 00		

YARD QUOTATIONS—CAR LOTS DRY.

Drop Siding.

Clear, ⅜ in	44 00@46 00	C, ⅜ in	30 00
A	38 00 41 00	D	19 00
B	36 00		

Flooring and Siding—Dressed.

Flooring, clear, d & m	46 00	Siding, clear, ½ in.	22 00
No. 1	31 00	A	20 00
No. 2	30 00	B	17 00
No. 3	20 00	C	14 00
No. 4	13 00	D	12 00

Finishing Lumber—Rough.

Three uppers, 1 in.	43 00@45 00	Fine common, 1 in.	28 00 31 00
1¼ & 1½	44 00 46 00	1¼ & 2 in.	32 00
Selects, 1 in.	35 00 36 00	C, 7, 8 & 9 in.	25 00
1¼ & 2 in.	36 00	Base, 2 to 9 in. No. 1	40 00
		No. 2	30 00
		No. 3	20 00
		Coffin boards 16 in. and over	16 00

Joist, Scantling and Timber.

12 to 18 feet	10 00	22 feet	12 00
20 feet	11 00	24 feet	13 00

Plank and timber, 12 inches wide, $1 extra.

Wide Select and Common—Rough.

C (No. 1 com.) 13in. and up	28 00	D (common) 14 in. and up	16 00

Lath, Shingles and Pickets.

Lath, No. 1	1 40	Country brands XXX	3 25 3 35
No. 1	1 25	Clear butts	2 25 2 35
Shingles, river brands		P'kts, 2 to 2½ in rough	12 00 13 00
XXX	3 40@3 50	Dressed	20 00
Clear butts	2 40 2 50	1¼ in. square, dressed	14 00 16 00

Buffala and Tonawanda, N. Y.

TONAWANDA, N. Y., Nov. 25.—Tonawanda is rapidly assuming the air of quietness, that usually characterizes it when barges begin to lay up and canal boats cease to run. On every side can be seen indications pointing to going into winter quarters. There are only a few tows yet to arrive, and shipping via canal is virtually ended.

The yards will all be piled up in good season, and the inventries be taken early. Then the grave subject of the year's profits will absorb the dealer's mind to the exclusion of everything else, and I do not doubt but that, in most instances, the results will be pleasing; for while the season of 1887 has had many drawbacks and plenty to contend with. the result of it all is as favorable as perhaps the most sanguine anticipated.

A visit to the different yards shows lots of lumber on hand. And Tonawanda is in pretty good shape to meet the winter's trade. But in some thicknesses and grades there is not the stock we wish to have.

Norway Pine—Rough.

No. 1, 1 & 1¼ in.	19 00@	20 00	Stocks No. 1, 1 & 1¼ in	21 00
No. 2, 1 & 1¼ in.	15 00	15 50	No. 2, 1 & 1¼ in.	17 00
No. 3, 1 & 1¼ in.	11 50	12 00	No. 3, 1 & 1¼ in.	12 00
			Scantling 2x4 to 2x12 12 to 16 ft	13 00
			Timber, 4x6 to 12x12 16 00	20 00

White Pine—Rough.

Uppers, 1 in.	$44 00@	46 00	Shelving, No. 1, 13 in. and up	31 00
1¼, 1½ and 2 in.	44 00	47 00	No. 2, 13 in. & up	22 00 29 00
2½, 3 and 4 in.	55 00	60 00		
Selects, 1 in.	39 00	40 00	Fine common, 1 in.	32 00
1¼, 1½ and 2 in.	39 00	40 00	1¼, 1½ and 2 in.	32 00 35 00
2½, 3 and 4 in.	45 00	50 00	Common, 1 in.	16 00 19 00
Cuts, No. 1, 1 in.	25 00	28 00	1¼ and 1½ in.	17 00 20 00
1¼, 1½ and 2 in.	32 00	33 00	2 in.	20 00 22 00
2½, 3 and 4 in.	37 00	40 00	Coffin boards	17 50
No. 2, 1 in.	15 00	17 00	Box, 1 in.	12 00
1¼, 1½ and 2 in.	21 00	22 00	1¼ in. & thicker	13 50
Moulding, 1 in.	28 00	32 00	A stocks, 1x10	29 00
1¼, 1½ and 2 in.	28 00	32 00	1x12	29 00
Siding strips, 1 in.		38 00	B stocks, 1x6 to 16	17 50
			C stocks, 1x6 to 16	13 50

Dressed Lumber.

	No. 1.	No. 2.	No. 3
Base and Casing under 6 inches.	$33 00	$23 00	$16 00
Base and Casing, 6 inches	34 00	25 00	17 00
Base and Casing, 6, 7 and 8 inches	40 00	29 00	18 00
Flooring, 1 and 1¼ inches, 2½ to 5 in. wide	30 00	20 00	15 00
Ceiling, ⅞ in., 2½ to 5 inches wide	33 00	23 00	16 00
Ceiling, ⅝ in., 2½ to 5 inches wide	28 00	22 00	14 00
Ceiling, ½ in., 2½ to 5 inches wide	24 00	18 00	13 00
Philadelphia Fencing	39 00	30 00	21 00
Bevel Siding, 6 inches	23 00	21 00	11 00
Bevel Siding, 5 inches	23 50	21 00	17 00
Bevel Siding, 6 inches	23 00	19 00	14 00
Novelty Siding, 6 inches and over	40 00	23 00	16 00

Shingles and Lath.

Shingles. 18 in. XXX	3 85@	3 90	Lath, pine No. 1	2 10 2 15
XX	2 85	2 90	No. 2	1 70
X		1 25	Norway	1 60
Shingles, 16 in. XXX		3 00	Hemlock	1 60
XX		2 10		
X		90		

Duluth.

DULUTH, Nov. 28.—The lumber cut of the season is now about determined, though one mill is yet running and detailed statistics are not yet in. The cut of the various Duluth mills has been about as follows:

R. A. Gray's (for Duncan, Gamble & Co.)	17,000,000
Peyton, Kimball & Barber	10,000,000
Peck & Sons	10,000,000
Hubbard & Vincent	8,000,000
Graff, Murray & Co	7,500,000

Exact figures may make the total somewhat larger than this. The estimate at the beginning of the season was from 55,000,000 to 60,000,000 feet. Duncan, Gamble & Co. have about 8,000,000 feet on hand, and Bradley, Hanford and Co. 3,000,000 feet, and the stock in other yards will probably make the total on hand here about 20,000,000 feet.

J. P. White & Co. have leased the Tower mill of Sellers & Owens, which cuts about 5,000,000 feet a year.

New York City.

NOV. 28.—The date is fast drawing near when the river and canals will be closed to navigation, and for that reason supplies are rushed forward as fast as possible. At many of the yards the piles are high and close together, and one cannot readily see where more stock can be cared for; but distribution is fairly active, and lumber goes nearly as fast as it comes. In a great city like this there are myriads of uses for pine besides house building, and while that industry consumes an immense quantity of lumber, it is only a fraction of the total consumption. The salesmen who do a car trade entirely seem to have been instilled with new life, since it became pretty well understood that freight rates would not advance the usual 5 cents a hundred pounds. It cannot last long, as the dealers have already bought about enough stock to carry them through the winter. From this on, sales will be made in a small way, and consist of such stock as dealers may not care to carry any amount of. The extra inducements may lead to more than an ordinary sale, but taking the market as a whole, it is not reasonable to expect any very active business during the ensuing three months. At near-by points much the same condition of affairs exists, and unless extraordinary good weather prevails, thus extending building operations, that, too, must soon show a decline.

There are no special features concerning prices. The same quotations covering the market for the last three months still exist, and the decline in orders is certainly not conducive to an advance.

Export trade is still quiet, and the condition of affairs is at least annoying to shippers. While a few vessels are loading for ports in various directions, much of the stock is for filling out cargoes, and not on actual order. Shipments to the River Platte are still going on from the St. Lawrence; these shipments will cease before long, and thus throw a certain amount of business into this market. It is probably possible to shade a few of the grades, say 50 cents a thousand, still we do not think it necessary to change quotations.

Black Walnut.

⅝ in., all clear	$82 00@	85 00	Culls, 1 inch	$36 00@ 38 00
1 and 1¼ inches	94 00	97 00	Culls, thick	38 00 39 00
1½ and thicker	98 00	105 00	Counter tops, 18 in. and over	110 00 150 00
Rejects	52 00	55 00		

Poplar, or White Wood.

⅝ in. 10 inches and over	22 00@	24 00	1¼ to 2 inch	29 00@30 00
¾ in. coffin boards	27 00	28 50	2½ and thicker	31 00 33 00
1 inch, 10 inch and over	27 00	29 50	Common 1 to 2 inch	21 00 22 50
1 inch, 8 in. and over	26 00	28 00	Saps, 1 inch	23 00 25 00
			Culls, all thickness	15 00 18 00

Dressed Poplar.

½ inch panel	24 50@	25 00	⅜ in. clg. 4 to 6 in	21 00@21 50
⅝ inch panel	27 00	28 00	½ in. clg. 4 to 6 in	24 00 24 50
¾ inch panel	29 00	30 00	⅝ in. clg. 4 to 6 in	27 00 28 00
4, 5, 6 inch casing	30 00	31 00	¾ in. clg. 4 to 6 in	29 00 30 00
7, 8, 9, 10 inch casing	32 00	33 00	⅞ in. clg. 4 to 6 in	30 00 31 00

Ash.

1 inch, white	37 00@	39 00	Strips, clear	28 00@ 30 00
1¼ to 2 inch	38 00	40 00	Black ash, good	26 00 28 00
2½ to 4 inch	40 00	41 00	Black ash, culls	10 00 12 00

Oak.

1 inch plain sawed,	37 00@	39 00	inches and over	50 00@ 53 00
1¼ to 2 inch	37 00	40 00	Thicker	52 00 54 00
Thicker	38 00	40 00	Strips under 6 in.	38 00 40 00
Quarter-sawed, white, all clear, 6-				

Cherry

⅝ in., white & clear	65 00@	70 00	2½ and thicker	85 00@ 90 00
1 inch	76 00	80 00	Counter tops, 18 in. and over	100 00 115 00
1 inch strips	40 00	43 00		
1¼ to 2 inch	80 00	85 00	Culls, all thickness	18 00 20 00

Miscellaneous.

Chestnut, clear	35 00@	38 00	Redwood California plank	55 00@ 58 00
Chestnut common	20 00	23 00	Hickery, old growth	50 00 60 00
Basswood white	28 00	32 00	Hickery, 2nd growth	70 00 80 00
Basswood common	18 00	23 00	Elm	20 00 22 00
Maple, clear	25 00	30 00	Sycamore	25 00 28 00
Birch, clear	33 00	36 00	Sycamore quartered	35 00 40 00
Birch, 1s and 2s	28 00	30 00	Gum	38 00 41 00
Cottonwood	19 00	21 00	Butternut	45 00 50 00
Redwood, California boards	50 00	53 00		

Philadelphia, Pa.

White Pine.

Mich. uppers, 1 to 2 in., dry	$48 00@	50 00	1¼ to 2 in. plank, barn quality	22 50@25 00
2½, 3 & 4 in	55 00	60 00	Common plank	20 00 22 00
Slcts, 1¼ to 2 in.	42 50	45 00	⅞ box boards, wide	14 00 16 50
Selects, 1 in	41 00	43 00	⅝ siding, selected	27 50 30 00
12 in. flooring quality	30 00	32 50	Culls, 12 in.	15 50 17 00
barn	19 00	23 00	Wide	15 00 16 00
Edge barn, all widths	18 00	20 00	Narrow	13 50
			No. 1 moulding	36 00 38 50

Cargo Lots.

Yellow pine edge bds	14 00@	16 00	Scantling and plank	20 00 22 00
Heart face boards	19 00	21 00		

Hemlock Boards and Scantling.

Edge boards	10 50@	11 50	Scantling, 2x3 & 2x4, 12 in. stock	11 50 12 00
Fencing, 6 in., 16 ft	11 50	12 00	16 & 18 ft	12 00@13 00
			3x4, to 12, 12 to 20 ft.	11 00 11 50

Shingles and Posts.

Cypress shingles, 24 in. heart, d & b	13 00@	18 00	Cedar shingles, 30 in. hand dressed	35 00 40 00
24 in. sap, d & b.	10 00	12 00	Chestnut posts, 9 ft.	32 00
			7 ft.	28 00

HARDWOOD.

Walnut.

Nos. 1 & 2, 1 in., good dry, Indiana	$87 50@	95 00	Reject or common, 1 in., 1¼ and up	60 00 65 00
1¼ & up	92 50	100 00	Culls, 1 in.	35 00 37 50
Nos. 1 & 2, ⅝ in.	72 50	77 50	1¼ in. & up	35 00 40 00

Poplar.

Nos. 1 & 2, ⅝ in. good wide, Indiana	25 00@	27 50	Nos. 1 & 2, 1¼ in. & up, good wide, Ind.	32 50 36 00
1 in.	28 00	32 50	Columns, 5x5 & up clear	35 00 35 00

Oak.

Nos. 1 & 2, 1 in., good western, straight	32 50@	35 00	Nos. 1 & 2, 1¼ in. & up, good western, straight	35 00 37 50
quartered	49 00	50 00	quartered	42 50 55 00

Ash.

Nos. 1 & 2, 1 in., good western	35 00@	40 00	Nos. 1 & 2, 1¼ in. & up, good western	32 50 42 50

Yellow Pine—Yard and Wholesale.

Sc'tlg, 2x4 to 12x14	22 00@	23 00	Flooring, 1 in., Va.	17 00 19 00
Plank, 1¼ to 2 in.	23 00	27 50	1 & 1¼ in., Ga. & Fla. cargo run	22 00 24 0
Fl'g, 1 & 1¼ in. No. 1	27 50	30 00		

Cherry.

Nos. 1 & 2, 1 in., good	62 50	70 00	Nos. 1 & 2, 1½ in. & up, good	65 00 75 00

Minneapolis, Minn.

NOV. 28.—The *Lumberman* of the 25th says: The last saw mill shut down on Saturday as was anticipated, the cold snap of Friday filling most of the mill ponds with ice and prohibiting any further operation. Hall & Ducey would have sawed a few days this week had it been possible, but gave up an attempt which was made in that direction on Monday. The total cut of the different mills very closely approximates the estimate of 225,000,000 made last week. The mills in this city manufactured less lumber during the past season than in any year since 1880 when the cut was 195,452,182.

There are no new features in the local market. Trade is gradually reaching the winter level, and the record from week to week shows a steady decline in the output by rail. This statement applies equally to Minneapolis and to the north Wisconsin points, the movement from which is indicated by the shipments from St. Paul.

Detroit, Mich.

Uppers, Selects, Stock &c.

Uppers, 4-4	$45 00	Shop, 5-4, 6-4 & 8-4	$25 00
5x4, 6x4 & 8x4	45 00	Fine common, 4x4	31 50
3 & 4 in	50 00	5x4, 6x4 & 8x4	33 50
Selects, 4x4	38 00	Stocks, 1x12 & 1x10, No. 1	19 00
5x4, 6x4 & 8x4	40 00	1x12, & 1x10, No. 2	16 00
Shop, 4x4	22 00	1x12, & 1x10, No. 3	13 00

Flooring, Siding, Ceiling, etc.

Flooring, select common	22 00	Roofing, D & M	16 00
No. 1 common	18 00	Siding, clear	21 00
No. 1 fencing	16 50	A	20 00
Ceiling, select common	25 00	B	18 00
No. 1 common	22 00	C	15 00
No. 1 fencing	20 00		

Bill Stuff and Cuts.

Bill stuff, ordinary sizes:		26 to 28 ft	14 00
12 to 16 ft	12 00	30 to 34 ft	16 00
18 to 20 ft	12 50	Ship culls	12 00
22 to 24 ft	13 00	Mill culls	10 00

Shingles and Lath.

Shingles, clear, 18 in. Ex	3 75	6 in. stocks clear. Ex	4 00
10 in. clear. 18 in.	3 00	5 in. stocks clear, Ex	4 80
6 in. clear, 18 in.	2 75	Lath	2 10

Add for surfacing one or two sides, $1

Glasgow, Scotland.

NOV. 17.—Nothing of very great importance has transpired during the past week. The import list is a very small one, comprising two small parcels of deals from Montreal, and staves and oak lumber from New York.

I understand, says the correspondent of *Timber*, that, with the exception of one steamer cargo, the import of deals from Quebec is all but closed. This being so, merchants will soon be "comparing notes" with stocks at the wharf and their own in view of requirements for the next six months of close time.

Only one auction sale has been held since last writing, Messrs. Allison, Cousland and Hamilton's at Yorkhill Wharf on Wednesday. There was a fairly good company present, but the business done at auction was moderate, the brokers holding firm for better prices. In some instances this was yielded to on the part of buyers, but in most cases it was not, consequently a large portion of the catalogue was passed over. I understand, however, that a considerable amount of business was put through privately.

Prices on the whole are firm, and although several old lots are reported to have been sold cheap, newly-imported goods are evidently not parted with unless at an advance in prices. This augurs well for business in the beginning of the year.

Note of Messrs. Allison, Cousland and Hamilton's public sale at Yorkhill, November 16th:

1ST QUEBEC PINE DEALS.

Pcs.		Ft.		In.		
287	.....	12/16	.....	11x3	.....	2/9
481	.....	11/15	.....	6x3	.....	2/2½
220	.....	12/13	.....	11x3	.....	2/8
169	.....	9/16	.....	7x3	.....	2/2½
301	.....	9/11	.....	5x3	.....	2/0½
Ends						
675	.....	6/8	.....	4/7x3	.....	22½d.

2ND QUEBEC PINE DEALS.

Pcs.						
264	.....	10/16	.....	7/20x3	.....	19½d.
703	.....	9/16	.....	4/6x3	.....	18 d.

3RD QUEBEC PINE DEALS.

610	.....	14/16	.....	11x3	....	14½x15d.
400	.....	10/11	.....	11x3	.....	13d.
218	.....	9	.....	11x3	.....	12½d.
136	.....	9/12	.....	7/11x3	.....	9¼d.

4TH QUEBEC PINE DEALS.

280	.....	15/16	.....	11x3	.....	11½d.
307	.....	13/14	.....	11x3	.....	11 d.
292	.....	10/16	.....	7/10x3	.....	10 d.
771	.....	12/16	.....	11x3	.....	11 d.
234	.....	10/16	.....	7/14x3	.....	10 d.
179	.....	11/16	.....	8/10x3	.....	10 d.
1241	.....	10/16	.....	7/10x3	.....	9½d.
1672	.....	11/13	.....	7/24x2	.....	10 d.

QUEBEC RED PINE DEALS.

93	.....	10/12	.....	11x3	.....	12 d.
8	Broken	.....				6½d.

—Notwithstanding the fact that it is believed there will be 400,000,000 feet of lumber in pile on the Saginaw river at the close of the season, a prominent manufacturer and shipper expresses the conviction that the rail shipments would be so extensive the coming winter that the docks would be cleaner when the navigation season of 1888 opens than they have been for years.

—Emigration to America of the laborers at the saw mills in the Sundswall district is on the increase, says an English exchange. Last Sunday, for instance, a considerable number of men, mostly married, left Stockvik for Stockholm by steamer in order to reach the other shore of the Atlantic, *via* Gotenberg.

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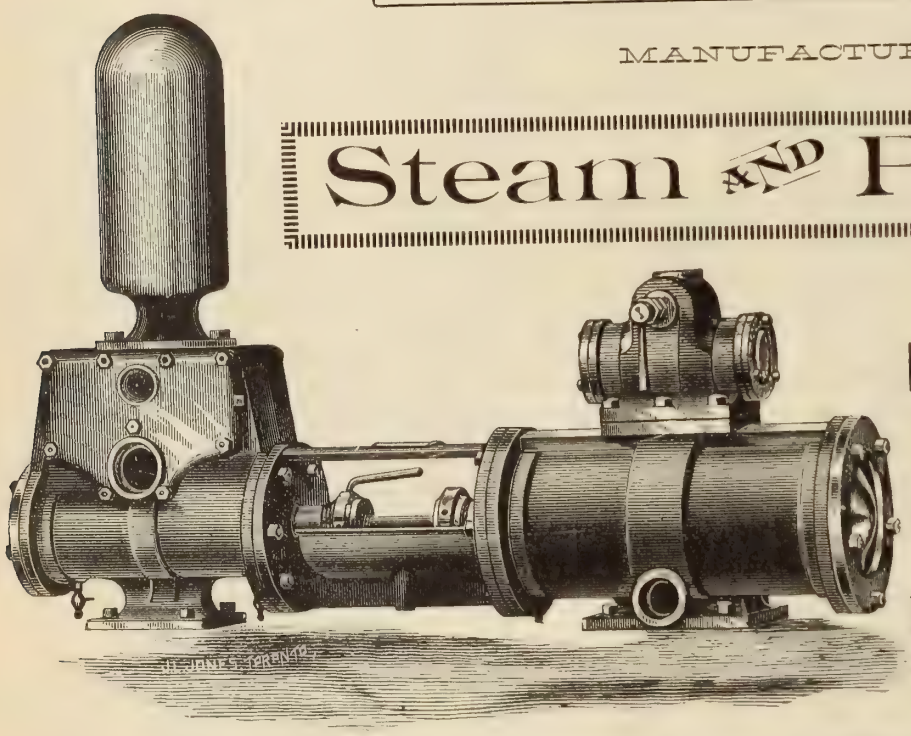

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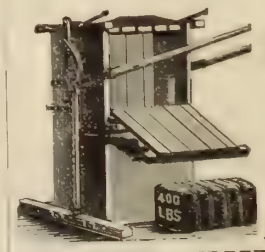

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Either in Log or Dimension Stuff for Prompt Cash.

OFFERS INVITED.

IMPORTANT NOTICE TO THE PUBLIC.

I am patentee and owner of Canada patent, No. 42,357, Improvement in Band Saw Mills, which covers a Band Mill with two columns. I am also patentee and owner of Canada patent, No. 42,377, Improvement in Band Saw Guides, which covers wheel guides for a Band Saw. I am informed that a Band Mill is being offered to mill men in the Dominion, containing two columns that is an infringement of the above patent. The public is hereby warned against purchasing such Band Mill, as I shall hold the purchaser responsible for the infringement of my said patents, and for all damages which I may have, or may hereafter sustain, on account of any unlawful use of said patents.

The Wm. Hamilton Mfg. Co., of Peterborough, Ont., is authorized to build and sell Band Mills under my patents.

FRANK W. WHEELER,
SHIP BUILDER.
Specifications and Estimates Furnished on application.

[A TRUE COPY.]

WEST BAY CITY, Mich., June 26th, 1886.

Mr. D. K. Allington, East Saginaw, Mich.

I have been running your Pat. Band Saw Mill in my new ship yard mill for over one month, squaring up large and long hewn oak timber which has been hewn a sufficient time to be dry and hard on the surface and sawing long plank from same kind of timber. The timber or Keelsons squared was laid up in a vessel, one on top of the other, and fitted as well as could be done by hand, it being square, straight and out of wind. I have had a large amount of this plank and timber sawn, and have not yet found a bad cut. I have squared timber where the saw here and there barely cut the thickness of the saw kerf, yet the saw did not deviate the least from a straight line. From the nature of my work I cannot give any idea of the amount cut in a given time, but the speed of cut should be satisfactory to any one. The most difficult part of my work is in sawing tamarac ship knees, yet the machine has given me entire satisfaction in this respect, sawing a root having a cut of from 2 to 4 feet, making in every case a true cut.

I do not believe that a saw has been put on the machine in good order, as I have not a sufficient number of saws to give time to dress them well and keep the mill running, yet there has not been one broken or disabled, in fact, a saw must be in bad order that will not run in a straight line when run over your guide wheels.

Yours, truly, F. W. WHEELER.

[A TRUE COPY.]

F. W. WHEELER'S SHIP YARD.
WEST BAY CITY, Mich., June 25th, 1886.

Mr. D. K. Allington, East Saginaw, Mich.

DEAR SIR:—I have been engaged in running band saws for the past five years, and I never before found anything equal to the Band Mill built by you, that I am now filing for. I must say that it is almost impossible to made a bad line if the saw is in any kind of order. We are cutting hardwood, principally long oak, and on account of being scarce of saws we have run our saws for five hours and cut as fast as we could conveniently handle, without making any perceptible variation in the cut. I have run various kinds of mills, but never before saw anything to equal it. There has been quite a number of millmen examining it, and all give it up to be the best and truest cutting mill they ever saw.

Respectfully yours,
JOHN A. GREGG.

[A TRUE COPY.]

BAY CITY, Mich., Nov. 15th, 1887.

Mr. D. K. Allington, Saginaw, Mich.

DEAR SIR:—Having had considerable experience with Band Mills, I consider myself competent to judge the merits of the same. I started and run one of your Band Mills at Victoria Harbor, Ontario, which was manufactured by the Wm. Hamilton Manufacturing Co., of Peterborough, Ont. I also started and run your two Band Mills in William Peters' mill, at Bay City, Mich., and must confess they are superior to any Band Mill I have ever seen, for quality and quantity of lumber produced.

Respectfully, yours,
W. A. McCLENATHAN, Filer.

[A TRUE COPY.]

F. W. WHEELER'S SHIP YARD.
WEST BAY CITY, Mich., June 24th, 1886.

Mr. D. K. Allington, East Saginaw, Mich.

DEAR SIR:—I have been sawing on your Band Saw Mill for the last month, making plank from long square oak timber, partially seasoned, and being short of saws, do not have time to have them put in in the best of order, and have to run them five hours without changing, yet I have not broken a saw or made a bad cut, the machine running smoothly, and not having cause to stop for any reason but to change saws, and cutting as fast as other band saws I have run.

Yours truly,
THOMAS GRAHAM.

D. K. ALLINGTON.

MANUFACTURER OF IMPROVED BAND SAW MILLS

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DEPARTMENT OF CROWN LANDS.

(WOODS AND FORESTS BRANCH.)

Toronto, 18th October, 1887.

NOTICE is hereby given that under Order in Council Timber Berths in the following Townships, viz.: Livingstone, McClintock, Lawrence, McLaughlin, Hunter, Bishop, Devine, Butt, Biggar, Wilkes, Ballantyne, Chisholm, Canisbay, Pentland, and Boulter, will be offered for sale by Public Auction on Thursday, the Fifteenth day of December next, at 12 o'clock noon, at the Department of Crown Lands, Toronto.

T. B. PARDEE.
Commissioner.

NOTE.—Particulars as to locality and description of limits, area, etc., and terms and conditions of sale, will be furnished on application personally, or by letter to the Department of Crown Lands.

No unauthorized Advertisement of the above will be paid for.

SCRIBNER'S LUMBER AND LOG BOOK, revised, enlarged and improved; nearly a million copies sold. This is the most complete book of its kind ever published. It is designed expressly for *Ship and Boat Builders, Lumber Merchants, Saw Mill Men and others*, containing Tables for the measurement **LUMBER AND** of Scantling, Boards, Plank, Cubical Contents of Square and Round Timber, Saw Logs, reduced to Board Measure by Doyle's Rule, Specific Gravity and Weight of different Woods, Measurement **LOG BOOK** of Wood and Price Per Cord, Stave and Heading Bolt Table, Hints to Lumber Dealers and Mechanics, Selection of Standing Trees, Defects of Timber, Felling Trees, Cubic Measurement, Speed of Circular Saws and Power of same, Growth of Trees, **AND THE** Cutting Fuel, Splitting Rails, Price Table of Lumber, Standard Log Table, Care of Saws, Filing Saws, Land Measure, Strength of Timber, Stone Wall Table, Weight of Flat and Round Bar Iron, Tables **CANADA LUMBERMAN** of Wages by the Month, Board or Rent by the week or day, Interest Tables, etc. Sixty Pages of New Tables and Illustrations added, with other improvements by Daniel Marsh, Civil Engineer. Book alone **TO END OF 1888 FOR $1.25.** Post-paid for 35 cents.

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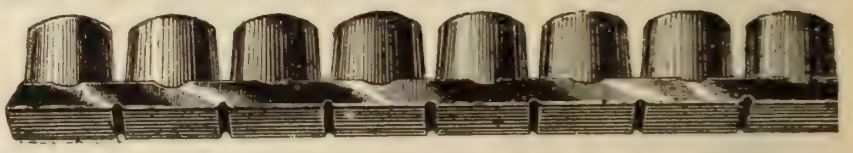

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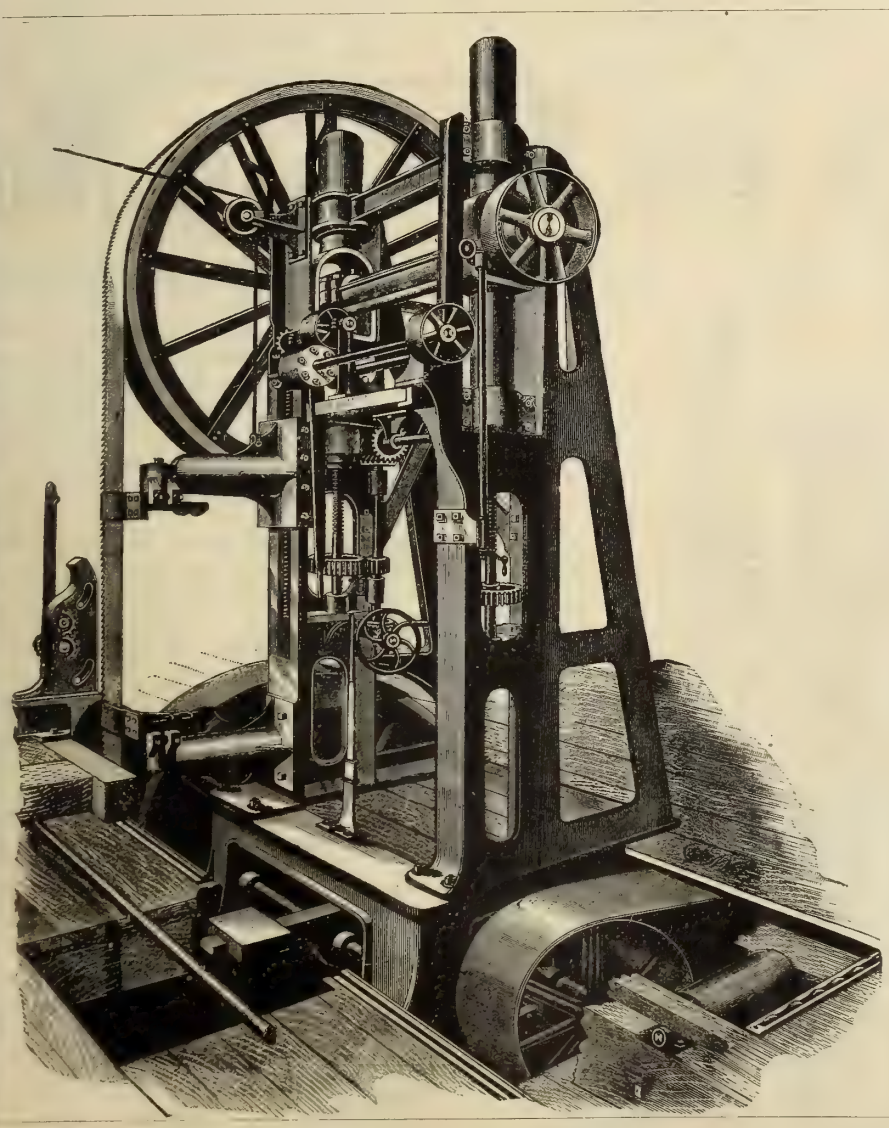

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We have never seen lumber so perfectly manufactured as made by this band mill. The mechanic that planned it and the company that manufactured it deserves the congratulations and thanks of all manufacturers of lumber.

Very respectfully,
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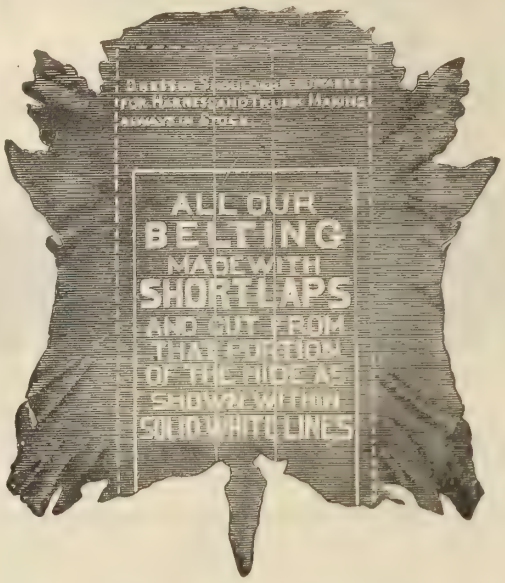

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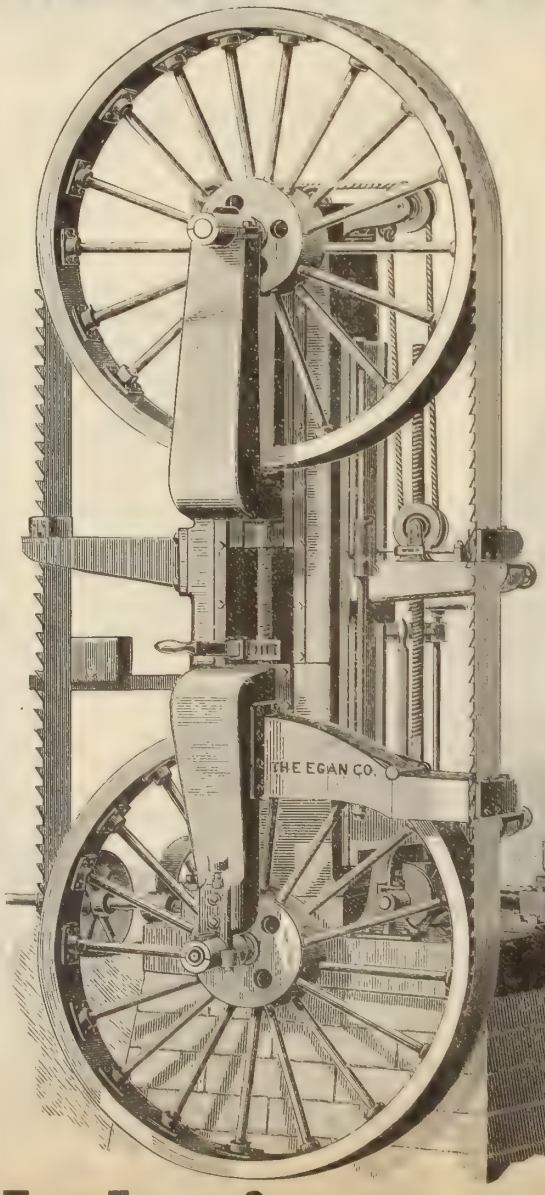

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The mill is built in the most perfect manner. The best materials are used throughout, and we test and run the mill in our works before shipping, and will warrant it in every way.

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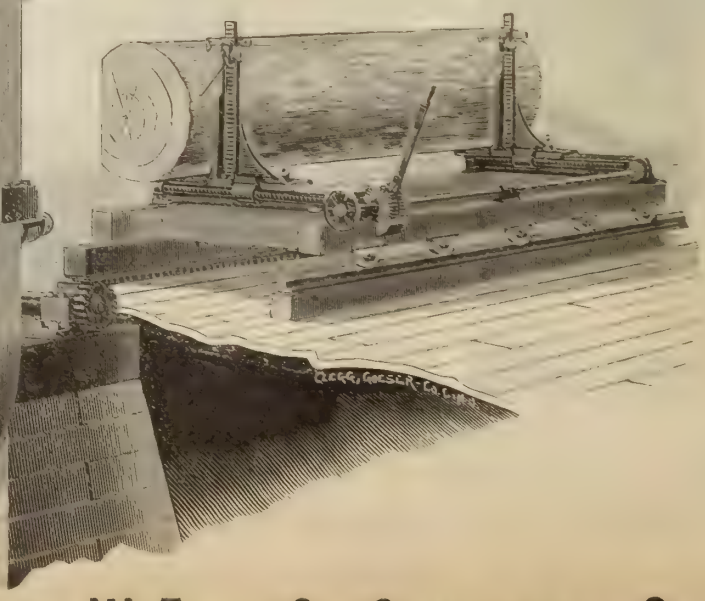

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THE CANADA LUMBERMAN.

VOLUME VIII. NUMBER I. PETERBOROUGH, ONT., JANUARY, 1888. TERMS, $1.00 PER YEAR / SINGLE COPIES, 10 CTS.

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PUBLISHED MONTHLY BY

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OFFICE: OPERA HOUSE BLOCK, PETERBOROUGH, ONT.

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THE CANADA LUMBERMAN is published in the interest of the lumber trade and of allied industries throughout the Dominio being the only representative in Canada of this foremost branch of the commerce of this country. It aims at giving full and timely information on all subjects touching these interests, discussing these topics editorially and inviting free discussion of them by others.

Especial pains are taken to secure the latest and most trustworthy market quotations from various points throughout the world, so as to afford to the trade in Canada information upon which it can rely in its operations.

Special correspondents in localities of importance present accurate report not only of prices and the condition of the market, but also of other matters specially interesting to our readers. But correspondence is not only welcome but is invited from all who have any information to communicate or subjects to discuss relating to the trade or in any way effecting it. Even when we may not be able to agree with the writers we will give them a fair opportunity for free discussion as the best means of eliciting the truth. Any items of interest are particularly requested, for even if not of great importance individually, they contribute to a fund of information from which general results are obtained.

Advertisers will receive careful attention and liberal treatment. We need not point out that for many the CANADA LUMBERMAN with its special class of readers is not only an exceptionally good medium for securing publicity, but is indispensable for those who would bring themselves before the notice of that class. Special attention is directed to "WANTED" and "FOR SALE" advertisements which will be inserted in a conspicious position at the uniform price of ten cents per line for each insertion. Announcements of this character will be subject to a discount of 25 per cent. if ordered for three successive issues or longer.

Subscribers will find the small amount they pay for the CANADA LUMBERMAN quite insignificant as compared with its value to them. There is not an individual in the trade, or specially interested in it, who should not be on our list, thus obtaining the present benefit and aiding and encouraging us to render it even more complete.

JUST before putting the last form of THE LUMBERMAN to press the annual circular from J. Bell Forsyth & Co., of Quebec, was received. The length of this report—giving as it does a detailed statement of the timber trade of Quebec for the past year—precludes its production in this issue, but will prove a valuable addition to our statistical edition of February 1st.

THOUGH several lumbermen from the United States attended the sale of Ontario pine limits, at the Crown Lands office, and no doubt by their bids contributed to raise the purchases to the very satisfactory total, they were not large purchasers, unless, indeed, some of the berths were secured by them in the names of other men. This, however, does not seem likely, as most of the buyers have mills handy to the limits and require them for their own operations.

WITH the present issue we present to our many readers the first number of the eighth volume of the CANADA LUMBERMAN. It is almost needless to add in this connection that it will be our persistent aim to retain it in the high position it now fills—the acknowledged representative journal of the lumber and kindred trades of Canada—and that from month to month new and special features will appear in its columns. Let us hope that the eighth year of THE LUMBERMAN'S existence may be the most successful yet, and that it may shed its light on many who now know it not.

MR. PARDEE may well be content with the result of the sale of timber berths, which as Commissioner of Crown Lands for Ontario, he submitted to auction last month. A million and a-quarter dollars was a very satisfactory total, and the individual lots, almost without exception, sold well. His most sanguine expectations must, we fancy, have been more than realized. This large sum is only a bonus given for a lease at a heavy rental, including the ground rents and stumpage dues now exacted, so it must be conceded that the Province has obtained good value for its property. The fact that the dues have lately been so largely increased, and that there is no guarantee against a further raise, make the heavy bonus that were given still more remarkable. But the fact is that unappropriated timber lands are becoming scarce in Ontario, so there was lively competition for many of the lots. It will probably be some time before there is another sale of similar dimensions, at least in the settled portion of Ontario, where, indeed, little pine forest now remains in the hands of the Government. The purchasers, even though they paid rather largely, may possibly be congratulated with as much reason as the Administration.

ANOTHER year has drawn to a close, and its successor has been duly installed by Father Time. It would be difficult to determine the multiplicity of changes which have taken place among LUMBERMAN readers during the twelve months of the year 1887. Many have forsaken the vocation of years, and stepped down and out of business life; others have transferred their interests to other fields of labor; while not a few have joined the great caravan which is steadily moving to an unknown world. To the old year, and those who have passed away with it, let there be given a lasting memory for the good that has been done, forgetting always the darker side of the life that is past. The year '87 has been a prosperous one to many, and to others it has been a year of reverses. The fortunate we congratulate; the unfortunate receives the sympathy of all true men. Entering as we are on another year of business activity we all do it with more or less trepidition, fearing lest a storm may overtake our bark and throw us against a reef upon which we may lose the cargo which took, perhaps, a lifetime to accumulate. But though the signs of the times do not look the brightest, let us hope that the present stringency in the money market may be of short duration, and that before the logs now being cut are floated, that more confidence may be infused in the commercial world. To the lumbermen the prospects seem by no means discouraging. So far as we can learn work in the woods is making good headway, and every confidence exists among the trade. The hope of THE LUMBERMAN is that this may continue, and that the year 1888 will be second, in point of prosperity, to no year of the past.

FEBRUARY first next the second annual statistical edition of the CANADA LUMBERMAN will make its appearance, and no pains are being spared to make it the most interesting and complete edition yet issued from this office. Arrangements are being made whereby we will be enabled to present reports regarding last season's operations and the probable cut for the present winter from every part of the Dominion, together with all statistics obtainable showing the leading markets of consumption. Some of the best authorities on the lumber trade in the country will contribute to make this special effort a success, and one worthy of the great industry whose interests it is intended to represent. We would like every reader of THE LUMBERMAN to lend a hand in sending items of news or correspondence on relevant topics. There is not one on our list who cannot claim the possession of some knowledge, which, when published, would help his fellow craftsman. No one need be afraid of sending in their ideas in crude shape, as the editor will, in all cases, be pleased to fill in and place the same intelligently before our readers. The statistical edition will comprise six thousand copies, and will be mailed to every man to be found engaged in the lumber, wood-working and kindred industries in the Dominion, as well as a considerable number both in the United States and Europe. Advertisers desiring to take advantage of this large edition can ascertain the cost of different size spaces by referring to the prospectus on another page of this issue.

WE have received from the Forestry branch, Department of Agriculture for Ontario, the forestry report for 1886. It contains a report from 160 townships, giving the amount of wood fit for fuel yet standing in the older settled portions of Ontario. A report of a careful examination of two townships of Ontario, one lying southerly and one northerly, with the view of obtaining an accurate idea of the effects of woods or lines of trees on growing crops, and the climatic differences observed since the clearing up of the country. Notices of the progress of forestry in other countries. Results of experiments in growing evergreens in large quantities in Ontario, and directions as to how similar results may be obtained. Complete directions as to raising all trees from seed and planting them out. Carefully prepared statements as to the lumber districts of Ontario; the value and uses of wood here; planting in school grounds and on Arbor Day; value of woods in preserving humidity in adjacent fields; proposed forest preservations; management of trees in cities; over-clearing in Ontario; [illegible] on Ontario farms; preservation of birds; forest work in Europe; evergreen hedges; and many kindred subjects. [illegible] valuable reports from gentlemen who have of late years started plantations here. The dissemination of these reports has been productive of much benefit in the Province, many thousands of trees having been planted and an interest aroused which will lead to much greater results. Should any LUMBERMAN readers desire a copy of this report it will be cheerfully furnished by the Department.

THERE is a general anticipation, it is said, on the part of lumbermen in the Western States, that the customs duties on lumber imported from Canada will be done away by legislation likely to occur during the present session of Congress. Speculation is rife, says the *N.-W. Lumberman*, as to the probable effect the free importation of Canadian pine will have in the United States. "Men," says that paper, "inclined to a belief in a protective tariff, jump at the conclusion that free importation will depress prices on this side, and overburden the markets with foreign products. But a careful and unprejudiced view of the matter does not so readily lead to that view. In case there were no duties to be paid on lumber from Canada, why should the producer in that country wish to sell his lumber any cheaper than the manufacturer on this side the line? Surely his desire would be to market his product at the highest market price. Furthermore, the supply of pine is not now so great, either in this country or in Canada, that there need be any fear of an over-production that will seriously reduce prices. Men talk as if Canada lumber were a new thing in our markets, when the fact is that it has been pouring into this country for forty years. The duty of $2 a thousand has not been sufficient to keep it out. Europe, the United States and the home demand has already absorbed so much of Canada pine that owners of limits, and the Government, have begun to economize the forest resources of that country. There is not so much to be yet slaughtered that owners of it will be stimulated by the chance of free exportation to the degree of selling it so cheaply that it will depress the markets on this side. Now that the forest supply has been so reduced in the United States that strong men financially have been able to raise the price of stumpage to $5 and $7 a thousand in Michigan, and $3 to $5 in Wisconsin, there is little danger of overloading the markets of this country with Canada pine. The direct effect of an abrogation of customs duties between the two countries would be an enhancement of the value of stumpage in Canada. There would follow an immediate rush of American capital into the British provinces, seeking investment in timber limits and mill property. This would tend to the stiffening in value of such holdings. Pine in Canada, other things being equal, would soon become as valuable as pine in the United States. When competition became active between Canadian and the United States capitalists, as it soon would, pine holdings and the lumber industry of the Dominion would assume the level of that in the States."

A PETITION to the Hon. C. F. Fraser, Ontario Commissioner of Public Works, has recently been extensively signed throughout the Parry Sound district, setting forth the fact that the South or Inside Channel between the ports of Parry Sound, Midland, Penetanguishene, Waubaushene, Muskoka Mills, Indian Harbor, etc., has, of late years, become a well-established route for passenger and freight steamers, tugs and other vessels plying up and down the east shore of the Georgian Bay; that two obstructions to the use of the said channel by boats drawing more than six or seven feet of water exist, known as Two-Mile and Seven-Mile Narrows, but that

a further grant of money is required to be expended there to make the channel sufficiently deep to enable vessels navigating its waters to use it at all times. Therefore the Commissioner is asked to cause a sufficient sum to be placed in the estimates of the next fiscal year to complete the improvements required. The deepening of this channel will be of great benefit to a very large number of the residents of the districts of Muskoka and Parry Sound, as well as to mariners, lumbermen and others.

United States Consul Murray states that the amount of American long lumber shipped to the States from the port of St. John for the year ending September 30, 1887, was 96,385,000 feet, and of short lumber, such as laths, pickets, shooks, staves, shingles, etc. an amount equal to 25,000,000 feet. The amount of lumber manufactured from English logs shipped to the states during the same time was 50,000,000 feet, making 171,385,000 feet of American and English lumber shipped to the United States from this port for the year. Shipments for the same year to all foreign ports, including deals, lumber, ect., was 130,000,000 feet. Total shipment for the year, including American and English lumber, 301,385,000 feet.

THE TIMBER DUES.

On the day before the late sale of Ontario pine limits a very influential deputation of lumbermen waited upon Mr. Pardee, the Commissioner of Crown Lands. Their request was certainly most reasonable, namely, that the Government should give some permanency to the terms on which the limits should be held, and should guarantee the purchasers against another sudden and unexpected raise of the dues and ground rent. It was unfortunate that Mr. Pardee did not see his way to accede to this reasonable request, though he remarked that the recent increase had been the first for twenty years and that there need be no apprehension of a further increase for a considerable period. This assurance may be sufficient for holding purposes, but the misfortune is that it gives no valid, unimpeachable security such as a banker requires when he makes advances. Confidence in timber limits as such security had already been somewhat shaken by the increase of dues in the Provinces of Ontario and Quebec, and the statement of Mr. Pardee is hardly calculated to give stronger assurance in this respect. It is not too late even yet for Mr. Pardee to make the present dues unchangable for some fixed period and thus make timber leases a more staple security.

The following report of the interview between the lumbermen and the premier of Ontario, with regard to the timber dues, appeared in the Toronto *Mail*:

A deputation representing the lumbering interests of Ontario waited upon Hon. Messrs. Mowat and Pardee yesterday afternoon. The subject upon which they wished to ascertain the views of Ministers was the increase in the Crown dues and ground rent made by an Order-in-Council last spring which comes into operation this winter. The former fees were 75c. per thousand feet Crown dues and $2 per square mile ground rent. These fees have been increased to $1 for Crown dues and $3 ground rent.

The lumbermen held a meeting previous to their waiting on the Ministers, at which a statement of their case, drawn up by Mr. A. H. Campbell, was agreed upon, and where it was also determined to form an association to be known as the Ontario Lumbermen's Association. The drift of constitution was adopted and the entrance fee fixed at $10.

The gentlemen then proceeded to Mr. Mowat's office, where the Premier and Hon. Mr. Pardee, Commissioner of Crown Lands, were ready to hear their grievances. Among those present were :—A. H. Campbell, Toronto; Jas. Scott, Waubashene; John Charlton, M.P., Lyndoch; David Gilmour, Trenton; Allan Gilmour, Trenton; M. Burton, Barrie; J. M. Irwin, Peterboro', M. M. Boyd, Bobcaygeon; W. T. C. Boyd, Bobcaygeon; John Macdonald, Albany; C. McLachlin, Arnprior; E. H. Bronson, M. P. P., Geo. H. Perley, M. P., Powell, E. B. Eddy, W. R. Thistle, Ottawa; J. B. Miller, Parry Sound; Jas. McLaren, Buckingham; Robt. Thomson; Hamilton; Alex. Fraser, Westmeath; N. Dyment, Barrie; H. H. Cook, M. P., Toronto; J. S. Hatton, New Lowell; J. M. Dollar, Midland; Thos. Murray, M. P. P., Pembroke; J. R. Booth, Ottawa; E. D. Moore, Ottawa; John Davidson, New Lowell; John McArthur, Toronto; Wm. Christie, Toronto; R. H. Klock, Ottawa.

It would be difficult to conjecture just how many millions this convocation of lumber Kings represented. There were several millionaires amongst them anyway.

Mr. Campbell opened the lumbermen's case by reading the paper that had been approved of at the meeting in the morning. This paper, ably and comprehensively stated the views of the lumbermen concerning the equity of the matter and the proper policy to be pursued by the Government in dealing with its timber lands. He took the ground that the purchases at the sales of timber limits held had been made upon fixed and well-defined conditions. The bids were made on the basis that the Crown dues were 75 cents per thousand and the ground rent $2 per square mile. Full value for the limits had been paid on that basis. To increase the dues and ground rent, therefore, now, was to impose on the purchasers in excess of their value and in excess of the amount they would have paid. He furthermore questioned the legality of such an action and had no doubt whatever of the decided lack of equity in such action. The Government should restore that confidence and put an end to doubt and uncertainty by declaring that the present scale of dues and ground rent should be maintained and unalterable for a fixed term of twenty years.

Mr. James McLaren pointed out that the dues could be so increased as to be tantamount to a concellation of the lumberman's lease. He cited the case of the Province of New Brunswick, where the Government by raising Crown dues to $1.50 and the ground rent to $8 on spruce lands had stopped the cutting of timber in that province altogether except on private lands. He asked that before the sale an announcement fixing the rates and dues for a term of years should be made.

John Charlton, M.P., stated that at the various sales of timber lands held, especially at the last one in 1884, the universal impression was that the charges for dues and ground rent were of a permanent character, and upon this basis bids were made. This view of the case was stated in implied and not in expressed terms by the Crown Lands Commissioner himself, and the bonuses paid amounted to the full value of the limits upon the basis of the charges then levied. Within eighteen months of the date of the last sale the Government advanced the Crown dues 33 per cent. and the ground rent 50 per cent. This action had provoked a considerable degree of indignation on the part of lumbermen, and many felt disposed to characterize it as a piece of sharp practice. It had been urged in justification of the advance that Crown dues in Quebec were considerably higher than in Ontario. To this he answered that the cost of placing lumber in the American markets was from a dollar to two dollars per thousand less from Quebec than the cost of placing lumber in the same markets from Ontario. The difference in dues had also to a large extent been equalized by the higher rate of bonuses paid in Ontario, that government having received as bonuses on its various sales a sum exceeding $1,700,000, which was greatly in excess of the amount received as bonuses in Quebec for a corresponding area. It should be borne in mind that calculations as to establishing a business in lumber must necessarily cover a term of years, as a mill could not be erected and adequate returns obtained for the investment in less than 10 or 15 years at least. This alone should make it apparent to the Government that for a term of years charges should be made of a permanent character, and not subject to arbitrary change. One effect of the Government policy had been loss of confidence and great shrinkage in the market value of limits. Lumbermen in the great majority of cases were dependent upon bank loans for a portion of the capital used in their business, and in this respect any action of the Government impairing the security they had to offer for money advances would be disastrous to them in its effects. The impression generally entertained that lumber was advancing rapidly in value was an erroneous one. Year by year the Canadian lumbermen found the northern limit at which he was driven from the field by the competition of Southern yellow pine coming nearer to him, and for the last two or three years a notable change had taken place in the market for the better grades of lumber through the introduction of yellow poplar from the south which stood high in public favor, and was rapidly supplanting the better grades of white pine for finishing lumber and had actually reduced the value of clear stuff, white pine lumber, from $4 to $6 per thousand in New York and other eastern cities. Owing to the deterioration in the quality of logs from year to year, the average value of our mill cut in Ontario was actually less than seven or eight years ago.

After some further discussion, Mr. Mowat, in reply, said it was the duty of the Government to consider the interests of all parties, the interests of the lumbermen as well as those of other parties, and they had endeavored to do so. They had endeavored to act fairly in this matter. In regard to the suggestion that the power which the Government have of raising the dues may be exercised unfairly, he said he thought the general feeling is that, so far, that power has not been unfairly exercised. The same suggestion might be made in regard to all the powers of parliament. Heretofore the changes had only taken place at long intervals, and under circumstances which had, he thought, received public approbation. The fact that an increase had taken place in the dues recently was an assurance that an increase will not be made again very soon. It might be possible for the Government on further enquiry and consideration to name a period within which no increase shall be made, but up to the present they had found it impossible to do so. They could not, therefore, make any change in regard to the present sales.

It was quite evident that the reply wat not satisfactory to the members of the deputation.

The Government Sale of Timber Limits.

The sale of timber limits by the Ontario government, on December 15th, drew the largest gathering of lumberman ever convened at one time in Toronto. It is stated that the lumbermen representing Canada attending the sale were worth $23,000,000, while the Americans present represented a capital of $20,000,000. The bidding as a rule was fairly brisk, and the result seems to satisfy both the Government and the purchasers. Following is a list of the buyers and the amount paid for each parcel:

Biggar tp.—Berth 1, 20⅜ sq. m. at $3,100, Thos. and Wm. Murray, Pembroke	$ 63,162 50
Biggar tp.—Berth 2, 11⅛ sq. m. at $3,100, T. H. Moffatt, Pembroke	34,487 50
Bishop tp.—Berth 1, 13⅛ sq. m. at $2,100, Wm. Cook, Toronto	28,218 75
Ballantyne tp.—Berth 1, 22⅜ sq. m. at $5,500, Albert Pack, Osceola,	123,062 50
Ballantyne tp.—Berth 2, 14 sq. m. at $2,350, Martin Brennan	32,900 00
Ballantyne tp.—Berth 3, 19⅛ sq. m. at $2,600, Jos. Riopelle, Ottawa	49,725 00
Ballantyne tp.—Berth 4, 12⅛ sq. m. at $850, Thos. Mackay, Pembroke	10,306 25
Butt tp.—Berth 1, 16¼ sq. m. at $900, Alex. Fraser, Westmeath	13,725 00
Chisholm tp.—Berth 1, 22 sq. m. at $3,000, Robt. Thompson	66,000 00
Canisbay tp.—Berth 1 2⅝ sq. m. at $500, Alex. Barnett, Renfrew	1,312 50
Devine tp.—Berth 1, 17 sq. m. at $4,300, Alex. Fraser, Westmeath	73,100 00
Devine tp.—Berth 2, 13½ sq. m. at $2.100, Alex. Fraser, Westmeath	28,350 00
Devine tp.—Berth 3, 11 sq. m at $4,200, Alex. Fraser, Westmeath	46,200 00
Devine tp.—Berth 4, 11⅜ sq. m. at $3,000, Alex. Fraser, Westmeath	34,875 00
Hunter tp.—Berth 1, 16½ sq. m. at $3,500, Alex. Barnett, Renfrew	57,550 00
Hunter tp.—Berth 2 12½ sq. m. at $4,600, Alex. Fraser, Westmeath	55,775 00
Livingstone tp.—Berth 1, 8 sq. m. at $6,350, Callahan & Montrose, Alpena, Mich	50,800 00
Livingstone tp.—Berth 2, 13¼ sq. m. at $4,200 Albert Pack, Osceola, Mich	55,650 00
Livingstone tp.—Berth 3, 11⅛ sq. m. at $3,400 P. H. Spohn	37,825 00
Livingstone tp.—Berth 4, 9 sq. m at $2,100 N. Dyment	18,900 00
Livingstone tp.—Berth 5, 8⅜ sq. m. at $800, W. J. Smith	6,700 00
Livingstone tp.—Berth 6, 9 sq. m. at $800, N. Dyment	7,200 00
Livingstone tp.—Berth 7, 7¾ sq. m. at $1,350, N. Dyment	10,462 50
Lawrence tp.—Berth 1, 15 sq. m. at $ 3,300, Alex. McArthur, Toronto	49,500 00
McLaughlin tp.—Berth 1, 17¼ sq. m. at $3,400 Alex. Barnett, Renfrew	58,650 00
McLaughlin tp.—B 2, 12½ sq. m. at $4,400, Alex. Barnett, Renfrew	55,000 00
McClintock tp.—Berth 1, 14 sq. m. at $2,500, Isaac Cockburn, Gravenhurst	35,000 00
McClintock tp.—Berth 2, 12 sq. m. at $2,500, Longford Lumber Co.	30,000 00
McClintock tp.—Berth 3, 8¾ sq. m. at $2,300, Longford Lumber Co	20,125 00
McClintock tp.—Berth 4, 10¼ sq. m. at $2,000, Isaac Cockburn, Gravenhurst	20,500 00
McClintock tp.—Berth 5, 9¼ sq. m. at $1,600, Isaac Cockburn, Gravenhurst	14,800 00
McClintock tp.—Berth 1, 1⅜ sq. m. at $1,050, Longford Lumber Co	11,550 00
Pentland tp.—Berth 6, 11 sq. m. Wm. Mackie, Ottawa	400 00
Wilkes tp.—Berth 1, 13¾ sq. m. at $900, Wm. Mackie, Ottawa	12,375 00
Wilkes tp.—Berth 2, 15½ sq. m. as $1,700, Wm. Mackie, Ottawa	26,350 00
Wilkes tp.—Berth 3, 17¾ sq. m. at $4,000, T. H. Moffatt, Pembroke	71,000 00
Nightingale tp.—Berth 1, 1⅝ sq. m. at $600, Thos. Murray, Pembroke	975 00
Grand total	$1,312,712 50

—The cabinet and furniture factory of Mr. Philippe Valliere, Quebec. was destroyed by fire Dec. 4th, entailing a loss of over $100,000. The works were well equipped with valuable machinery and tools, and there was a large lot of walnut and mahogany lumber, and some 30,000 chairs, all of which was destroyed. The extensive stores and showrooms adjoining, containing about $200,000 worth of goods, were saved, but considerably damaged. Mr. Valliere' who is one of the wealthiest citizens of Quebec and does probably the largest business in his line there, will commence rebuilding his factory immediately.

The Art of Sorting Lumber.

People unacquainted with the lumber business usually think that it is the handling of a coarse, bulky commodity, that requires little knowledge of details, or skill in management. It is the common notion that any man can be a lumberman after a short experience. Surely the buying and selling of boards, scantling, timbers, shingles and lath must be a simple and easy matter. Such a business, in the common view, has no comparison, in detail and minutiæ, to the dry goods, grocery or hardware trade. This opinion may have some application to the business of a small retail yard, at a railway station in a farming district, in which half a million feet of common lumber would be a large stock, and the list of sorts would not comprise more than a dozen. But when we come to one of the great wholesale yards, such as are to be found in this city, and other leading markets, the common notion is wide of the correct one. A wholesale yard has come to be the depository of a vast list of articles of wood, in which is embraced coarse and manufactured lumber, from a stick of 12x12 to a picket with an ornamental head on it, or a shingle with a hexagonal butt. If a yard price list that lies under the eye of the writer were to be thrust into the visual range of a dry goods merchant, he would be astonished at the multiplicity of articles named therein, and the wide divergence of value attached to them. He would make up his mind that a novice would have to receive a long and painstaking tuition before he could engage successfully in such a business.

Let us take a glance at the list in question. It embraces nearly 60 different classes of rough and dressed "wood goods," as the English say. Included in this classification are fully 900 different grades, sizes or styles of manufacture. In white, or soft pine flooring, there are 41 grades or items, with as many different prices. There are 13 grades of Norway flooring; 71 of hardwood flooring, including maple, red oak, white oak, walnut, cherry, ash and southern pine. Ship lap has a list of 22 items. There are patent sheathing and lath, soft and Norway pine partition, German siding, o. g. drop siding, soft pine ceiling, Norway ceiling, wainscoting, corrugated ceiling and well tubing, each with from one to twenty grades, sizes or descriptions. There are a dozen different makes of "fence rails"—not the kind that Indiana and Ohio farmers use, that are split out of logs, but fancy rails, that are priced at $10 to $40 a thousand, measured in lumber feet. There is a class of lumber denominated "saps," which comprises seven items; a style of lumber that is much esteemed at the east because it is clear and cheap, and just as good as any when inside and covered with paint. Stock boards, 10 and 12-inch, have 36 items on the list. Finishing lumber and thick uppers include nearly a hundred items. Panel stock has 20 grades; rough pine strips, 34; Norway, 12; pickets and palings, 16 sizes and grades; short lumber, rough, 42; car builders' stock, 32. Then, there are common and cull boards, Norway boards, common and cull fencing, and Norway fencing; mill culls, rough maple strips, timber, joists and scantling, each class with a numerous list. There is beveled corn cribbing, bridging and furring which the novice should know is not stuff with which to build bridges, or anything that pertains to beltries taken from the backs of animals, but simply little sticks with which to brace joists in floors, and strips to nail lath on. In plain shingles there are 22 kinds and grades, and there are 14 de-descriptions of dimension and ornamental makes, with geometrical terms—squares, diamond, hexagon, octagon, circle and segment applied to them.

Enough has already been mentioned to bewilder the ordinary merchant; but the list further includes building paper, lath, battens, poplar eave troughs, sidewalk plank, porch post stock, turning timber, turned hitching and stable posts, cedar posts, etc.

All the different kinds of lumber are sold rough or dressed, as desired. Much of it has to be manufactured into stuff ready to be put into place in buildings, articles of use, fences, or what not. It can be easily seen that this involves a large and varied amount of mill work. Hence we find attached to this trade list a schedule of prices for dressing, making, kiln drying, etc. There is also a sash, door and blind list, with the customary discounts.

All the rough, dressed and manufactured material referred to in this list is offered for sale, at specified prices, by one house. The job is undertaken to supply any customer in the United States, with any item on the list, on short notice. It does not require a strong imagination to reach the conclusion that there can be no seeds in the wool, moss on the back, or hair on the teeth of the man or men who devise and maintain such a complex business as this. Though a wooden trade, there can be no wood in the head of the men who keep all these details in proper arrangement, so that there shall not only be no loss in the business, but handsome profit at the year's end.

There are several wholesale yards in this city, the stock of which takes a wide range, but perhaps the one referred to is the most complete. The successful conduct of such a trade is enough to show that the lumber business can be made to employ the ablest and brightest mercantile faculty of the country. As the years pass, raw material diminishes in supply, and forest resources have to be gathered from a widening reach of territory; as the necessities and tastes of community shall require the use of a greater variety of woods, the wholesale collector and distributer of stocks will become more and more a man of extended and minute knowledge pertaining to his vocation.—*Northwestern Lumberman.*

Tension in Saws.

Tension is the principle in hammering a high speeded saw. In the lower speed the tension is not such an item, and many saws are now running that require no tension at all only the natural stiffness of the steel. This term tension is new to many saw hammerers, and a great many so-called experts and instructors in hammering saws do not understand the proper relation of the tension in a high speeded saw. They can make the average saw do good work. In this way many men get up their "rep." and are ready to tackle anything in the shape of a saw, knowing that the saw requires to be opened in the centre to the required speed. This may be done and yet the saw won't go. The unequal tension is corrected, but of no avail. I have seen such men hammer a high speeded saw until the centre would dish back and forth as it should apparently, and he never did make that saw run, hammering it half a dozen times, opening and stiffening it to the extreme both ways, trying to get at the limit and the saw got worse. Remember this man could correct unequal tension fairly. The trouble was the saw was not opened in the proper relation to the action of centrifugal force. This is something that nine-tenths of the saw hammerers do not understand, that a saw can be hammered to be as stiff at any required speed as the metal in the plate will allow. They do not know the extent of the centrifugal strain on the rim. How many know the maximum or "vice versa" line in a circular saw? We often see men hammer a saw in segments from centre to rim, no matter what the condition of the saw is. The first thing is to sledge hammer the saw for a while to "liven up the steel," and then go about to regulate it to the speed. By the time this is done there has been ten times as much work done as was necessary, and the saw will soon be in worse condition than ever, as the tight and loose lines bring about more buckles from rim to center than all his hammering can get out; the rim at regular intervals gradually assumes the shape of the letter S.

Years of experience in average speed does not make a man proficient for a speed of 12,000 feet rim speed. The trouble with such men is this, as above stated, they can make an average saw go very well, have hammered saws that so many have failed on, that the man naturally is led to believe that he is chief. He can talk about the saw makers and what he can learn them, knows it all and don't care to learn any more, but talk to him about a saw running on 12 and 14-inch feed, and you will catch his jack, and he won't believe it then, says it's some newspaper talk, and a trick. As a man of this kind remarked to me, it is "scalping," the saw being allowed to rub the log while gigging, to display the feed marks, etc.

Saw makers are not very old on heavy feeds. The best saw maker in the United States to-day claimed 15 years ago that no saw could be made to stand the strain of a 10-inch feed in a 12-inch cut. At the Centennial in 1876, 10½-inch feed was all that was aimed at. The same saw cut 21½-inch feed at the World's Fair, at New Orleans in 1885. Why could not 21½ inch feed be cut just as well 11 years ago as now? The steel in the saw to-day is undoubtedly the same as then. This shows that there has been a wonderful increase in the capacity of the circular saw, all brought about in the hammering of it, getting the tension in the exact relation to the centrifugal force, and feed strain.

Saws are sometimes bursted on heavy feed, but my experience has been that when a saw was adapted to the work and in a first-class condition, they have never been broken by heavy feeds. There are but very few men who can put a saw in that condition, and it being so far above the calibre of the average saw hammerer, it is folly to attempt to explain here the sensitive and most essential parts of a perfect saw. Perfection has not yet been attained by any man, but the difference between a botch and a good job on a circular saw, comes very near demonstrating perfection.

The adjustment of a saw is more essential than the most vital part of a watch. Two saws may be fixed up and appear so near alike that the average man can not tell which is in the best condition, and yet one saw will cut twice as much lumber as the other and equally as good. My limited experience has taught me that the best results are obtained by not hammering near the center or rim of a saw.—*Foreman, in Woodworker.*

—There is very little doing just now in the Quebec market.

What is Forestry?

What is forestry? It is the same thing as agriculture—a business. The difference is only in the kind of crop and in the manner of treating the crop. It is the production of a wood crop we are after. This is the crop which grows, or can be made to grow, on those parts of the farm which are useless for all other crops. It is a slow growing crop, to be sure, but it grows while you are asleep, and you need put it in the ground but once, where it will thrive without further care for many years; and, if properly started, it needs no hoeing, no cultivating, no worrying about the weather. And when you come to reap it, it will prove to yield a profit from ground that would otherwise have been left not only unproductive, but unsightly in addition.

If only for the looks of it a piece of [illegible] thriftily growing enhances the value of the farm. Therefore plant the unsightly waste places to trees, remove those ugly spots from the farm that spoils its good looks. It costs but little [illegible] than an occasional day of enjoyable work.

Don't figure on the profit of sticks that you are [illegible]; there is profit indirectly accruing from such planting, [illegible] defies all strict financial calculation, besides your [illegible] tion which will surely reflect from such work beyond any direct money gain, though this will not be lacking [illegible] proper time. It has been proved over and over [illegible] wood-lot will sell the farm—if sold it must [illegible] than it would have brought without it.

And you who are the happy owner of a wood-lot treat it as the goose that lays the golden eggs; the eggs will soon be high in price, the goose is worth caring for! If you cut, don't cut the good trees only and leave the bad ones to spoil the looks of the lot and to injure the young growth, that would be better off if the gnarly old fellow over head did not stand in its way with shade and drip. Always give some light and room to the young folks!

Forestry means more than tree planting; it is the art of managing a wood crop so that it will reproduce itself spontaneously by the seed from old trees and afterwards helping the young growth to make the best timber in the shortest time. Nature will reproduce the forest and grow timber without care if allowed by man, but she takes time, and time is money—at least to a careful manager.

Then use your odd moments in improving your crop; the axe, too, is a cultivator—in judicious hands.—*B. F. Fernow, Chief of Forestry Division U. S. Department of Agriculture.*

A Curious Bill-Head.

A correspondant of the *Antiquary* says that recently, in turning over a bundle of London tradesman's accounts of nearly a couple of centuries ago, he came across the following, which is certainly curious, and seems to be a sort of cross between a bill-head and a book-plate. The plate-mark has a margin of half an inch all round, the full size of the sheet itself being 6½ by 4¼ inches.

> WILLIAM GARDNER at the Sign of the one Cane-Chair, on the South Side of St. Pauls-Church, London, maketh and selleth Cane-Chairs, Couches, and Cane-Sashes at reasonable Rates. Of dry Wood.

At the back of this is Mr. Gardner's account, as follows:—

Mr. Duglas bill for cheres Nov. ye 6, 1709.

	£.	s.	d.
8 walnut Cheres, fine moulding, the finest Caine of all, at 12s.	4	16	0
2 Elbow Cheres suttable at 15s.	1	10	0
in all	£6	6	0

Reced Nov. ye 8 1709, of Mr. Duglas the full contents of this bill and all demands, I say Reced by me

WM. GARDNER.

Gardner must have been a celebrated chair-maker, from the fact of the goods having been sent all the way to Newcastle-on-Tyne, where the Mr. Duglas referred to in his bill resided.

They Paid for the Mistake.

Northwestern Lumberman.

A Bangor Me., lumber dealer recovered 10 cents a thousand on 800,000 lath from the Western Union Telegraph Co., because a telegraphic offer to a Philadelphia dealer had been delivered making the price 10 cents less than that written by the sender. The waiving clause in the telegraph blank, releasing the company's liability for error or non-delivery, and the ground that plaintiff was not bound by the erroneous message, furnished the strong points in the company's defense. The supreme judicial court of Maine decided against the company on both grounds, holding that the printed stipulation did not bind the sender, but was void, because the public good demanded the use of care and dilligence by the company, and that the sender of the message was bound by it in the form delivered, but that he had remedy against the company.

THE NEWS.

ONTARIO.

—Mr. Van, of Foxmead, is about starting a new shingle mill.

—Joseph Wheeler has erected his shingle mill in Freetton. It is now in full swing.

—The Macklem saw mill, at Kincardine, will shortly recommence operations.

—Wilson Little and Alex. Morrison, of Donegal, will engage in lumbering at Wiarton.

—The Georgian Bay Lumber Co., are putting in a new engine and other machinery.

—Laurin & Capistrand, planing mill operators, Penetanguishene, have dissolved partnership.

—Hamilton Bros. of Ottawa are sending an unusually large number of men to the woods this winter.

—The sash and door factory belonging to A. J. Jones, Rochesterville, was recently destroyed by fire.

—Robert Harrison, of Cavan, is adding to his saw mill a chair factory and sash, door and blind factory.

—It is stated that McLaughlan Bros., of Arnprior, intend to take out about 400,000 logs this winter.

—A jobber for the Conger Lumber Co. has skidded over 1,000,000 feet of logs since July, with two teams.

—A former resident of Peterborough, Mr. Perchard, is running the mill for Mr. Sills, at Meyersburg.

—Mr. S. Cummer is building a new saw mill at Arranville, on the site of the old mill that stood for thirty years.

—An Ottawa newspaper estimates the output of logs on the Ottawa region alone at about a thousand million of feet.

—Manhard & Co., lumber dealers and brokers, of Brockville, have decided to remove to Cape Vincent, N. Y.

—The loss occasioned by the recent burning of the Gilmour shingle mill, at Trenton, will be $12,000. It was insured.

—Mr. Hadden, of Foxmead, has his planing machinery ready for operation. He also intends erecting a shingle mill during the present winter.

—Perley & Pattee, lumber merchants, are the leading promoters of the new company for supplying Ottawa with natural gas.

—A wood pulp mill is being built at Kingtson, on the Hudson river, to draw on the supply of pine in the Ottawa region.

—The Parry Sound Lumber Co.'s barge, Corisande, met with a mishap recently, which has rendered it unfit for use until repaired.

—The Canada Pacific Railway is now practically finished from Algoma Mills to Ste. Marie. The men on the contract have all returned east.

—The firm of Christie, Kerr & Co. has several camps at Oakley, and in order to feed the men send herds of cattle there. They intend getting out 12,000,000 feet this winter.

—The mills of Messrs. B. Caldwell & Son, at Carleton Place, closed down for the season last week. Their cut this year amounts to 9,000,000 feet, the largest for some years.

—A large quantity of wrecked timber has been shored on Lake Huron, near Kincardine, and the Goverment has instructed the local Costoms collecter, to protect the same.

—About a million feet of lumber has been washed ashore on Lake Huron, between Point Clark and Inverhuron, and it is reported that the farmers in that vicinity have been confiscating it.

—There was an auction sale of lumber and shingles at Young's Point, on Dec. 13th, comprising pine, oak, elm, ash, basswood, maple and hemlock also a large quantity of dimension timber.

—The lumber laden barges Hinckley and Harmon, which were wrecked on Point Albion, Ont., have proved a total loss. The outfits were lately taken to Port Colbourne and all hope of releasing them given up.

—The machinery for the new mills of the Parry Sound lumber Co. and the Midland and North Shore Co. has been received at Parry Sound, and the work of erecting the mills is being pushed forward rapidly.

—It is reported that Mr. Horace Shaver, and Henry Shaver, of Ancaster, have been making extensive purchases in the district of Muskoka. It is their intention to have the lumber and wood shipped to Hamilton station.

—Peter McLean, of Pembroke, has been appointed detective officer to look after the persons who steal logs along the Ottawa. The *Standard* says Peter is the right man for the place, and that he will make matters hot for the harpies.

—Mr. Thos. Greenlaw, of Vasey, Midland district, having rented his farm is going to build on his swamp lot in Tay and commence the manufacture of shingles. He has the lumber on the ground and will commence operations at once. We also hear that some parties from Penetang. have purchased the timber on the Simpson-Mealey lot and are going to build a shingle mill at once.

—The lumber manufacturers interested in the Madawaska river and its tributaries, held a meeting in Ottawa, Dec. 14th, for the purpose of taking into consideration the improving of that stream from Bark Lake to Chain Rapids. It was decided to proceed with the necessary improvements at once, John Harvey, of Arnprior, being appointed as superintendent. This work will give employment to a large number of men during this winter.

—Very considerable transactions in deals are reported. The Gilmour stock on hand and the cutting for 1888 is sold to Messrs. Smith, Wade & Co., of London, Eng., the balance of the Hamilton stock on hand and about half of the production for next year has also been bought by the same firm, the remainder being sold to Messrs. Dobell, Beckett & Co., Messrs. R. M. Cox & Co., of Liverpool, are reported to have purchased Messrs. Perley & Pattee's productions for next year. Prices have not transpired, but are understood to be about the same as ruled for this year's cuttings.

—A company composed of Messrs. E. H. Bronson, E. B. Eddy, H. F. McLaughlin, J. R. Booth, Alex. Fraser, and W. G. Perley, under the name of the Madawaska Improvement Company, have applied for an act of incorporation. The capital of the company is $60,000, and the object of the proposed company will be to construct dams, slides, piers, booms, and other works necessary to facilitate the rapid transmission of logs down the Madawaska river and its tributaries, and also to improve the navigation and telegraphic connections in the district. The head office of the company will be at Ottawa.

—The Emery Lumber Company is composed of the Emery Bros., of East Tawas, and the members of the Saginaw Lumber and Salt Company, of East Saginaw. This concern owns about 100,000,000 feet of pine in the Georgian Bay district. Two years ago they conceived the idea of bringing the timber from that tract to the mills of the company at East Tawas, and Crow Island, on the Saginaw River, for manufacture, the export duty exacted by the Canadian authorities on logs in the rough being only $1 per thousand feet. It was finally decided to construct a barge sufficiently large to carry 500,000 feet of logs at one cargo, with appliances for loading and unloading the logs by steam. Accordingly the contract was let for the construction of a craft at Bay City, and she was completed a year ago last spring and called the *Wahnapitæ*, after a river in the Georgian Bay region. This craft is 275 feet long, and 51 feet breadth of beam. Her cost was $30,000, and she was put into the log carrying business between the points named, the company having cut 13,000 pieces on their Canadian limits. Several trips were made, but during the season the Canadian authorities increased the export duty on logs to $2 per thousand feet, and it was found that they could lumber more profitably by manufacturing the log stock cut on the Canadian side. Last spring the *Wahnapitæ* was put into the lumber carrying trade in which she has proved a bonanza. Her trips have all been made from the Lake Superior country, and had the monster craft been ten inches wider she could not have passed through the Sault canal. She has made six round trips, carrying an average of 2,000,000 feet of lumber at a load, the freight averaging $4. She is now bound down from Ashland to Tonawanda with a cargo of about 2,000,000 feet. Her up freights amounted to $7,800 on ties carried into Duluth. Her largest cargo was was 2,409,800 feet—the largest ever carried by a lake craft—which was loaded at Duluth and carried to Tonawanda. On one trip between the same points she carried 2,181,000 feet. This cargo was piled 22 feet high and she drew only 11 feet of water.—*Saginaw Courier*.

QUEBEC.

—Lake Magentic and vicinity boasts of at least seven saw mills.

—Contractors are getting out about 40,000 sleepers for the C.P.R. in Saguenay County.

—The lumber mill belonging to E. F. Todd & Son, Milltown, has been damaged by fire.

—James Burbank, of Hatley, has put a saw and planing mill in operation in the basement of his grist mill.

—A Quebec despatch says news received from England points to an advance in the timber market on account of the low stock in hand.

—The barque Peerless, reported some time ago as waterlogged and towed into Gaspe Basin, has been pumped out, and her cargo of timber and deals discharged and secured for the winter.

—J. B. Scott, Nicolet, lumber dealer and speculator in logs, ties and bark, has assigned, due, it is said, to the recent failure of Plamonden & Augur, Quebec lumbermen. His liabilities are given at from between $50,000 and $60,000.

—Here is a modicum of interesting news for Canadian saw mill owners and others. The Papineauville, Que., Council has stated that no tax shall be levied for fifteen years on any person or persons who erect saw mills or other manufactories in that locality. An Arnprior firm, Messrs. McLaughlin, and a Braeside firm, Messrs Gillies Bros., it is rumored, intend to take advantage of this promise.

—Ross & Co., of Quebec, have purchased of Hon. Timothy Nester, Hon. H. C. Thurber and Jacob Selegman, 14,000 acres of land in Baraga, Menominee, Delta, Alger and Marguette, Mich., which comprise a vast portion of the vast tract purchased by Mr. Selegman and Mr. Nester from an England syndicate a few months ago. Ross & Co. will cut such lumber as they won't export, and put the rest of the timber on the market.

—Lumber operators on the Lake St. John Railway route during the present winter promise to be very active. Large numbers of men are being sent up to work in the different lumber shantes along the line. Mr. J. S. Murphy will employ about 150 men in his shanties getting out spruce logs to supply his new steam mill which has lately been completed on the Riviere a Pierre, and several other operators will also employ a large number of men. A new spool factory has also been established at Pearl Lake by Messrs Shroder & Son of Three Rivers, and is expected to commence operations shortly.

—A correspondent writing from Springfield to the Sherbrooke *Gazette*, among other items of interest concerning that section, advocates the establishment of a lumber mill in the following words: A mill for the manufacture of lumber to meet the demands of a local, and other markets, and for other purposes, on the stream known as Black River, three miles from Springhill railway station, on the main road leading to the village of Stornaway is much needed. If such saw mill were built and in operation on the stream aforesaid, local residents would have a market for their lumber, and other farm productions. In the vicinity of Black River there is an endless quantity of sound spruce and a variety of other timber within a radius of four miles, which would last a good running saw mill a quarter of a century. Recently the residents have commenced subscribing to a fund to be laid out in building such a saw mill on Black River, and put the same into first class running order, with the intention of forming and establishing a company for the manufacture of all kinds of timber, and this fund is increasing with astonishing rapidity. I should not be surprised to see within two years hence a company incorporated by an act of the Provincial Legislature in Springhill, which will do a profitable business in an honest and industrious pursuit.

NEW BRUNSWICK.

—Shipments for the season are about over at Bangor, Me.

—Smith Bros., of Centreville, have their steam saw mill at work.

—Adams & Gregory's mill, St. John, will, it is said, run most of the winter.

—About fifteen mills have been built in the province during the current year.

—All the mills in the vicinity of St. John were closed for the season before Christmas.

—Carr & Shaw will build a steam mill near Hartland, this winter, and Chase & Sons will rebuild in the same town.

—W. H. Murray, of Indiantown, is building an addition to his mill and will put in several stave and clapboard machines.

—Shipments of deals, etc., to the United Kingdom, from the port of Richmond and output of Buctouche, for the season, amount to 14,751,000.

—The shingle mills throughout New Brunswick have had an extra good season. Nearly all of them are piling cedar so as to be able to run all winter.

—The lumbermen had plenty of snow during the first part of the season, but the woods are now reported bare and operations practically suspended.

—J. W. Clark & Son are making boxes. A member of the firm is now in the United States buying planing and door-bailing machines, which will be placed about the middle of January.

—The shipment of deals, etc., for the year, from the port of Miramichi, amount to 68,121,029 superficial feet. From Richibucto and its outport, Buctouche, the shipment amounted to 14,751,000 superficial feet.

—The Grangers on the Arostook are reported to be holding large meetings and passing strong resolutions against Arostook lumber being driven into New Brunswick, and manufactured there.

—The value of the lumber exports from St. John during November was less than half of that for the same month last year, the amount being $66,772, as against $143,143.

—Fairfield lumbermen will cut about 8,000,000 feet this year. Estimates of cuts in other sections are hard to get at, but it is believed that the coming season will show the largest cut for years.

—At Baring, Dec. 12th, H. F. Eaton & Son lost three gang muleys, two planing machines, lath and shingle machines, and a quantity of lumber by fire. The loss is placed at $15,000; insurance, $8,000.

—Business in St. John and vicinity, so far as lumber is concerned, has kept up well so far, and the prospect for the winter is decidedly encouraging. An advance in certain kinds of lumber is being talked of, although no particulars are yet to hand.

—In an old volume entitled, Sketches of New Brunswick, I find these figures given as the market quotations of New Brunswick lumber, etc., in 1825: Pine and Birch timber, 20s. sterling per ton; lumber and plank, 40s sterling per M; shingles, 12s. 6d. per M; lathwood, 20s. per cord; staves, 60s. per M.

—Lumbermen say there will not be so much lumbering done in the Miramichi region this season as in former years, on account of the stumpage tax. Besides that, lumber is scarcer and more difficult to get at, the hauls are longer and, with the work of building dams and cleaning out streams, the expenses lap over the profits. Reduction of stumpage is now an issue in the local election there.

—The lumber mills of Messrs. H. F. Eaton & Sons, St. Stephen, N. B., known as the "Upper Mills," were destroyed by fire Dec. 5th. Loss about $12,000. These are the mills about which there was a dispute as to which side of the river they were on. A few weeks since the United States customs officers seized some of the lumber manufactured there, contending it was from Canadian mills and liable to duty on going into the United States. The owners claimed that the mills were in Maine. It is probable that the mills will not be rebuilt unless it is decided that their site is on the Baring side of the boundary line.

—Maine dealers say that the past season has been a prosperous one for everybody interested in the lumber business and that the trade, both foreign and domestic, has been limited only by the supply. I gather from lumbermen and correspondence, says a writer in the N. Y. *Lumber Trade Journal*, some interesting notes. The tide mills of the lower Kennebec, which had hard luck from 1884 to 1886, sawed over 5,000,000 feet this season, most of which went to the Boston market at $14 to $14.50 per M. The amount of lumber handled by Portland houses during the year will be about 150,000,000 feet. The South American export trade this year will probably amount to 50,000,000 feet, a large advance over any previous year.

MANITOBA AND THE NORTHWEST.

—Minnedosa saw mills are reaping a profit from the sale of their sawdust.

—Jeffrey Bros., of Laggan, are getting out 20,000 poles and some flat timber for the Galt Mining Company.

—From twelve to fifteen cars of lumber are being sent weekly from Selkirk to Winnipeg and other western parts.

—Fraser & Co. have sawed about eight hundred and fifty thousand feet of lumber this season and have about seventy-five thousand feet of logs up the river yet. They will take out half a million feet this winter.

—Seven thousand railway ties were sold in Brandon recently for timber dues. They only brought $5200, or just about enough to cover the dues and the wages of the men who brought them down the river to Brandon.

—Mr. W. B. Fotheringham is building a saw mill and grist mill on the island at the head of the Sault rapids of the Rainy River. He has already got in his camp and is taking out logs and will have about 600,000 feet by the time the mill is ready. The roads are cut to the mill and everything is in good running order for this time of the year, in fact he has got out these supplies for a year. The mill site selected is exactly midway between Rainy River and Lake of the Woods so that as it is in the middle of the settlement on the banks of the Rainy River it must naturally follow that it will be the headquarters for the settlement on the river. The place has been called Jubilee.

BRITISH COLUMBIA.

—From the *Sentinel* we learn that Wm. Fortune, of Tranquille, has completed the building of his new mill and commenced cutting lumber.

—Knight Bros., Popcum, write THE LUMBERMAN that they have some choice timber in that Province, and that they had the pleasure a short time ago of examining a grove of timber containing about one hundred and sixty acres. There was no underbrush, and the trees did not stand more than ten feet apart on the average, sometimes three or four would be almost touching at the roots.

—The Dominion Government has completed an arrangement for the transportation of mails on the new route between Great Britain and Japan, via the Canadian Pacific railway. Vancouver will be made a postal centre under the new arrangement, and all foreign mails coming east, and destined morf poins in the United States and Canada will be distributed rom there.

AMERICAN NOTES.

—There will be a heavy accumulation of lumber in the Philadelphia market this winter.

—A large number of Michigan lumbermen will operate this winter in California and the south.

—Saginaw lumbermen are making heavy investments in pine timber in the Duluth districts.

—The total cut of lumber for the season of 1887 by the Ashland saw mills has been 69,774,024 feet.

—The Chicago market is virtually at an end for the season. There will be no further sales worthy of note until next spring.

—The forest lands of the United States, excluding Alaska, embrace 500,000,000 acres, or 28 per cent of the entire area.

—The devastation caused by fire on the Saginaw river has been extensive the past season; it is estimated that nearly $200,000 has gone up in smoke.

—An approximate estimate of the amount of lumber hauled by the principal railway lines of eastern Michigan, for the year just closed, is placed at 200,000,000 feet.

—The white cedar movement on the lakes, as well as by rail, have been enormous this year, Chicago dealers have handled the larger portion of this year's products.

—A change in the editorial management of the *Timberman* is announced in its last issue, A. H. Hitchcock retiring from the editorial chair, which is assumed by J. E. Defebaugh.

—The mills at the mouth of Menominee river have closed down for the year 1887. During the past season there has been about 217,000,000 feet of lumber cut by these mills besides a large quantity of lath, shingles and picket.

—The lake receipts at Buffalo for the season amount to 258,000,000 against 285,000,000 feet the previous year, a slight falling off, and the canal shipments amount to only 56,000,000 in round numbers against 83,000,000 the previous year.

—About 100,000,000 feet of lumber was cut at Cheboygan, Mich., the last season, the largest ever recorded. It falls about 25,000,000 feet short of the amount anticipated at the start, but is about 20,000,000 feet in excess of the cut of 1886.

—The Tonawanda and Buffalo dealers have, the past season, labored under the serious difficulty of a short supply of cars. Some dealers in the two markers declare that they could have shipped a third more lumber if they had been furnished a sufficiency of cars.

—From New York we learn that the export demand continues light in all directions. The near future may produce a reaction, as several features of the market are undergoing a change that will benefit us. The River Platte trade is about to begin from this port, and things look brighter in the direction of the West Indies. Trade with Australia and Africa is dull.

—Wages in the Michigan woods, it is believed, will average two or three dollars per month the coming winter better than last. In some portions of Wisconsin, it is reported, there is a larger increase than the above. In the vicinity of Wausau, Wis., men who received $26 last winter are getting from $30 to $33, and teamsters, loaders and choppers are offered $40, and some very desirable men are even offered $45. This rate of wages is about equal to the years 1871 and 1872, previous to the panic.

EUROPEAN NOTES.

—The London timber market is unusually heavily stocked this winter.

—The London mahogany and hardwood market shows signs of increased firmness every week.

—There will likely be an advance in London shipping rates at the opening of navigation next spring.

—Advices from Glasgow go to show that the outlook for the winter's work on the Clyde is pretty good.

—The preparatory works for the commencement of the Manchester Ship Canal are being pushed on vigorously.

—The timber trade throughout England and Scotland is showing very satisfactory signs of improvement, especially as regards hardwoods.

—Private transactions in the lumber world are becoming more numerous than heretofore, and as a result auctions are not as well patronized.

John H. Burrell has retired from the firm of Alfred Dobell & Co., Liverpool, Eng., timber merchants and brokers, but business will be continued under the old [illegible]

There has been a rise in mahogany on this side of the water, and principally owing to this fact cedar has gone up also. The stocks in the latter line are very much reduced, and consumers are showing a better disposition to purchase.

Deals from Quebec and Montreal, to the Glasgow market, imports of which were large in the earlier part of the [illegible] and ran considerably ahead of last year's at corresponding period, are now in total quantity rather behind that of last year.

The vessel *New Brunswick*, bound from Quebec to Liverpool with a cargo of timber, etc., for Messrs. Gilbert Harrison & Brothers, has again been passed derelict in the Atlantic, and from her position is a source of danger t[illegible] transatlantic steamers, as she is in the customary [illegible] by them when bound for New York.

Messrs. Singleton, Dunn & Co.'s circular, dated Glasgow, Dec. 1, says: "The trade i now realising that things [illegible] to have got past the worst, and the moderate imports of Canadian goods and Pitch Pine have begun to exercise a wholesome influence on prices. In addition to this a fair amount of tonnage has been contracted for by our shipbuilders, and [illegible] transactions of more or less importance were arranged [illegible] merchants in consequence. Housebuilding is not better, but still maintains a fair average. It may be remembered that a year ago a like condition of hopefullness prevailed in o[illegible] and in other trades, to be followed by a depression all the more felt that it came so quickly after the buoyant tone. At this time, however, there are many circumstances which point to a continuance of the improvement now felt.'

AMONG THE MANUFACTURERS.

THE William Hamilton Manufacturing Company, Peterboro', Ont., have their establishment full of work. Among some of their recent shipments of machinery are an 18x24 inch slide valve engine and equipment for a saw mill for the Georgian Bay Lumber Company; an 11x24 engine and shingle mill equipment for the Midland North Shore Lumber Company, Parry Harbor, Ont., and a lot of heavy machinery, boiler, etc., for the Haslan Lumber Company, Nanaimo, B. C. They are now building a 13x50 inch 50 horse-power Corliss engine for the new works of the W. F. Cochrane Roller Mills Supply Company now being built at Dundas, Ont.

MESSRS. W. R. THISTLE & CO., of Pembroke and Ottawa, take a place among the lumbermen's notices for the first time this month. They have started their winter saw mill at Chalk River, for supplying dimension timber, in white and red pine, car lumber, spiles, etc. We have pleasure in directing attention to their advertisement on another page.

AMONG the new advertisements contained in this issue is one from the Lake Shore Saw Mill Lumber Co., of Cleveland, Ohio. This firm are in need of about two million feet of white and Norway pine logs, principally the former, long or short lengths, which they wish rafted to their mills in the above city. The announcement will doubtless be of interest to many LUMBERMAN readers.

THE WESTERN STATES.

Special Correspondence to THE LUMBERMAN:

ST. LOUIS, MO., Dec. 28th, 1887.

It is really surprising, yet it is a fact, that the white pine lumber trade of St. Louis was as good the first part of December as it was in the first part of the month preceeding. From now on, however, the merchants do not anticipate more than a local business, and that with regular winter weather will be confined mostly for six weeks at least to urgent orders. Since my letter of December to THE CANADA LUMBERMAN prices have advanced slightly on some scarce grades of white pine. In this stock of lumber there is badly broken stocks at every point from here north on the upper Mississippi to St. Paul. Locally the yards will wind up the season to January with less by 50,000,000 or 60,000,000 feet than there was in stock at this season last year.

Davenport, a thriving city and big saw mill centre on the upper Mississippi, will in all probability get the convention of '88 of the National Retail Lumber Dealers' Association. St. Louis has made a strong bid but the directors of the association are favorably inclined to the city named. The association now numbers one thousand in good standing.

FRANK R. BIGNEY.

—Reports of scarcity of all lengths of bill stuff reach us from all directions. The cause is attributed to the early closing down of the mills through lack of logs. Dimension timber is also hard to obtain. We have not learned, however, of any advance in prices as yet.

TRADE REVIEW.

Montreal, Que.

MONTREAL, Dec. 28th.—The business done in lumber in this city this season shows a falling off. In small lots considerable is doing, but there is but small enquiry for cargo quotations, heavy consumers not being disposed to anticipate the wants of the future, although it is certain that, before long, there must be an augmentation of values. Of some kinds of lumber there is an acknowledged scarcity. Messrs. Bulmer's sale, the beginning of the month, principally of hardwood, was the biggest auction held here for some years, close on 500 lots finding purchasers at fair prices.

Should the weather be as favorable as during the past month it is very probable that extensive building operations will be carried on during the winter, and in that event higher prices in some descriptions are almost sure to rule.

Last months' sales fell off almost fifty per cent. as compared with November, 1886, and at present transactions, both at wholesale and retail, have been very much diminished.

Following are the prices ruling at this date :

Pine, 1st qual'y ℔ M	$38 00	40 00	Basswood, run of log culls out per M...	$18 00	20 00
Pine, 2nd " "	28 00	30 00	Oak, per M.....	40 00	50 00
Pine, shipping culls ℔ M.....	14 00	16 00	Walnut, per M.....	60 00	100 00
Pine, 4th quality deals ℔ M.....	10 00	12 00	Cherry, per M	80 00	100 00
Pine, mill culls, ℔ M	8 00	10 00	Butternut, per M...	35 00	40 00
Spruce, per M.....	10 00	13 00	Birch, per M.....	20 00	25 00
Hemlock, per M....	9 00	10 00	Hard Maple, per M	25 00	30 00
Ash, run of log culls out per M.....	20 00	25 00	Lath, per M.....	1 50	00 00
			Shingles, 1st, per M	2 00	3 00
			Shingles, 2nd, per M	1 00	2 00

Toronto, Ont.

TORONTO, Dec. 29th, 1887.

Heartrending wails of lumber dealers are filling the air. That embodiment of all evil, the speculative builder, by his unholy deeds has lessened very materially the profits of the dealers. Hence the wails, with more to follow.

It is something peculiar, very peculiar, that a lumberman who in the past has had to lament the loss of several shekels is quite ready to supply a bill of lumber to another of these gentlemen. The unlimited cheek displayed by an enterprising builder is amazing. No mortal having the most vivid imagination could possibly conceive of such a being as the one above mentioned. One of them will walk into an office and request figures on a bill of lumber, stating in a careless, off-hand way, as a matter of no importance, that he has purchased a quantity of land and is about to erect a number of houses ; forgetting to add that he has paid the enormous sum of $15 or $20 down, the balance in years to come. The dealer fills the bill, delighted at the prospect of making a good sale. He may receive some money when the first draw is made, with promises of more when next the draw come round. This fairy music is kept up to the last until the dealer finds, too late, that dollars have been abstracted from his coffers.

Our dealers are, par excellence, the largest hearted men in this city. They have contributed more to the building of Toronto than any other class. While the land dealer will gladly dispose of land without the payment of any sum of consequence, the lumber dealer goes one better and supplies lumber to the penniless adventurer with no security of any kind, knowing well that the material supplied will enhance the value of the property, benefiting the land dealer and him alone. It is not to add to their untold millions that our dealers do business—perish the thought. Nothing affords them greater pleasure than to drive through the city and see building after building erected with the lumber supplied gratuitously by them. So long as building is actively carried on and the demand for lumber consequently good, what care our dealers for money,—that they may lose, but the monuments erected throughout the city to the memory of almost every lumberman, afford a solace for any pang a dealer may feel when notes fall due.

The pleasure of benefiting suffering humanity, represented in the person of a speculative builder, must be intense, so much of it is done. It is painful to think of the quantity of lumber required to erect buildings throughout the recent additions made to Toronto. Our authorities did wrong in extending the bounds of this city without consulting our lumbermen. Not one but would have fought against it, as rather overdoing the thing and as taking a mean advantage of their large, extensive public spirit.

Gentlemen dealers in lumber, you are fulfilling what has been said of old—"It is more blessed to give than receive."

Business is quiet, very little lumber being sold, in some instances we have heard of pieces being cut to work off car lots. Our dealers find the stringency of the money market effecting them very much, builders not getting such large advances as formerly.

Quite a number of builders are somewhat straightened in money matters, requiring renewals, some for the whole amount and others for part. From reports circulating we learn that there is a large amount of money tied up in buildings, and that some dealers have met with considerable losses. Two months from the present may in all probability see a few changes in the trade.

Prices on the whole are much about the same, good paper demanding concessions and receiving them.

Fewer builders and concerted action among the dealers would be beneficial to all concerned.

CAR OR CARGO LOTS.

1¼ and thicker clear picks, American inspection	$34 00	@	35 00
1¼ and thicker, three uppers, American inspection			40 00
1¼ and thicker, pickings, American inspection			30 00
1x10 & 12 dressing and better	20 00		22 00
1x10 & 12 mill run	15 00		16 00
1x10 & 12 dressing	14 00		16 00
1x10 & 12 common	12 00		13 00
1x10 & 12 spruce culls	10 00		11 00
1x10 & 12 maple culls			9 00
1 inch clear and picks	24 00		26 00
1 inch dressing and better	18 00		20 00
1 inch siding mill run	13 00		15 00
1 inch siding common	12 00		13 00
1 inch siding ship culls	10 00		11 00
1 inch siding mill culls	8 00		9 00
Cull scantling	8 00		9 00
1¼ and thicker cutting up plank	22 00		25 00
1 inch strips 4in to 8in mill run	14 00		15 00
1 inch strips, common	11 00		12 00
1¼ inch flooring			14 00
1½ inch flooring	14 00		15 00
XXX shingles, sawn	2 40		2 50
XX shingles, sawn	1 40		1 50
Lath, Sawn			1 80

YARD QUOTATIONS.

Mill cull boards & scantling	$10 00		Dressing stocks.....	14 00	@ 15 00
Shipping cull boards, promiscuous widths.....	12 00		Picks Am. inspection.....		30 00
" stocks....	13 00		Three uppers, Am. inspect.		40 00
Scantling & joist, up to 16 ft	13 00		B. M.		
" " 18 ft	14 00		1½-in. flooring, dres'd	25 00	30 00
" " 20 ft	15 00		1½ " " rough ..	14 00	15 00
" " 22 ft	16 00		1¼ " " dres'd ..	23 00	25 00
" " 24 ft	17 00		" " undres'd		14 00
" " 26 ft	18 00		" " dres'd...	16 00	20 00
" " 28 ft	19 00		" " undres'd	12 00	14 00
" " 30 ft	20 00		Beaded sheeting, dressed	18 00	20 00
" " 32 ft	21 00		Clapboarding, dres'd		12 50
" " 34 ft			XXX sawn shingles per M	2 75	2 90
" "	22 50	@ 22 50	Sawn Lath.....		2 25
" " 36 ft	24 00		Red oak.....	20 00	25 00
" " 38 ft	27 00		White "	25 00	30 00
" 40 to 44 ft	30 00		Basswood, No. 1 & 2	18 00	20 00
Cutting up planks 1¼ and thicker dry.....	25 00	@ 26 00	Cherry, No. 1 & 2....	50 00	60 00
" board	18 00	20 00	White ash, 1 & 2....	25 00	30 00
			Black ash, 1 & 2.....	20 00	25 00

Goderich, Ont.

GODERICH, Dec. 28th.—The market here is very quiet ; the usual holiday calm. Dealers throughout the country are preparing to "take stock," and overhaul the year's business before making a fresh start for the new year. Little will be done before the end of January. The business of 1887 has been fairly good at this point.

The expectation is growing that at no very distant date this will be a terminus of the Canadian Pacific Railway. Should this be realized all industries would be increased and benefited none more so than the lumberman's.

Prices remain as last quoted.

PRICES IN CAR LOTS.

1 inch Mill Culls	$8 00	@	8 50
1x6-8-10 & 12, common			12 00
1x6-8-10 & 12, dressing			16 00
1x14, and wider, common			12 00
1x14, " " dressing			16 00
1¼ dressing			16 00
1½ "			16 00
1¼ Norway pine flooring			14 00
1½ " " "			14 00
1 inch clear and picks			26 00
1 inch clear and picks 4 to 8 inch			25 00
1¼ and 1½ clear and picks			35 00
Lath 1½x4 feet			1 85

Ottawa, Ont.

DEC. 28th.—Very little change is noticeable in the state of trade here compared with last month. Consequent upon the holidays there has been the usual cessation in trade, but immediately after the opening of the new year we may look for the usual activity.

A large body of our lumbermen attended the sale of timber limits in Toronto the middle of the month, but made few purchases. They seemed to have made up their minds that the sale was going to be rather slow and prices small, but in this they were disappointed. Mr. Alex Fraser, of Westmeath, or Pembroke, was the largest buyer from the Ottawa district, and in fact almost the only buyer among the large capitalists. He purchased the limits in entire township of Divine some 53⅓ square miles for $182,525. The largest price per square mile obtained at the sale was for berth No. 1 of the township of Livingstone, which included eight square miles. This was purchased by J. W. Pack of Alpena, Mich., for $6,350 per square mile.

The Ottawa lumbermen, although much dissatisfied with the obstinacy of the government in reference to the ground rent and crown dues question, are rather resigned to their fate and say they expect nothing from the government.

During the past season 214,000,000 feet of lumber have been shipped by water from Ottawa, and 180,000,000 feet by rail, making a total of 394,000,000 feet, of which it is estimated 296,000,000 was shipped to the United States, while bulk of remaining 98,000,000 went to England.

The following are the ruling prices at this date :

	Dimensions, Inches.	*Per M.*
Mill culls	10 x 1	
"	12 1	$8.00
"	12 1½	
"	12 2	
" selected 16 ft. long, above dimensions		8.50 to 9.00
Cull strips, 1 in. thick, 5 to 7 wide		7.00 to 8.00
Mill cut outs	12 x 1	
"	11 1½	4.00 to 5.00
"	12 2	
Scantling	2 4	
"	3 4	12.00
" culls	2 4	
" "	3 4	7.00
Laths		1.25
Stock shorts, 12 x 1		10.00
1 inch siding outs, 1¼, 1½, 2		15.00
" outs from shorts, 1¼, 1½, 2		6.50 to 7.00
Outs from stocks	12 x 1	
" "	12 1¼	10.00 to 12.00
" "	12 1½	
Shingles, X		1.25
" XX		2.00
" XXX		3.00
" cedar, No. 1		2.00 to 2.75
" cedar, culls		1.25
Difference in planed lumber, in waste and planing		5.00
Ditto, on average good stock		20.00 to 25.00

Hamilton, Ont.

Mill cull boards and scantlings	$ 9 00	@ 10 00	Dressing stocks.....	$ 6 00	18 00
Shipping cull boards, promiscuous widths.	10 00	12 00	1¼ flooring, rough...	16 00	18 00
Shipping cull stocks.		13 00	1½ flooring, rough...	16 00	18 00
Scantling and joist up to 6 feet		13 00	1¼ flooring, dressed .		25 00
do up to 18 feet		13 50	1½ flooring, dressed .		32 00
do up to 20 feet		14 00	1 flooring, dressed .		23 00
do up to 22 feet		15 00	Beaded sheeting 1..	28 00	30 00
do up to 24 feet		16 00	Picks, Am. inspection		30 00
do up to 26 feet		17 00	Three uppers Am. In.		40 00
do up to 28 feet		18 00	XXX sawn shingles..	2 60	2 70
do up to 30 feet		20 00	Sawn Lath.....		2 25
Cutting up plank 1¼ and thicker, dry....	20 00	25 00	Red Oak.....	20 00	25 00
Cutting up boards....		20 00	White Oak.....	25 00	30 00
			Basswood No. 1. & 2..	18 00	20 00
			Cherry No. 1 & 2.....	50 00	60 00
			White Ash No. 1 & 2.	25 00	30 00
			Black Ash. No. 1 & 2.	20 00	25 00

Saginaw Valley.

CARGO LOTS.

Uppers	36 00	@ 38 00	Norway	9 00	10 50
Common	15 00	20 00	Box	10 00	10 50
Shipping Culls	8 00	10 50	Straight measure	12 00	23 00
Mill Culls		6 00			

YARD QUOTATIONS—CAR LOTS DRY.

Drop Siding.

Clear, ⅞ in	44 00	@ 46 00	C, ⅞ in		30 00
A	38 00	41 00	D		19 00
B		30 00			

Flooring and Siding—Dressed.

Flooring, clear, d & m		40 00	Siding, clear, ½ in.		22 00
No. 1		31 00	A		20 00
No. 2		30 00	B		17 00
No. 3		20 00	C		14 00
No. 4		13 00	D		12 00

Finishing Lumber—Rough.

Three uppers, 1 in.	43 00	@ 45 00	Fine common, 1 in.	28 00	31 00
1¼ & 1½	44 00	46 00	1¼ & 2 in.		32 00
Selects, 1 in.	35 00	36 00	C, 7, 8 & 9 in.		25 00
1¼ & 2 in.		36 00	Base, 2 to 9 in. No. 1		40 00
			No. 2		30 00
			No. 3		20 00
			Coffin boards 16 in. and over		10 00

Joist, Scantling and Timber.

12 to 18 feet		10 00	22 feet		12 00
20 feet		11 00	24 feet		13 00

Plank and timber, 12 inches wide, $1 extra.

Wide Select and Common—Rough.

C (No. 1 com.) 13in. and up	28 00		D (common) 14 in. and up		16 00

Lath, Shingles and Pickets.

Lath, No. 1		1 40	Country brands XXX	3 25	3 35
No. 1		1 25	Clear butts	2 25	2 35
Shingles, river brands			P'kts, 2 to 2½ in rough	12 00	13 00
XXX	3 40	@ 3 50	Dressed		20 00
Clear butts	2 40	2 50	1¼ in. square, dressed	14 00	19 00

St. John, N. B.

St. John, N. B., Dec. 27th, 1887.

Business has been fairly good for the month. Four mills, Hilyard's, Adams & Gregory's, Miller & Woodman's and Cushing's are still running and will not shut down until cold weather forces it. The only boom there is to note, however, is with the shingle mills, which have had a prosperous season. Three firms, Gunter, Cowan and Stetson & Jordan, are still running and the last named, having piled cedar, will run all winter. Gunter & Co. will build an addition to their mill, after closing. A further indication of the state of trade is found in the building of Miller & Woodman's new shingle mill, which will have eight machines—not twenty, as reported—and also clapboard and stave machines, with possibly a rotary. This mill, by the way, is about completed. The machines will be placed this winter and it will begin operations in the spring.

A careful estimate places the season's cut of fourteen lumber mills in this vicinity at 155,000,000 sp. ft. Five shingle mills have already sawed 55,000,000 shingles. The lumber cut is below that of last season, owing to the freshets which shut down all the mills above the harbor.

The Annagance mills are still in operation and will run until February.

Reports of the building of new mills, changes and improvements come quick and fast. W. H. Murray, of Indiantown.

is building an addition and will put in several stave and clapboard machines. D. W. Clarke & Son, of Carleton, will add planing and dove-tailing machines. Carr & Shaw and Chase & Sons will build in and near Hartland, this winter, and H. H. Vesey & Son will put up a mill at the Thoroughfare, between North and Grand lakes, in the spring. I see it stated on good authority that fully fifteen mills have been built in the province during the past season.

The value of lumber exports from this port during November was $66,772, as against $143,143 for the same month last year.

The railroad boom in eastern and northern Maine causes a great demand for sleepers and the cedar business on the Miramichi will be a lively one this season. Ten cents are paid for sleepers delivered at the cars at the Northern & Western.

The recent heavy rains will cause severe loss to lumbermen who were operating at the headwaters of the St. John.

Carleton county operators write that they are unable to do much at present besides yarding the logs on account of the lack of snow.

Robert McElroy is to be numbered with the builders of new mills, he having erected a fine one at Kirkland.

There has been no change in prices during the month, though from time to time there has been talk of an advance. Wholesale prices are as follows:

Deals, Boards, Scantling, etc.

Spruce deals	$12 00	Pine "	12 00@50 00
Pine "	15 00	Oak "	40 00
Deal ends	6 00	Ash "	15 00@25 00
Scantling	10 00	Hemlock "	7 50
Spruce boards	12 00		

Shingles.

Spruce, extra	$3 50	" No. 1	1 25
" clear	3 00	Pine	1 25
" No. 1 extra	2 25		

Clapboards.

Pine, extra	50 00	Spruce, extra	25 00
" clears	45 00	" clears	23 00
" 2d clears	35 00	" " No. 1	15 00
		" " No. 2	10 00

Flooring, Dressed.

6 in., No. 1	12 00	4 in., No. 1	12 00
" No. 2	10 00	" No. 2	10 00

Miscellaneous.

Staves	3 00@ 4 50	Laths	1 80
Heading, 17 in. per pr.	04	Pickets	6 50@15 00
" 18 in. "	04½ 05½	Railway ties	15
" 22 in. "	04½ 06		

Buffala and Tonawanda, N. Y.

Norway Pine—Rough.

No. 1, 1 & 1¼ in.	19 00@20 00	Stocks No. 1, 1 & 1¼ in	21 00
No. 2, 1 & 1¼ in.	15 00 15 50	No. 2, 1 & 1¼ in.	17 00
No. 3, 1 & 1¼ in.	11 50 12 00	No. 3, 1 & 1¼ in.	12 00
		Scantling 2x4 to 2x12 12 to 16 ft	13 00
		Timber, 4x6 to 12x12	16 00 20 00

White Pine—Rough.

Uppers, 1 in.	$44 00@46 00	Shelving, No. 1, 13 in.	
1¼, 1½ and 2 in.	44 00 47 00	and up	31 00
2½, 3 and 4 in.	55 00 60 00	No. 2, 13 in. & up	22 00 29 00
Selects, 1 in.	39 00 40 00	Fine common, 1 in.	32 00
1¼, 1½ and 2 in.	39 00 40 00	1¼, 1½ and 2 in.	32 00 35 00
2½, 3 and 4 in.	45 00 50 00	Common, 1 in.	16 00 19 00
Cuts, No. 1, 1 in.	25 00 28 00	1¼ and 1½ in.	17 00 20 00
1¼, 1½ and 2 in.	32 00 33 00	2 in.	20 00 22 00
2½, 3 and 4 in.	37 00 40 00	Coffin boards	17 50
No. 2, 1 in.	15 00 17 00	Box, 1 in.	12 00
1¼, 1½ and 2 in.	21 00 22 00	1¼ in. & thicker	13 50
Moulding, 1 in.	28 00 32 00	A stocks, 1x10	29 00
1¼, 1½ and 2 in.	28 00 32 00	1x12	29 00
Siding strips, 1 in.	38 00	B stocks, 1x6 to 16	17 50
		C stocks, 1x6 to 16	13 50

Dressed Lumber.

	No. 1.	No. 2.	No. 3
Base and Casing under 6 inches	$33 00	$23 00	$16 00
Base and Casing, 6 inches	34 00	25 00	17 00
Base and Casing, 6, 7 and 8 inches	40 00	29 00	18 00
Flooring, 1 and 1¼ inches, 2½ to 5 in. wide	30 00	20 00	15 00
Ceiling, ⅞ in., 2½ to 5 inches wide	33 00	23 00	16 00
Ceiling, ⅝ in., 2½ to 5 inches wide	28 00	22 00	14 00
Ceiling, ½ in., 2½ to 5 inches wide	24 00	18 00	13 00
Philadelphia Fencing	39 00	30 00	21 00
Bevel Siding, 6 inches	23 00	21 00	11 00
Bevel Siding, 5 inches	23 50	21 00	17 00
Bevel Siding, 6 inches	23 00	19 00	14 00
Novelty Siding, 6 inches and over	40 00	23 00	16 00

Shingles and Lath.

Shingles, 18 in. XXX	3 85@ 3 90	Lath, pine No. 1	2 10 2 15
XX	2 85 2 90	No. 2	1 70
X	1 25	Norway	1 60
Shingles, 16 in. XXX	3 00	Hemlock	1 60
XX	2 10		
X	90		

Detroit, Mich.

Uppers, Selects, Stocks, etc.

Uppers, 4-4	$45 00	Shop, 5-4, 6-4 & 8-4	$25 00
5x4, 6x4 & 8x4	45 00	Fine common, 4x4	31 00
3 & 4 in	50 00	5x4, 6x4 & 8x4	33 50
Selects, 4x4	38 00	Stocks, 1x12 & 1x10, No. 1	19 00
5x4, 6x4 & 8x4	40 00	1x12, & 1x10, No. 2	16 00
Shop, 4x4	22 00	1x12, & 1x10, No. 3	13 00

Flooring, Siding, Ceiling, etc.

Flooring, select common	22 00	Roofing, D & M	16 00
No. 1 common	18 00	Siding, clear	21 50
No. 1 fencing	16 50	A	20 50
Ceiling, select common	25 00	B	18 50
No. 1 common	22 00	C	13 50
No. 1 fencing	20 00		

Bill Stuff and Culls.

Bill stuff, ordinary sizes:		26 to 28 ft	14 00
12 to 16 ft	12 00	30 to 34 ft	16 00
18 to 20 ft	12 50	Ship culls	12 00
22 to 24 ft	13 00	Mill culls	10 00

Shingles and Lath.

Shingles, clear, 18 in. Ex	3 75	6 in. stocks clear, Ex	4 00
16 in. clear, 18 in.	3 00	5 in. stocks clear, Ex	4 80
6 in. clear, 18 in.	2 75	Lath	2 10

Add for surfacing one or two sides, $1.

Burlington, Vt.

Canada Pine Sidings—1x8 in. and up, 12 to 16 ft. d 2 or 4 s.

Select & shelving	$46 00	Finish	$38 00
Pickings	37 00	Dressing	28 00
Pickings & better	40 00@42 00	Common	20 00@21 00

Canada Pine Stocks—1x10 in, 12 to 16 ft., d 2 or 4 s.

Selects (clear)	55 00	Pickings & better	40 00
1st shelving	42 00	As run, common out	28 00@30 00
2nd	39 00	No. 1 barn boards	25 00
3rd	30 00	Common	21 00
Pickings	38 00		

Canada Pine Stock—1x12 in. 12 to 16 ft. d 2 or 4 s.

Selects (clear)	57 00	Pickings & better	44 00
1st shelving	47 00	As run, common out	33 00
2nd	41 00	No 1 barn boards	26 00
3rd	32 00	Common	21 00@22 00
Pickings	38 00		

Canada Pine Stock—14 in. 12 to 16 ft. d 2 or 4 s.

Pickings & better	45 00	3d shelving	33 00
As run, common out	33 00	Common	22 00

Canada Pine S. B'ds—1x8 in. & up, 11 ft. and under, d 2 s or r.

Pickings & better	33 00@35 00	Dressing & common, d 2 s or	
As run, common out	30 00	d 2 s & m	20 00@21 00
		Common	18 00@19 00

Canada Pine Sheathing, d. m. & b.—1," 4 to 7", 5" & up. ch ⅞".

1st quality, 12 to 16 ft	46 00	1st & 2nd quality, 9 to 11 ft.	33 00
2d	37 00	7 & 8 ft.	34 00
3d	27 00	3rd quality, 11 feet & under	22 00
4th (selected Common)	22 00	4th	18 00

Canada (Quebec) Spruce—1 & 1½ in., 4 to 7 in. d 2 s & m.

Clear, 10 to 16 feet	32 00	No 2, 10 to 16 ft.	15 00@16 00
No 1	22 00		

Above prices delivered on a rate of $30 per car load.

Boston, Mass.

Western Pine—by car load.

Uppers, 1 in	$46 00@48 00	No. 1 strips, 4 to 6 in	$42 00@44 00
1¼, 1½ & 2 in	47 00 49 00	No. 1	34 00 32 00
3 & 4 in	58 00 60 00	No. 3	25 00 27 00
Selects, 1 in	43 00 44 00	Cut ups, 1 to 2 in	26 00 30 00
1¼, 1½ & 2in	44 00 46 00	Coffin boards	20 00 22 00
3 & 4 in	50 00 53 00	No. 1 com. 10 & 12 in.	24 00 26 00
Moulding boards, 7 to		8 in	23 00 24 00
11 inch clear	38 00 39 00	No. 2 com. 10 & 12 in.	19 50 21 00
60 per cent clear	36 00 37 00	8 in	18 00 18 50
Fine common 1 inch	37 00 38 00	No. 3 common, 8, 10	
1¼, 1½ & 2 inch	38 00 41 00	and 12 inch	15 30 16 50
Fine com. 3 & 4 in	46 00 50 00	Shipping culls, inch	15 00 16 00
No 2, 1 in. Fine com.	26 00 31 00	Shipping culls, 1¼ in	15 50 16 50
1¼, 1½ & 2 in	30 00 32 00		

Eastern Pine—Cargo or Car Load.

Nos. 1, 2 & 3	40 00@43 00	Sap, 2nd clear	35 00@37 00
4	28 00 30 00	Heart extra	50 00 55 00
5	23 00 26 00	Heart clear	45 00 50 00
Ship'g bds & coarse	16 00 17 00	Bevel siding 6 inch,	
Refuse	12 00 13 00	clear	21 00 23 00
West'rn pine clapbds		No. 1	20 00 21 00
4 ft. sap extra	45 00 50 00	No. 2	19 00 20 00
Clapboards, 4 ft., sap			
clear	40 00 45 00		

Spruce—by Cargo.

Scantling and plank,		Clear floor boards	19 00@20 00
random cargoes	12 50@14 00	No. 2	16 00 18 00
Yard orders, ordinary sizes	14 00 14 50	Coarse, rough	9 50 10 50
Yard orders, extra		Hemlock bds., rough	10 50 11 00
sizes	15 00 15 50	" " dressed	12 00 12 50
Frames, to order,		Clapbds., extra, 4 ft.	28 00 30 00
small sizes	14 00 14 50	Clear, 4 ft.	26 00 28 00
Frames, to order extra sizes	15 00 15 50	Second clear	20 00 22 00
		No. 1	12 00 16 00

Lath.

Spruce	2 00@ 2 05

Shingles.

Spruce	1 25@1 50	Cedar, sawed, extra	3 50@3 62½
Pine, 18 in. extra	4 65 4 70	Clear	2 75 3 12½
Pine, clear Butts	3 40 3 50	Extra, No. 1	2 30 2 50
		Cypress, No. 1, 18 in.	5 00

Philadelphia, Pa.

White Pine.

Mich. uppers, 1 to 2		1¼ to 2 in. plank,	
in., dry	$48 00@50 00	barn quality	22 50@25 00
2½, 3 & 4 in	55 00 60 00	Common plank	20 00 22 00
Selcts, 1¼ to 2 in.	42 50 45 00	⅞ box boards, wide	14 00 16 50
Selects, 1 in	41 00 43 00	⅝ siding, selected	27 50 30 00
12 in. flooring quality	30 00 32 50	Culls, 12 in.	15 50 17 00
barn	19 00 23 00	Wide	15 00 16 00
Edge barn, all widths	18 00 20 00	Narrow	13 50
		No. 1 moulding	36 00 38 50

Cargo Lots.

Yellow pine edge bds	14 00@16 00	Scantling and plank	20 00 22 00
Heart face boards	19 00 21 00		

Hemlock Boards and Scantling.

Edge boards	10 50@11 50	Scantling, 2x3 & 2x4,	
12 in. stock	11 50 12 00	16 & 18 ft	12 00@13 00
Fencing, 6 in., 16 ft.	11 50 12 00	3x4, to 12, 12 to 20 ft.	11 00 11 50

Shingles and Posts.

Cypress shingles, 24		Cedar shingles, 30 in.	
in. heart, d & b	13 00@18 00	hand dressed	35 00 40 00
24 in. sap, d & b.	10 00 12 00	Chestnut posts, 9 ft.	32 00
		7 ft.	28 00

HARDWOOD.

Walnut.

Nos. 1 & 2, 1 in., good		Reject or common, 1	
dry, Indiana	$87 50@ 95 00	in., 1¼ and up	60 00 65 00
1¼ & up	92 50 100 00	Culls, 1 in	35 00 37 50
Nos. 1 & 2, ⅝ in.	72 50 77 50	1¼ in. & up	35 00 40 00

Poplar.

Nos. 1 & 2, ¾ in. good		Nos. 1 & 2, 1¼ in. &	
wide, Indiana	25 00@27 50	up, good wide, Ind.	32 50 36 00
1 in	28 00 32 50	Columns, 5x5 & up	
		clear	35 00 35 00

Oak.

Nos. 1 & 2, 1 in., good		Nos. 1 & 2, 1¼ in. &	
western, straight	32 50@35 00	up, good western,	
quartered	49 00 50 00	straight	35 00 37 50
		quartered	52 50 55 00

Ash.

Nos. 1 & 2, 1 in., good		Nos. 1 & 2, 1¼ in. &	
western	35 00@40 00	up, good western	32 50 42 50

Yellow Pine—Yard and Wholesale.

Sc'tlg, 2x4 to 12x14	22 00@23 00	Flooring, 1 in., Va.	17 00 19 00
Plank, 1¼ to 2 in.	23 00 27 50	1 & 1¼ in., Ga. &	
Fl'g, 1 & 1¼ in. No. 1	27 50 30 00	Fla. cargo run	22 00 24 00

Cherry.

Nos. 1 & 2, 1 in., good	62 50 70 00	Nos. 1 & 2, 1½ in. &	
		up, good	65 00 75 00

New York City.

Black Walnut.

¾ in., all clear	$78 00@ 82 00	Culls, 1 inch	$35 00@ 37 00
1 and 1¼ inches	92 00 97 00	Culls, thick	38 00 39 00
1½ and thicker	98 00 105 00	Counter tops, 18 in.	
Rejects	52 00 55 00	and over	110 00 150 00

Poplar, or White Wood

⅝ in. 10 inches and		1¼ to 2 inch	29 00@ 30 00
over	22 00@ 24 00	2½ and thicker	31 00 33 00
¾ in. coffin boards	27 00 28 50	Common 1 to 2 inch	21 00 22 50
1 inch, 10 inch and		Saps, 1 inch	21 00 25 00
over	28 00 29 50	Culls, all thickness	15 00 18 00
1 inch, 8 in. and over	26 00 28 00		

Dressed Poplar

½ inch panel	24 50@25 00	¾ in. clg. 4 to 6 in	21 00@21 50
⅝ inch panel	27 00 28 00	½ in. clg. 4 to 6 in	24 00 24 50
¾ inch panel	29 00 30 00	⅝ in. clg. 4 to 6 in	27 00 28 00
4, 5, 6 inch casing	30 00 31 00	¾ in. clg. 4 to 6 in	29 00 30 00
7, 8, 9, 10 inch casing	32 00 33 00	⅞ in. clg. 4 to 6 in	30 00 31 00

Ash

1 inch, white	36 00@ 39 00	Strips, clear	26 00@ 28 00
1¼ to 2 inch	38 00 40 00	Black ash, good	26 00
2½ to 4 inch	40 00 41 00	Black ash, culls	10 00 12 00

Oak.

1 inch plain sawed,	37 00@ 39 00	inches and over	48 00@ 51 00
1¼ to 2 inch	37 00 40 00	Thicker	51 00 53 00
Thicker	38 00 40 00	Strips under 6 in.	38 00 40 00
Quarter-sawed, white, all clear, 6-			

Cherry

⅝ in., white & clear	65 00@ 70 00	2½ and thicker	85 00@ 90 00
1 inch	75 00	¾	75
1 inch strips	40 00 42 00	and over	100 00 115 00
1¼ to 2 inch	80 00 83 00	Culls, all thickness	18 00 20 00

Miscellaneous.

Chestnut, clear	35 00@ 38 00	Redwood California	
Chestnut common	20 00 23 00	plank	55 00@ 58 00
Basswood white	28 00 32 00	Hickery, old growth	50 00 60 00
Basswood common	20 00 23 00	Hickery, 2nd growth	70 00 80 00
Maple, clear	25 00 30 00	Elm	20 00 22 00
Birch, clear	33 00 36 00	Sycamore	24 00 27 00
Birch, 1s and 2s	26 00 30 00	Sycamore quartered	35 00 40 00
Cottonwood	20 00 21 00	Gum	38 00 41 00
Redwood, California		Butternut	45 00 50 00
boards	50 00 53 00		

Chicago, Ill.

CARGO PRICES.

Dimensions, short green	$10.00@10.25
Long joists	12 00@14 00
Cull piece stuff	7.50
No. 1 inch	19.00@20.00
Medium	13.00@15.00
No. 2	12.00@13.50
Selected	19.00@28.00
Shingles, standard	1.90@ 1.95
" extra	2.10@ 2.20
" choice	2.00@ 2.10
" cedar	1.65@ 1.85
Lath, dry	1.70
" green	1.50@ 1.60

Receipts of lumber and shingles for the week ending December 22, as reported by the Lumbermen's Exchange:

	LUMBER.	SHINGLES.
1887	7,449,000	527,000
1886	6,045,000	208,000
Increase	1,404,000	319,000

FROM JANUARY 1 TO DECEMBER 22, INCLUSIVE.

	LUMBER.	SHINGLES.
1887	1,836,969,000	608,819,000
1886	1,680,672,000	747,042,000
Increase	156,297,000	
Decrease		138,223,000

STOCK ON HAND DECEMBER 1.

	1887.	1886.
Lumber	623,434,984	577,339,746
Shingles	428,049,700	399,074,750
Lath	48,555,48[illegible]	45,[illegible]
Pickets	867,434	899,017
Cedar posts	156,034	161,649
Hardwood	60,785,179	60,074,[illegible]

NEWS NOTES.

—Mr. John Readhead is building a new mill at St. Ann's near Lowville, Ont

—McKinney Bros., of Melrose, propose cutting cedar extensively this winter.

—The planing mill belonging to Johnston Bros., Essex Centre, has been destroyed by fire.

—Messrs. Phelps Bros., Welland, Ont., have just completed a raceway from the Welland canal through their lumber mills at a cost of $5,000.

—Mr. W. Welbanks, of South Bay, is going out of the lumber business, and the people of that berg are looking for somebody to take his place.

—The Manitoulin *Expositor* wants the export duty on logs increased from $3 to $5 per thousand. It says, Americans cut the timber, export it to Michigan in large quantities, and in cutting it give employment to a great many Michiganders.

During the past six years the value of the products of the forest shipped to the United States out of Wallaceburg, Ont., was for firewood, $808,698; stave bolts, $520,370; saw logs, $636,633; pine lumber, 205,098; oak lumber, $20,483; railroad ties $63,201, and other products, such as hoops, staves, axe handles, ect., $226,378, aggregating a grand total of exports from the Sydenham Valley of $2,480,824. The local mills there furnish the cooperage stock for nearly the whole Dominion, and at least $100,000 should be added to this, which would make the aggregate sum larger and place the yearly average about half a million dollars, or sufficient to buy 25,000 acres of timbered lands at the going prices of $20 per acre.

THE LUMBER REGIONS OF ONTARIO.

BY R. W. PHIPPS.

In all plans for improving our methods of forest management, which are frequently proposed, such as starting schools of forestry, introducing the scientific methods of Europe, and so on, one point has to be considered, that is, the system of forestry in the Old and the New World are totally distinct. In Europe, generally, lumber is felled or marked to be felled by the forest owners; the lumber merchant buys what is pointed out for sale. Here, he purchases from the government of a state or province the right to take such trees as suit his purpose. There, it is generally the case that the peasant will clear the refuse for fuel, if not, it is used in manufactures, or cared for that it shall be no source of danger. Here, it is left to lie as chance throws it. This is and has ever been the case in all North America, as far as I have known or learned. The consequence has been the destruction of many fine pine forests in the United States, for fire follows the lumberman, who is forced by this method to further wastefulness, for he cuts many young trees which would otherwise grow to large ones lest the fire take them off his hands. In Europe the forests, many of them, have been planted for the purpose, the trees stand as regularly as vegetables in a garden, and are sown, reared, and cut at stated intervals.

Immense damage has been done in Ontario, as elsewhere, by our American system, but in this Province of late years, measures have been taken to check it. A stringent fire act has been passed, demanding great care in the use of fire for camping and clearing purposes, and for the last two years a number of rangers, half paid by the government, half by the lumbermen, have traversed the country during the summer months to enforce it. They are employed on the application of lumbermen, who then become responsible for their share of the expense. These efforts are well spoken of. The plan is as yet not fully in operation, many lumbermen not having as yet applied for men, nevertheless, its success seems to have been considerable, for even through this last dry summer no fires at all so destructive as in former years have been reported.

Ontario has taken the lead in this matter. I do not know in America of such another Fire Act, nor of any body of rangers appointed to enforce one. Both have been favorably commented on in the Washington forestry reports, and their imitation pressed on the various state governments.

Though these steps will save much timber and far overpay their cost, yet we cannot say that they will effectually preserve our forests. Time must tell. The next, if any further step be taken, must be the compulsory destruction of the refuse by the lumbermen. This is a matter for careful experiment, our climate being quite different from that of Europe, and even from that of Maine and Massachusetts. For these reasons I have recommended that this be tried on a Government reservation, where its possibility and cost can both be ascertained.

The next and final step, namely, the management, replanting, and care of Ontario forests on the European system, resolves itself into a question of expense. Such a vast reform—a reform unprecedented in America, could not be expected without the sacrifice of a very considerable portion of yearly revenue, fully, I should say, one-half of what we now draw from the forests. If the people of Ontario are willing to incur this, there is no reason why the object should not be attained. There are many reasons, climatic, as far as the present generation is concerned, economic, as regards their successors, to be urged in favor of such a course.

In this article will be sketched the condition and method adopted for dealing with the lumber regions of Ontario, showing which may be called the American, as differing from the European manner of lumbering and managing the territory where the merchantable timber is found. These lands formerly included the whole Province, but the timber near the frontier being naturally the first exhausted, it may be said that in the Ontario peninsula west of Collingwood and Toronto there is little left, and that in private hands. East of this line the lumber regions extend as far as Ottawa, and passing up the Ottawa, westward, they extend along the north shore of Lake Huron (where are dense pine forests) to the Bruce Mines and Rainy River neighborhood, at the extreme west of the Province, where is still found much valuable timber. In fact, north of Lake Huron, there is much which has never been lumbered over, though a great deal of it has been overrun by fire.

The method of working these is by holding periodical sales of lumber districts, at which the highest bidder obtains the right to cut timber on certain portions, called limits, for a term which is renewable at the pleasure of the Government yearly, and practically is always renewed. On the timber cut the Government afterwards levy dues each year, in proportion to the amount cut. This, it will be seen, often gives the settler, if the land has been taken up for settlement, a joint interest in the lot with the lumberman, whose interest only extends to the timber.

The lumberman camps on the limit (if a large firm he will have many camps, and central farms and depots). He cuts such of the trees as he chooses, takes what portion of the trunk suits him, cuts it into logs, leaves the tops and branches lying in the woods, and draws the logs on sledges to the nearest water, down which they are floated to the mills, if for boards; or if square timber, continue to raft to their chosen sea-port, generally Quebec. What is sent to the mills is generally for Canada or the States, the square timber is for Europe.

What has been commonly the method practiced by lumbermen is to cut as soon as possible, the merchantable timber from all portions of their limit which are nearest to settlement, or, in other words, in most danger from fire. They will often do this, as far as they intend, in two or three cuttings, in successive years. They will then sell the right to cut to a smaller firm or jobber, who will glean what they have left. What portions they have in dense green forest, more distant from settlement, they leave till the last, or cut over it at long intervals. I was shown some which had been gone over but three times in twenty years.

I have procured during the past year, opinions from a great number of gentlemen, long resident in these districts, and intimately acquainted with the lumber traffic, as to the present position of affairs. From various portions of the country the opinion was expressed that in fourteen or fifteen years the merchantable pine would be gone. In other parts, where forests had been, for various reasons, not so accessible, many years' cut still remained. But the same principle governed all, of which I am about to speak.

When a forest is lumbered over on the above plan, vast amounts of resinous tops, branches, and portions of trunks, as well as many young trees cut down to clear the way, are left lying in the forest. Then, the continual passage of campers, hunters, fishermen and lumbermen, causes the lighting of many fires, which in a dry season are likely to set fire to the refuse above mentioned. This being very inflammable, spreads the fire through the forest, and wide-spread conflagrations are often the result. This pine refuse is the great block in the way of good management of our pine forests, and many plans have been proposed for using or getting rid of it. Among the former it has been proposed to make wood oil from it, as is done in Sweden, and wood wool, as made there and in other parts of Europe; also to use them for cattle bedding. But there are reasons against these being the true definitions sought after.

In the first place, the cause of the use of forest refuse in Europe is simple and plain. The user cannot get the forest to use; that is in the hands of some great proprietor who will not have it cut down. Next, labor is cheap and plenty, and the refuse can be gathered without great cost, or, it may be in some places, at no cost, by allowing the peasants a share for firewood of what they collect. In Canada, were an oil factory or a wood fiber factory started, its proprietors would probably find it much cheaper to buy four or five hundred acres with the forest but little touched, and to manufacture them, than they would, at our prices for labor and transport, be able to search over a large extent of forest for refuse.

It would, there is no doubt, be well that these experiments were tried here, since new industries which consume previously worthless products are always valuable. But as to the point in question, they could not solve it. Say the oil produced (it is a product not nearly as well known to the world as is the fiber) competed with our own petroleum to the extent of one-half, would the cost of half our petroleum collect and manufacture our lumber refuse? But a small part of it. Add what the wood fiber might give. Mattress and cushion filling would be its principal use, and for these purposes we now import the southern moss, which serves for the chief part of such work. Of this Canada imports about 200 tons. The wood fiber would scarcely displace more in these days of spring beds. That would take but little of our timber. I have seen as much burnt in one logging field.

The proposal to use pine refuse as litter for animals has been frequently made, but, in the first place, it could not be transported with sufficient cheapness to compete with straw, except, as in the case with our planing mills in the cities, where it is a waste product. In the next it would not be well to use it largely for that purpose, as the pine refuse injures land, and therefore renders the manure on many soils inferior or worthless.

The state of affairs spoken of above is now, as stated, much changed for the better by the action of the Government, which, in combination with the lumbermen, have for the past two summers had a large number of fire rangers engaged in enforcing the Fire Act, long a dead letter, which demands extreme carefullness in setting out and extinguishing fires. I find from the above mentioned correspondence that this has in many parts of the lumbering districts had an excellent effect.

Some letters received mention that the lumbermen in their districts have not yet secured the services of fire rangers, as offered by Government, but that they are expected to do so. A frequent cause of forest fires which should be especially guarded against is mentioned in a letter from Peterboro', concerning people who cut marsh hay. "I do not think the settlers are the cause of many of the bush fires that destroy so much of our valuable forests; in fact they are interested in fires not spreading, as they are in great danger of being burned out themselves. The fires that have done most damage in this section are not from settlers clearing, but fires from camping parties and people who cut marsh hay. When everything becomes dry in summer they will set fire to the old grass in these marshes to clean the bottom and produce a better crop. These marshes being largely in the pine forest, the fire gets into a large tract of timbered land, destroying wealth untold. I know whereof I speak in this matter. During my seventeen years' residence in this section I have frequently seen, at a great distance, large volumes of black smoke rise up. At once I have enquired where the large fire was, and invariably the answer was, 'O, it is in such a marsh; there is a lot of hay that was not cut last year and some one is burning it.' It is true the marsh burns over, and so does the pine adjoining. The settlers get the blame, although in most cases there is not one within miles of where the fire started."

The question having been asked whether persons found it possible to obtain land ostensibly for settlement, but really to take pine, bark, etc., for sale, and abandon the lots. About 30 answers state it impracticable, in their localities, to any extent, owing to the action of the regulations; but letters from Victoria, Renfrew, Hastings, Peterboro', Parry Sound, Muskoka and Algoma, state that it is yet to some extent carried on—sometimes for bark, sometimes for pine—the settler being allowed to sell what he cuts down in the course of clearing. Underbrushing has been interpreted to be the course of clearing, as it no doubt is, but the idea given is that the parties never intend to complete it; but leave when the pine is sold.

The situation throughout the lumber districts may be stated in this manner, so far as the method of cutting previously spoken of is concerned—that is, cutting all merchantable timber in exposed localities lest fire run through it. The fire rangers have been out but two seasons, and not in all localities, or a considerable number of lumberman have not yet availed themselves of the offer of the Government to pay half the cost, if the lumbermen apply for men. The lumbermen therefore, generally, are not in a position to judge whether their claims are now sufficiently secure to warrant them in leaving the small and medium trees to grow to large timber. As soon as this is the case they will undoubtedly do it, for there is little profit in small trees. But there is no doubt, even with the men now out, much good has been done, and the forests are immensely more secure. As soon as the rest of the lumbermen adopt the plan, which will be, I should judge, almost immediately, so ardently did many of them express themselves in its favor to myself, it is highly probable that an entirely different state of affairs will be inaugurated in our forests.

Without some security against fire, the lumberman has no inducement to preserve the forest. In good forest economy, he should leave his medium sized pines till they grow to be large, and then cut them. But if he did, in the intervening years, they were very liable to be swept off by fire, set by careless settlers, hunters, or by even his own men. There were—and are, it is feared—men even unprincipled enough to fire valuable pineries that they might get a little work in saving what pine could be secured from the wreck before the borers got at it. All around him a lumberman's limits are insecure—what was a forest to-day might be a *brule* in a fortnight. It was no wonder he too often took what he could, irrespective of growth. But, with a sufficient number of caretakers during the "fire months," the cost of which is trifling, compared with the property saved, a different state of things will arise. The lumberman will be careful both to leave uncut what will pay him better in future years, and will endeavor so to use what refuse is unsaleable or saleable, so that it shall not constitute a source of danger. Many expedients hitherto impossible will then be tried. There is much to be done, but in the appointment of fire rangers a great step in advance has been taken, and an important experiment attempted.

In forest as in ordinary police matters, it is not because the individual inclined to offend has himself been previously punished for offending, and therefore abstains from repeating the offence, that property remains tolerably secure. It is that some individuals are known to have been punished, and that the officers are known to be on the watch to detect others. It is not too much to say that in past years the Fire Act has been a dead letter. Lumbermen, settlers, hunters, fishers, set fires as they please and extinguished them if they chose, which last was seldom the case. The resultant damage was, as might be expected, immense. Fires smouldered in logs till drought and high winds excited them to action, and there was no one to stay their ravages except the immediately interested lumbermen, who thus are always interested in "cutting clean" and leaving nothing, in which case the fire, when it followed, although it destroyed many thousand fine saplings, the hope of future forests, yet did not injure themselves, they having taken all which was saleable before. But now what may be expected is as follows:

Word will, after a few convictions and punishments, go through all these districts, indeed through some it has already gone. The fisher, the hunter, the geologist (sometimes the worst ofall) will be warned at the taverns where they stop. "Youmust mind your fires; so-and-so left theirs, and were tracked, summoned and fined." For fire is a thing that leaves its plaintraces, and if the rangers follow out the instructions carefully, affords every opportunity of proving the effects of their carelessness against those who misuse it. The effect will be that thosewho set fire at their camps will extinguish them (they are always near water), and that those settlers who burn fallows will notify their neighbors before doing so, and will take far greater pains to prevent the spread of the flames into the forest beyond their clearing.

A suggestion is made in a letter from Nipissing concerning the danger of pine rubbish left in the bush. He thinks that much of the evil is owing to part of the top of the tree containing one, or sometimes more, knotty but still merchantable logs, being left lying, the lower part of the tree being taken. He proposes that all logs so found should be charged dues, and says: "If lumbermen knew that they were to pay a duty on that left, which competent men could easily prove and could not be gainsaid, there would be removed the very thing which causes bush fires; the top logs being resinous or pitch, and which would be considered valuable timber on the second or third cut, but it is useless then as the worm has got into it. Perhaps the lumbermen may say they could not afford to pile the brush tops; I say it will pay them.

As has before been noticed, Ontario is now trying throughout her lumber territories the experiment of stationing during the dry summer months a large number of fire rangers to enforce the Fire Act passed some years ago. This step was advised by many people throughout the Province long acquainted with lumbering operations, and its results are now being observed. There is no doubt whatever that this will save annually a large amount of valuable timber, and prevent many fires. The question now to be anxiously considered is, whether it will prevent them to such an extent as to give practical security to the lumberman in leaving the smaller pines to grow to a large size. It has been the practice hitherto in all outlying forests or those considered in danger of fire, to cut every tree from which a tolerable log could be taken, as there was very little likelihood that, if spared, the fire, which frequently followed the lumberman's operations in consequence of the quantity of refuse he leaves on the ground, would allow it to grow. It is to be hoped that the appointment of fire rangers will effect a total change in this.

This experiment is, as before remarked, in America, unique. The habit of the North American lumberman has ever been to cut the trees, leave the refuse, and risk the fire. Under this system, we may say, the northern States of the American Union have practically destroyed their pine forests. Having been in communication lately with officials of most of the States on the subject, I have not been informed of a single state maintaining any fire rangers whatever; I have therefore great hopes from this experiment here. Without it the chances were that in from twelve to twenty years many of our present limits would be valueless for pine; with its aid the pine will last much longer than otherwise.

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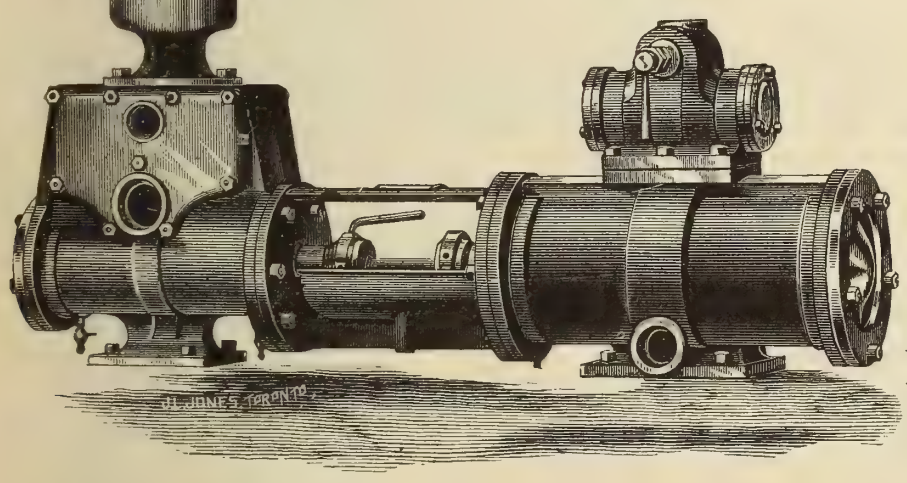

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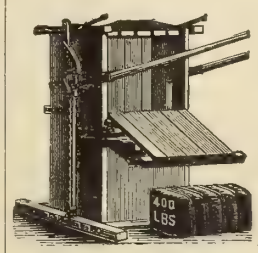

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Either in Log or Dimension Stuff for Prompt Cash.

OFFERS INVITED.

Present Aspect of the Lumber Trade in Great Britain.

We are glad to note from a persual of the late circulars from Great Britain, that there seems a break in the dark sky, which has so long hung over the lumber trade there, and that the outlook if it does not warrant the expectation of a boom, certainly indicates a much healthier state than has existed for a long time, and the prospects of considerable improvement in price of Canadian woods. This cannot fail to have its reaction here, and must help to improve our markets.

Messrs. Allison, Consland and Hamilton, in their circular of 1st November say :—"The private sales are probably in excess of any other months this year—orders for vessels estimated at 37,000 tons have been contracted for, and there are more to follow ; our shipbuilders have been in the market and bought several lines of yellow pine deckwood, teak and pitch pine, and a continuation of the demand is looked for from this source."

A noticeable and regrettable fact from the same circular, we observe that the imports of Canadian woods to Glasgow have considerably declined, the past years. The number of ships from B. N. America to Glasgow in 1883 was 107, with a tonnage of 97,825 tons. This has since yearly decreased. In 1887 the arrivals were 55 vessels total tonnage 45,172.

We understand, however, the stocks in the Clyde in most lines of goods are moderate, so that an improvement in demand, and prices at this peculiar moment, the end of the import season, is a good augury of considerable improvement during the period which must elapse, from now until opening of navigation here next spring.

Turning to London market we find an even more encouraging state of things. Messrs. Churchhill & Sims, in their circular of 1st November, in referring to tabulated statement of stocks, arrivals, deliveries, &c., say: —"These figures are more favorable than those of the preceding month, owing to an unusually light importation and to a rate of delivery from the docks, which equals that of last year, and with regard to price there has also been some improvement. The quantities sold have been of no great importance, but quite sufficient to test the strength of the market ; they have been taken readily by the trade at figures, which could not have been reached in the summer. It will be seen that there is now a considerable reduction in the stocks." And further on they say: "Canada—the importation has been from the St. Lawrence Pine deals, &c., 1,440,000 pieces, against 1,827,000 pieces in 1886. Spruce deals, 1,018,000 pieces, against 1,370,000 pieces in 1886. And from New Brunswick, Pine deals 17,000 pieces against 75,000 pieces in 1886. A very important reduction throughout. As yet no start has been made in prices and the stock of pine is still too large for the hope of any great or immediate improvement. With spruce the case is different, the stock taken altogether is of small matter, and when the lowness of price is considered, it is scarcely possible that the trade should not see a change for the better."

This is certainly comforting news, especially for our spruce manufacturers, and no one will begrudge them as they have had the hardest row to pull during the depression, and all will rejoice if the tide now turns in their favor, as our readers are no doubt aware the spruce deal trade, outside the Ottawa Valley is the chief one in the lumber trade of this Province, and any improvement therein means improvement in that which specially and directly benefits our Province.

As far as the pine deal trade is concerned, it is of course to be regretted that stocks are still large in London, but they are, we understand, held in strong hands, and are not therefore, likely to be sacrificed. The pine deal manufacturers, however, have it in their own hands to regulate this. The United States markets offer them an outlet, as good or better than the United Kingdom markets for their lumber, and if they cut no deal for simply one season, it would quickly right the demand and value of pine deal in the United Kingdom. And they could do this, and that even to advantage in a pecuniary sense, for we believe the United States markets are capable of absorbing all the lumber they can turn out next season, and at good paying prices.—*Quebec Chronicle.*

WHAT THEY SAY OF US.

In addition to the large number of complimentary references to THE LUMBERMAN published in the December issue, we subjoin the following from the press of Canada and the United States :

Southern Lumberman, Nashville, Tenn.

The CANADA LUMBERMAN, published at Peterborough, Ont., came to hand in November in a bran new dress and greatly impoved in all respects. We tender our congratulations upon its success and our best wishes for its continued prosperity.

Chatham Planet.

The CANADA LUMBERMAN, published at Peterborough, is a monthly, and typographically a very excellent journal. We cannot judge as to its contents, whether it properly subserves the interests of those for whom it is published or not, but it appears to be equal in substance to its appearance. A. G. Mortimer is the editor and proprietor.

Railway Life, Toronto.

The last issue of the CANADA LUMBERMAN presents a great advance in typographical appearance over former ones, good as they were. Not only has an entirely new dress of type been secured, but better paper is used, the size of the journal is increased, and in every way the LUMBERMAN presents the appearance of a thoroughly successful newspaper. At the same time the editorial management is even more vigorous than before, and altogether in this wide-awake journal the milling and wood-working interests of Canada have a representative in the newspaper world of which even so large and important an industry may well be proud.

Sherbrooke (Que.) Gazette.

We are glad to see our old friend the CANADA LUMBERMAN in a new dress, remodelled and with handsome type. We have always found it a most useful and trustworthy authority on everything connected with the lumber business, and in addition it contains a vast amount of interesting matter. It is published at Peterborough, Ont., and all engaged in this industry should subscribe to it.

Lumber World, Buffalo, N. Y.

Our Canadian cotemporary, the CANADA LUMBERMAN, is out in a handsome new winter dress of type. It presents a neat appearance typographically, and it has made notable improvements in the character of its contents. We congratulate Editor Mortimer on the success he is achieving.

Northwest Review, Winnipeg.

We have received the CANADA LUMBERMAN for November. From our perusal of it we judge it to be of much value and interest to the trade. It seems very complete and well edited in all departments. Peterborough has for many years been known as the headquarters of very large lumbering interests.

Petrolia Advertiser.

We have received the new number of that enterprising sheet, the CANADA LUMBERMAN, and have no hesitation in pronouncing it one of the best gotten up periodicals, mechanically, in the Dominion. The LUMBERMAN must be invaluable to those interested in the business, and we wish Bro. Mortimer every success.

8TH YEAR OF PUBLICATION. $1 PER YEAR, IN ADVANCE.

THE CANADA LUMBERMAN

STATISTICAL EDITION.

We have now in course of preparation the SECOND ANNUAL STATISTICAL EDITION *of The Lumberman,*

SIX THOUSAND COPIES

of which will be issued FEBRUARY FIRST, NEXT, *and circulated among the trade throughout Canada, the United States and Great Britain.*

This issue of THE LUMBERMAN *is intended to surpass, both in size and variety of contents, anything heretofore produced from this office. Arrangements are being made whereby every province in the Dominion will furnish a complete budget of news of interest to every man engaged in the lumber, wood-working and kindred branches of trade. The result of the past year's operations and the prospects for the coming season, will be fully set forth, while the list of technical contents will be unusually large and complete.*

No better opportunity has yet been offered Manufacturers of Saw Mill and Woodworking Machinery and Appliances, Wholesale Lumber Dealers, Etc., to introduce their business to the trade in general. The tariff of advertising rates for this edition are sufficiently low to commend the publication to all judicious advertisers.

From the rates specified below, advertisers will note that, if a series of insertions are ordered, they will gain all the benefit of the special issue at contract rates, which will be be furnished on application.

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TWO PAGES,	$55 00	QUARTER PAGE,	9 00	THREE INCHES,	$2 75
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Advertisers contracting for half or whole page advertisements can have descriptions of machinery and illustrations of same inserted among reading matter at the rate of $7 per column. Those not having displayed advertisements will be charged at the rate of $10 per column.

We beg to remind you that during the months of February and March Canadian lumbermen are fitting up their mills for the season's trade ; discarding old machinery and putting in new ; and for this reason, at no other time during the year will an investment in advertising pay as well. As the work is large and time short, intending advertisers will please let us understand their intentions at the earliest possible date.

Address all Communications to

A. G. MORTIMER, Peterborough, Ont.

The Big Raft Adrift.

A mountain of timber weighing 9,000 tons, or 18,000,000 pounds, is adrift on the ocean in the direct path of navigation, without beacon light or anything to warn passing vessels of its dangerous presence at night, threatening destruction to everything which may come in contact with it. The great raft broke loose from the steamer *Miranda* on Sunday morning, Dec. 11th, about eleven miles off Nantucket.

Captain Leseman, of the steamer *Miranda* said : "We left Two Rivers N. S., on Dec. 9th. No difficulty was experienced with our monster tow until the 11th, Sunday, when there came up a south-easterly gale, with a heavy cross sea. Finally the fifteen-inch hawser parted with a noise like the report of a cannon. The steamer immediately forged ahead and the extra strain on the ten-inch hawser and the bit to which it was attached, pulled the latter clear out of the deck, ripping up the flooring for a space of fifteen feet. There was a heavy fog at the time, and the raft immediately drifted out of sight. We did not spend any time looking for it, but steamed away as rapidly as possible to avoid any chance of collision."

The raft was valued at about $50,000, and was uninsured, no underwriters being willing to accept the risk at this season of the year.

Mr. James D. Deary, the owner of the great raft, was very indignant at the failure of the steamer to bring it safely into the port of New York. He said : "It seems that when the *Miranda* left Port Joggins she was only provisioned for seven days' voyage, and, in consequence, on Thursday last there was but half a barrel of flour on board for thirty men. For three days the men were on half rations and when the hawser broke, instead of waiting in the vicinity of the raft as Captain Leseman was instructed to do in case of such a contingency, he immediately came to New York, as the men were half starved. Another fact which made it necessary to put into port was that the oil on board gave out and the machinery had to go without oiling for some time. There was a scarcity of light on board, which is also attributed to the same cause. I contracted with Bowering & Archibald to bring the raft to this port for a certain sum and they tried to do it too cheaply. I sent the agents a note last night instructing them to dispatch a steamer immediately to search for the raft, which they refused to do. I will charter the first suitable steamer I can lay my hands on and if she fails to find the raft I will bring suit against Bowering & Archibald for the whole cost, $32,000. I am convinced that if proper care and discretion had been exercised the raft would have arrived in safety."

Secretary Whitney has instructed Commodore Gherardi, in command of the New York navy yard, to send a naval vessel on a cruise after the Nova Scotia lumber raft adrift in the path of European vessels, to warn them of its presence.

The *Canadian Gazette*, of London, Eng., urges that the Dominion Executive be invested with the power to prohibit a repetition of the raft enterprise, with a view to the grave danger to navigation so caused.

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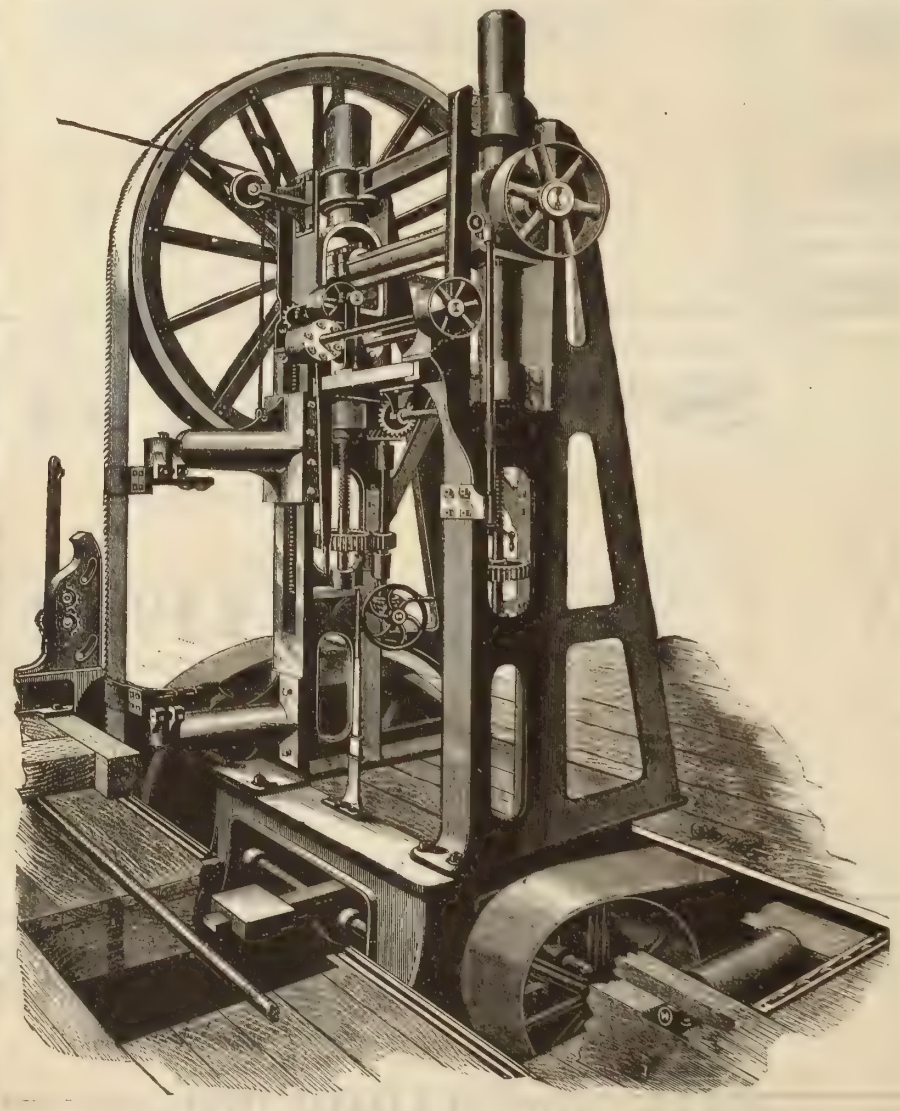

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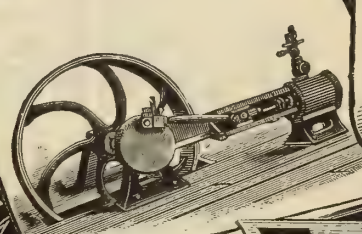

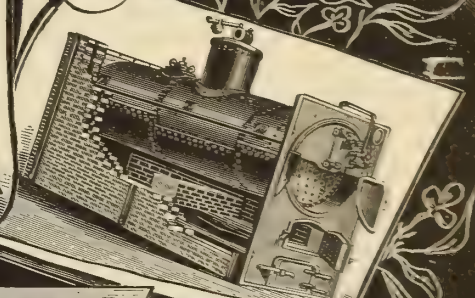

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* * *

I am patentee and owner of Canada patent, No. 42,357, Improvement in Band Saw Mills, which covers a Band Mill with two columns. I am also patentee and owner of Canada patent, No. 42,377, Improvement in Band Saw Guides, which covers wheel guides for a Band Saw. I am informed that a Band Mill is being offered to mill men in the Dominion, containing two columns that is an infringement of the above patent. The public is hereby warned against purchasing such Band Mill, as I shall hold the purchaser responsible for the infringement of my said patents, and for all damages which I may have, or may hereafter sustain, on account of any unlawful use of said patents.

The Wm. Hamilton Mfg. Co., of Peterborough, Ont., is authorized to build and sell Band Mills under my patents. * * * * *

FRANK W. WHEELER,
SHIP BUILDER,
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[A TRUE COPY.]

WEST BAY CITY, Mich., June 26th, 1886.

Mr. D. K. Allington, East Saginaw, Mich.

I have been running your Pat. Band Saw Mill in my new ship yard mill for over one month, squaring up large and long hewn oak timber which has been hewn a sufficient time to be dry and hard on the surface and sawing long plank from same kind of timber. The timber or Keelsons squared was laid up in a vessel, one on top of the other, and fitted as well as could be done by hand, it being square, straight and out of wind. I have had a large amount of this plank and timber sawn, and have not yet found a bad cut. I have squared timber where the saw here and there barely cut the thickness of the saw kerf, yet the saw did not deviate the least from a straight line. From the nature of my work I cannot give any idea of the amount cut in a given time, but the speed of cut should be satisfactory to any one. The most difficult part of my work is in sawing tamarac ship knees, yet the machine has given me entire satisfaction in this respect, sawing a root having a cut of from 2 to 4 feet, making in every case a true cut.

I do not believe that a saw has been put on the machine in good order, as I have not a sufficient number of saws to give time to dress them well and keep the mill running, yet there has not been one broken or disabled, in fact, a saw must be in bad order that will not run in a straight line when run over your guide wheels.

Yours, truly,
F. W. WHEELER.

[A TRUE COPY.]

F. W. WHEELER'S SHIP YARD.
WEST BAY CITY, Mich., June 25th, 1886.

Mr. D. K. Allington, East Saginaw, Mich.

DEAR SIR:—I have been engaged in running band saws for the past five years, and I never before found anything equal to the Band Mill built by you, that I am now filing for. I must say that it is almost impossible to made a bad line if the saw is in any kind of order. We are cutting hardwood, principally long oak, and on account of being scarce of saws we have run our saws for five hours and cut as fast as we could conveniently handle, without making any perceptible variation in the cut. I have run various kinds of mills, but never before saw anything to equal it. There has been quite a number of millmen examining it, and all give it up to be the best and truest cutting mill they ever saw.

Respectfully yours,
JOHN A. GREGG.

[A TRUE COPY.]

BAY CITY, Mich., Nov. 15th, 1887.

Mr. D. K. Allington, Saginaw, Mich.

DEAR SIR:—Having had considerable experience with Band Mills, I consider myself competent to judge the merits of the same. I started and run one of your Band Mills at Victoria Harbor, Ontario, which was manufactured by the Wm. Hamilton Manufacturing Co., of Peterborough, Ont. I also started and run your two Band Mills in William Peters' mill, at Bay City, Mich., and must confess they are superior to any Band Mill I have ever seen, for quality and quantity of lumber produced.

Respectfully, yours,
W. A. McCLENATHAN, Filer.

[A TRUE COPY.]

F. W. WHEELER'S SHIP YARD.
WEST BAY CITY, Mich., June 24th, 1886.

Mr. D. K. Allington, East Saginaw, Mich.

DEAR SIR:—I have been sawing on your Band Saw Mill for the last month, making plank from long square oak timber, partially seasoned, and being short of saws, do not have time to have them put in in the best of order, and have to run them five hours without changing, yet I have not broken a saw or made a bad cut, the machine running smoothly, and not having cause to stop for any reason but to change saws, and cutting as fast as other band saws I have run.

Yours truly,
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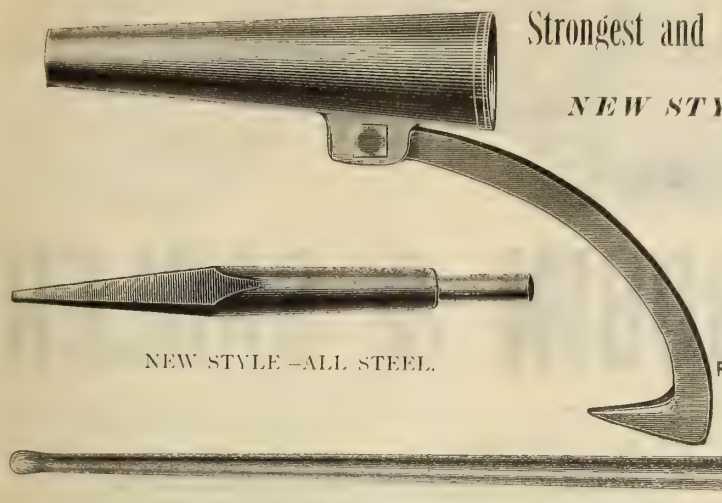

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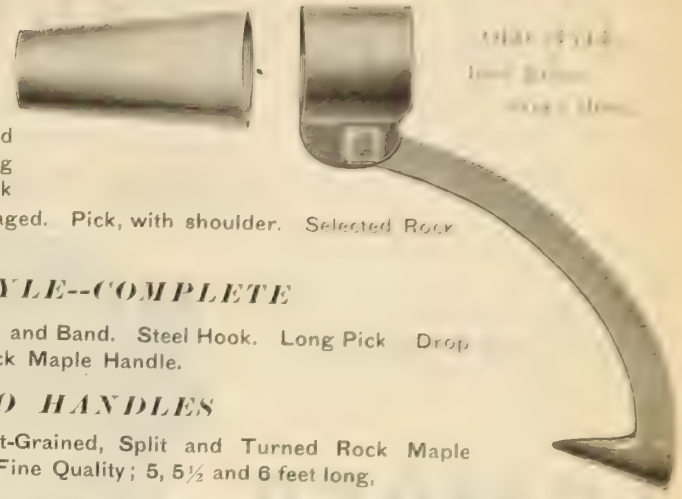

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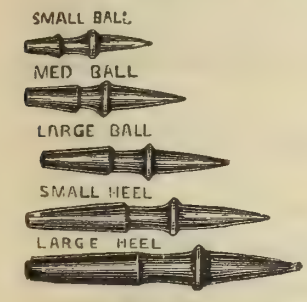

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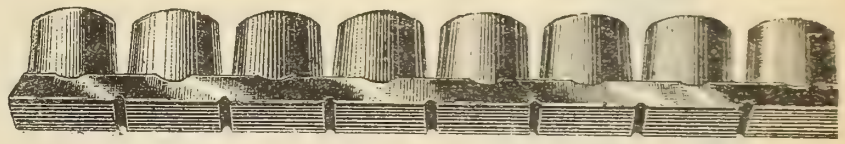

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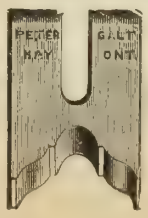

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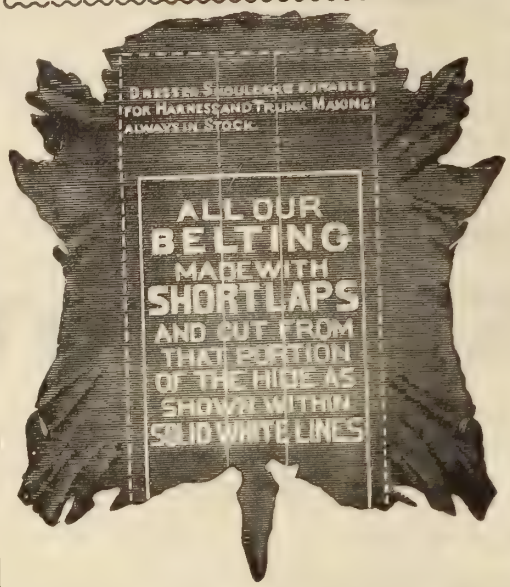

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Yours truly,
ROBERT CALDERWOOD, Foreman Longford Mills.

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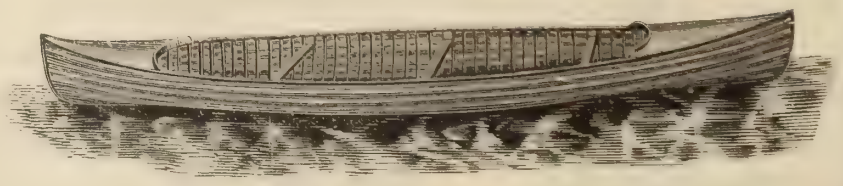

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STATISTICAL EDITION.

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Especial pains are taken to secure the latest and most trustworthy market quotations from various points throughout the world, so as to afford to the trade in Canada information upon which it can rely in its operations.

Special correspondents in localities of importance present accurate report not only of prices and the condition of the market, but also of other matters specially interesting to our readers. But correspondence is not only welcome but is invited from all who have any information to communicate or subjects to discuss relating to the trade or in any way effecting it. Even when we may not be able to agree with the writers we will give them a fair opportunity for free discussion as the best means of eliciting the truth. Any items of interest are particularly requested, for even if not of great importance individually, they contribute to a fund of information from which general results are obtained.

Advertisers will receive careful attention and liberal treatment. We need not point out that for many the CANADA LUMBERMAN with its special class of readers is not only an exceptionally good medium for securing publicity, but is indispensable for those who would bring themselves before the notice of that class. Special attention is directed to "WANTED" and "FOR SALE" advertisements which will be inserted in a conspicious position at the uniform price of ten cents per line for each insertion. Announcements of this character will be subject to a discount of 25 per cent. if ordered for three successive issues or longer.

Subscribers will find the small amount they pay for the CANADA LUMBERMAN quite insignificant as compared with its value to them. There is not an individual in the trade, or specially interested in it, who should not be on our list, thus obtaining the present benefit and aiding and encouraging us to render it even more complete.

MR. Hotchkiss, U. S. Consul at Ottawa, who was engaged for many years in the lumbering business in the United States and Canada, has received a number of letters from publishers of lumber trade newspapers and gentlemen engaged in the lumber business in Michigan and Wisconsin asking him what the probable effect would be if the American duty of $2 per thousand feet on Canadian lumber was removed. He has sent an answer to all such inquiries to the effect that, in his opinion, the price of lumber in the American markets would not be affected by the free admission of the Canadian product, and that the removal of the duty would simply mean $2 a thousand feet in the pockets of the Canadian lumbermen. Mr. Hotchkiss does not believe that the export of lumber from Canada would be sufficient to reduce the price of lumber at any point in the United States. The output from Ottawa, no doubt the greatest lumber centre in Canada, is not probably over 300,000,000 feet annually—not more than enough to supply the wants of one good-sized American city.

IN the last issue of this journal was given particulars of the loss of the noted Joggins timber raft, the whereabouts of which was at that time unknown. It has since transpired that the United States steamer Enterprise found the huge mass broken up about 250 miles south-southwest of Sandy Hook, and about 135 miles from the place where the steamer Miranda left it. Immense quantities of logs were found floating in every direction, and the fact was soon learned that the great raft was an entire wreck. Something more than $50,000 has been expended in this experiment, and the attention of the whole lumber world has been attracted to it. The loss is almost, if not quite, a total one, and the failure is so complete that the probabilities are that no similar attempt will again be made. Even should this prophesy not prove correct there will, in all probability, be steps taken by both Congress and the Dominion Government to prevent another raft becoming a danger to commerce.

MR. FRENCH, M.P.P., for Leeds and Grenville, has introduced a bill into the Ontario Legislature for the appointment of fire guardians for the prevention of bush fires. It is founded on legislation in force in the Western States and Manitoba, which has been found to work beneficially in those localities. It delegates to the township councils the power to appoint fire guardians who may be either pathmasters, fence viewers, or other competent persons. No person is to be allowed to start a bush fire for the purpose of clearing lands without the written permission of the guardian after he has viewed the locality. The guardian will be paid by fees to be collected from those requiring his permission. In bringing actions for damages for loss caused by bush fires it is often difficult to prove negligence. Mr. French's bill makes the omission to procure the fire guardian's consent a *prima facie* evidence of negligence. The measure is another step in a good direction and ought to be adopted. If such a scheme were carried out it would do much to prevent those destructive bush fires which have destroyed so much valuable timber.

SINCE the late Government sale of timber limits there has been a brisk demand on the part of American operators for Canadian limits, chiefly in the Nipissing and Algoma Districts. There have been some sales but holders of limits are disposed to ask high prices, and the tendency is to hold in the expectation of a considerable advance in values, owing to the growing needs of Americans and the rapid exhaustion of their supplies. The possibility of the speedy removal of the American duty which would, of course, result in an enormous expansion of the export trade to the United States has a decided influence in stiffening prices. Many Michigan lumber operators are turning their attention towards the timber resources of Ontario, and negotiating or prospecting with a view to the purchase of limits in the province. A number of estimators in the interest of these wealthy firms have lately gone into the bush to make investigations and important transactions are likely to be reported before long.

THE Provincial Legislature of Ontario was opened on the 25th ult. by Lieut.-Governor Campbell. The speech from the throne, which was of unusual length, contained the following reference to the lumber trade, and the recent increase in timber dues :—

"The value of our timber limits having greatly increased of late years, it was recently thought that the time had come for making such advances in ground rents and timber dues as should bring to the provincial revenue a substantial increase without being unfair or oppressive to persons engaged in the lumber trade. Certain increases were accordingly made ; and that they were not unreasonable or inopportune has been shown by the large prices obtained for limits at the timber sale which was afterwards held."

It is proposed to increase the number of ministers by separating the Department of Agriculture from that of the Provincial Treasurer. Mr. Dryden, of South Ontario, a practical farmer, and one of the old-time members of the Legislature will, in all probability, be the new Minister of Agriculture. Hon. Mr. Pardee, whose health has been very poor for some time, is not expected to be present in the House during the session, as it is understood that he will shortly leave for Florida. Among the bills foreshadowed by the speech is one for the separation of Parry Sound and Muskoka from the adjoining counties for certain purposes.

A CASE of special interest to the holders of timber limits, and which forcibly illustrates the evils of the present uncertainty of jurisdiction as between the Dominion and Ontario Governments is among the subjects now before the Ontario government for action. It affects the title of extensive limits, comprised in townships Nos. 75, 76 and 83 in the Algoma District, which were sold by the Ontario Government in 1872, and since that time have changed hands two or three times. In 1884 the territory was claimed by the Indian Department under the Robinson treaty, for the purpose of an Indian reserve. The timber rights were sold by the Dominion Government for $316, to Honore Robillard, now M.P. for Ottawa, who resold them shortly afterwards for about $55,000, to parties by whom lumbering operations are now being carried on. The holders of timber limits from the Ontario Government include the estate of J. D. Smith, Baldwin & Murphy, Klock & Co. and others who have urged upon the Provincial Crown Lands Department, the necessity of protecting their rights. In consequence an application has been made by the Government, to restrain the cutting of timber by the present holders of limits granted by the Dominion. The results of the suit will be watched with much interest. The doubt as to the validity of the title granted by the respective governments has been a serious drawback to the development of the timber resources of North-western Ontario.

THE name of Congressman Nelson seems to be coming prominently before Congress during the present session, through his introduction of at least two bills effecting the lumber interests. In addition to the one referred to elsewhere in this issue which proposed to abolish the duty on lumber, we find that for the fourth time he intends to introduce his bill to open what is known as the Red Lake reservation. This tract of land is a part of the original Louisiana purchase which the Indians have never ceded to the United States. It is conceded that there is likely to be very strong opposition to the measure. The Michigan delegation in the House is solid against it while the Wisconsin, New York, and Pennsylvania members who have constituencies are ready to work desperately against it. The reason assigned for this strong opposition is the idea of opening up two million acres of pine country to Canadian lumbermen. Half of this lake reservation lies on the northern slope of the Rainy Lake region, and its pine would have to be floated over the international boundary to the saw mills already at work there. All that lumber would come right straight down the lakes and be sold in competition with American. Interested Canadians will watch the result of the movement, and hope to secure their bread with the butter side up.

IF what is being written by our lumber contemporaries across the lines be true, it is quite evident that wholesalers in lumber, at least in some sections, are not accumulating the "root" to an extent consistent with their inclinations. Following the balancing of ledgers for the year 1887 come up from numerious quarters a wail of dissatisfaction, telling the tale of small profits or no profits at all. An experience such as this for a period of two or three years, is not one of the pleasantest things in this life, and accordingly many of the class referred to are asking the question : "Where should I be located?" Various are the reasons assigned for this unsatisfactory state of affairs. New railroads or freight combinations let in a competition which cannot be met, compressing prices down to bare cost ; competitive markets opening up in new quarters, struggling to gain the mastery. These and other reasons seem to be the secret of such disturbing influences in the wholesale trade, and they prove obstacles hard to surmount. To those who have settled down to investigate the different locations for probable successful business enterprises in lumber, we would advise the men of capital and energy, not alone to seek new fields of labor among the forty-two states of the Republic, but also to look to the different provinces of the Dominion where there will be abundance of room for the profitable investment of their capital in supplying their own people with the products of Canadian forests. Many have already come among us, and others are sure to follow.

CERTAINLY the fate of the big raft is not calculated to encourage further attempts to convey logs to the markets of the neighbouring republic in this manner. Under other circumstances more propituous to it, success might have been achieved, but the fates seem to have been against the venture from the beginning. The insufficient strength of the ways preventing the first attempt at launching the huge mass, the compulsory relinquishing by the tug of the reconstucted raft, and its breaking up at sea before it could be recovered, gave one heavy blow after another to the enterprise. Anyone of them might be possibly avoided with suitable precautions, even the whole of them might be escaped, but altogether, they point to an aggregate risk that must have a deterring effect. The loss in material, in labor and other expenses and in time, must have been very heavy, amounting to far more than several successful ventures would recoup. The risk of heavy loss seems dis-

proportionate to the saving that might be made. The exact whereabouts of the remains of the raft seems uncertain. Various vessels report seeing portions of it in different localities and some of the widely scattered logs have already travelled long distances. Fortunately they do not seem to have caused any damage or even serious inconvenience to vessels. There is now some talk of building up timber into roughly constructed vessels, to be broken up on reaching their destination. This, however, is not a new device. It has been tried before and the fact that the experiment was not repeated by those who made it, would go to show that it was not very successful or remunerative. The cost of construction, of navigation and of breaking up and preparing for market with the deterioration of the timber thus treated, probably left little if any saving as compared with the usual means of conveyance.

We have to apologize to our readers for the lateness of the present number. The delay was unavoidable, being occasioned by the refitting of our office with new presses and steam power, in accordance with the increased requirements of our business. There is every prospect that we shall be able to issue the LUMBERMAN on time in the future.

Hon. Benjamin Butterworth, of Ohio, has introduced his Reciprocity bill into the Washington Congress. Its provisions are very simple, and are to the effect that whenever Canada throws off the duty upon "all articles of trade and commerce, of whatever name or nature, whether products of the soil or the waters of the United States, or manufactured articles, live stock of all kinds, and all minerals or products of the United States," the American government will remove the duty on Canadian imports. The stiffest protectionist in the country can support a bill like that unreservedly, the contingency upon which it will become operative being so exceedingly remote.

It is understood that the Dominion and Ontario Governments have agreed upon a bill to be submitted to the Imperial Government, fixing the boundary between Ontario and Manitoba. As regarding the northern boundary of Ontario, it is estimated that propositions have been made which are likely to result in fixing conventional lines, as the boundaries of both Ontario and Quebec, as well as the line between the northern portions of those provinces. The vexed question of provincial boundaries has been the source of much trouble and uncertainty to the holders of timber limits, and its speedy settlement one way or another is much to be desired.

The current issue of THE LUMBERMAN is intended to find every man engaged in the lumber and wood-working branches of trade in the Dominion, and as the time has not yet arrived when all can be classed as regular subscribers, we would respectfully invite each and every one to fill in the blank subscription order herewith enclosed, and remit one dollar, which will secure the paper to them for one year. Every man directly, or indirectly, interested in lumber will find that such a small investment is money well spent. The larger our subscription list the better the paper will become. Let every man show his interest at least to the extent of one dollar.

Mr. Phillips Thompson, for many years connected with the editorial staffs of the Toronto *Globe* and *News*, is now filling the onerous duties of travelling correspondent and general business agent of the CANADA LUMBERMAN, and will shortly visit some of the larger business centres with the view of advancing the interests of the paper, and holding interviews with all with whom he comes in contact. We bespeak for Mr. Thompson a continuance of that courtesy hitherto shown by the trade to previous representatives of this journal, and can assure them that their personal and combined interests will be as closely advocated in the future as in the past. The Toronto branch of THE LUMBERMAN is at No. 37 Yonge street Arcade.

P. O. Byram, of Madawaska, N. B., sends us a letter protesting in strong terms against the fashion in which the country is being stripped of its forests by the present lumber policy of our Dominion and Provincial governments. He urges that much might be done to avert the exhaustion of our timber supply, if the exportation of the raw or half-manufactured material were prohibited, and wood were only allowed to be exported in the shape of the fully manufactured article. "From the Atlantic to the Pacific" he says "we don't want to ship one foot before it is manufactured to meet the domestic wants of all countries. It could be manufactured in the Dominion and put together at the place of destination. There would be no loss in paying freight on waste lumber, and it would employ an army of laborers and boom our industries." Mr. Byram's idea is well worthy of thoughtful consideration.

The United States Secretary of the Treasury recently received a letter requesting that persons engaged in the lumbering business in the Counties of St. Lawrence and Franklin, N. Y. may be permitted to import from Canada for temporary use, and without payment of duty, teams of animals and articles for use in the lumbering camps, which teams and animals are to be brought in by Canadians. The question was submitted to the collector of customs at Ogdensburg, in order to ascertain the necessity for such action, and that officer has reported that during the past year many horses suitable for use in lumbering have been imported from Canada. He has also expressed the opinion that the bringing in of Canadians with their teams for the purpose indicated would be in contravention of the Contract Labor Act. He said further that there was no immediate necessity for granting the request, for the reason that animals needed in the lumbering business can be readily obtained in the United States. Assistant Secretary Maynard has therefore informed the persons interested that as there is no legal authority for granting the request the department declines to interfere in the matter.

The American fire record for 1887 as affecting saw, shingle and planing mills, lumber-yards and other wood-working establishments, according to the *Northwestern Lumberman*, discloses a total of 398 losses. This includes 221 saw mills, of which 25 were in connection with planing mills, and five in connection with shingle mills. There are 78 other planing mills and 13 other shingle mills shown; also 18 dry kiln fires, 13 sash, door and blind factory losses, eight of box factories, 87 cases were lumber losses were reported, and 11 of shingles, the remainder being fires which consumed cooperage works, stave and heading factories, and similar wood-working establishments. The totals of fires shown in previous years were as follows: 1886, 207; 1885, 223; 1884, 310; 1883, 349; that for 1887 being the largest yet reported. In 292 cases where the losses were reported, the aggregate for 1887 is $7,021,100, as compared with $5,913,600 in '86, $4,079,950 in '85, $6,742,500 in '84, and $5,913,600 in '83. The aggregate insurance reported is $1,998,650, as against $1,574,675 in '86, and $1,780,975 in '85. Making allowance for 105 cases the losses in which amounted to $2,105,000, where no information was obtained as to the insurance, the total reported insurance amounted to over 40 per cent. of the losses.

The press of the United States is at the present time devoting a great deal of attention to the proposed removal of duty on lumber. In most instances we find that there is a strong opposition to the measure now before Congress. The opinion is freely expressed that the lumber industry has never received sufficient protection to pamper its growth. It is pointed out that there is now annually imported about 500,000,000 feet of lumber, chiefly of the better grades, because the specific duty of $2 per. thousand can be better borne by lumber of a hign valne than the course grades. Because this is so, and that there is an annual increase in the shipments of good grade lumber from Menomivll and other points to the eastern market, free lumber would mean a loss of this trade which would otherwise find its way to the Canadian mill men. There are various other reasons assigned for the United States lumbermen opposing the scheme. Ot course these objections only hold good throughout a certain section of the Union, other sections being equally enthustastic in pronouncing in favor of the bill, believing that the indirect advantages which might accrue from direct competition from Canadian lumber, would redound to the commerce of the United States.

At Washington the great question of the day seems to be tariff reform. Public interest is awake on the subject and not only the journals but the politicians and legislators are moving. Not only is the protectionist and free trade controversy revived again with considerable energy, but many thorough advocates of protection, in view of the surplus that is growing to an inconvenient extent, are in favor of a repeal or reduction of the duties on raw materials and natural products so as to diminish this excessive revenue. Lumber is among the articles generally named in this connection, and indeed it already figures in some of the propositions made in Congress to extend the free list. Then there is always a chance of some reciprocal arrangement, growing out of the fishery negotiations and if so lumber would almost certainly be included. So closely, however, have the Commissioners hitherto kept the secret of their proceedings that so far nothing authoritative is known of their progress, and the rumors that are circulated appear to be merely more or less happy guesses by ingenious newspaper correspondents and politicians who have to appear to be in the secret whether they are or not. Whether by international diplomacy or tariff legislation lumber is placed on the United States free list, the same treatment would result in Canada, for in the one case there would be a bargain for reciprocity and in the other case the standing offer in our statute book would come into operation. This, however, would not materially effect Canadian lumbermen, as little lumber from the States is likely to come in, excépt perhaps in Manitoba and the Northwest which take a comparatively small amount at present from Ontario and British Columbia. The effect on prices is not so certain. Some talk of a consequent reduction of prices in the United States, but the general opinion is that little, if any, fall would be caused. If so the Canadian lumbermen would benefit almost to the extent of the duty on their exports to the States. At present there is uncertainty on all these points, but a few weeks more will probably tell the tale and give the guessers a rest.

Congressman Nelson, a gentleman considerably interested in lumber, and well known among the fraternity, has introduced a bill in Congress which proposes to abolish the duty on that very necessary commodity. Whether or not he will succeed in convincing his fellow Congressmen that his ideas regarding the tariff on lumber are in accord with the best interests of the trade and country, will be determined in due time. So far as we can learn of American public sentiment as depicted in the press of that country, there are some grounds on which to base the opinion that the measure will at least receive the closest consideration, and perhaps be found to merit adoption. There seems to be, however, a still wider measure affecting the tariff of the country also before Congress at the present time. It is a bill introduced by Mr. Townsend, of Illinois, to promote the establishment of free commercial intercourse among the nations of America and the Dominion of Canada by the creation of an American Customs Union or Zollverein. This bill seeks to secure free commerce on this continent and the increase of the American merchant marine, a common system of weights and measures, a common system of silver coins in all American countries, and a plan of arbitration of all questions, disputes and differences among those countries that now exists or may arise. Both of these measures will receive bitter opposition from many States of the Union. Leaving out the question of Commercial Union altogether —and we doubt if it will be seriously considered by Congress —there is no question but that if the United States government did sanction the bill of Mr. Nelson that it would be done with the proviso that the Canadian government also abolish the present export duty on Canadian logs entering United States ports. We venture the statement that our home government would readily accede to such a reasonable demand. The same offer would, we think, hold good not only in the free interchange of the products of the forest, but also in all other raw materials, fish, etc. The Reciprocity treaty existing from 1854 to 1867 was supported almost unanimously by the electorate of this country, and as the law still remains on our statute books, our American cousins have only to say the word and in a sense both countries will have all the free commercial intercourse that circumstances would justify,

The mill saw and other files made by Messrs. Thos. Turton & Sons, (Limited), of Sheffield, England, have a well deserved reputation for excellence combined with cheapness. The attention of those requiring these articles is called to their advertisement.

The demand for tents for camping-out purposes has greatly increased of late years. Mr. J.J. Turner, of the Peterborough Tent and Awning Factory, Brock street, has a great variety of goods in this line which lumbermen and others going into the bush for business or pleasure would do well to examine.

Chas. Esplin, of Minneapolis, whose advertisement appears regularly in THE LUMBERMAN, has invented another band mill. The latest device does away entirely with the central columns which is the main feature of all the existing band saw mills. He hangs the upper wheel from a frame work large enough to admit of the steam carriage and all passing through between the upright supports and leaves the entire space clear. The device is so simple as almost to suggest the enquiry why the same thing has not been attempted before. The chief impediment has been in the direction of getting rid of the guide which is so imported a feature of all the successful band mills, and the mechanism of which is more or less connected with the upright column. Mr. Esplin has not dispensed with the guide but he has, by an ingenious device, applied it without the use of the column. This is the third band mill Mr. Esplin has invented and the last of the series was undoubtedly suggested by necessity for such a change in the general device as to make it possible to saw big logs without "breaking down" with the circular. Col. F. A. Boyle, who was in the north searching for the best band mill, suggested these features as essential to the best results in any band saw designed to be used in cypress timber in which he is operating. Mr. Esplin went to work on the suggestion with the result as stated.

CANADIAN IMPORTS AND EXPORTS.

Customs valuations upon goods imported subject to *ad valorem* duties are made at the fair market value thereof when sold for home consumption in the principal markets of the country whence they were exported. The value of good subject to export duty are to be their actual cost or the value which they truly bear at the port and time of exportation.

The following table is a comparative statement of the value or articles imported in the years 1885 and 1886 :—

IMPORTS.

Articles.	Value of Imports. 1885. $	1886. $
Bricks and tiles	150,807	134,650
Carriages, wagons, sleighs, &c	150,724	137,560
" parts of	69,150	76,367
Cars, railway passengers	99,900	189,015
Cement	118,783	128,413
Corkwood	12,083	19,609
Engines	115,598	205,431
Felt roofing and other	54,757	20,920
Felt sheeting for vessels	2,625	1,456
Furniture, including hair and spring mattresses, pillows, &c.	172,543	185,633
Gravels and sand	19,972	24,141
Lime	11,503	9,347
Logwood	31,906	58,045
Lumber, sawn, not manufactured	374,632	313,770
Machines and machinery	1,154,897	1,190,604
Marble	79,662	90,498
" manufactures of	21,519	23,410
Mouldings	4,314	21,232
Paints and Colors	520,339	539,083
" " dry	28,662	26,520
Picture frames	608	25,490
Plaster of Paris	5,986	6,138
Ships and other vessels built in any foreign country, except machinery	91,503	26,611
Ships and vessels, repairs on	13,965	13,162
Slate, mantle and roofing	12,102	9,610
Stone, building	30,491	41,675
" grind and flag	17,862	22,207
" manufactures of	39,422	39,362
Timber, lumber and shingles	224,190	456,320
" unmanufactured	609,872	499,192
Trees, forest	363	634
" fruit	42,254	42,129
" ornamental, shrubs and plants	33,509	42,844
Veneers of wood and ivory	47,700	52,664
Wood, manufactures of	636,052	674,477
Wooden ware	22,991	31,675

Value of Exports, Distinguishing Canadian Produce and Manufactures from those of other Countries.

Articles.	1885. Domestic. $	1885. Foreign. $	1886. Domestic. $	1886. Foreign. $
Lime	11,005	—	18,638	—
Machinery	86,163	23,607	80,455	34,207
Sand and Gravel	23,590	—	23,195	—
Slate	4,642	—	4,552	—
Stone and marble, unwrought	52,206	700	61,950	—
Stone (wrought) and Marble	17,235	1,125	17,801	658
Wood, viz.—				
Household furniture.	169,115	2,967	225,023	5,973
Door, Sashes and Blinds	46,678	—	33,070	—
Other manufacts. of The Forest.	470,206	16,574	379,498	41,902
Ashes, pot and pearl	156,322	927	131,163	—
" leached	16,613	—	16,106	—
" all others	7,179	—	14,978	—
Bark for tanning	364,053	—	221,815	—
Basswood, butternut and hickory	26,474	—	18,611	48
Firewood	316,647	—	313,480	—
Hop, hoop, telegraph and other poles	84,789	—	106,745	—
Knees and futtocks	9,619	—	6,031	—
Lathwood	1,843	—	1,785	—
Logs, hemlock	14,890	—	28,885	—
" oak	15,671	—	14,417	—
" pine	2,300	—	24,452	—
" spruce	49,474	—	82,016	—
" all others	143,523	—	164,195	154
Lumber, viz.—				
Battens	12,640	—	10,979	—
Deals	6385277	693,370	7652828	826,348
Deal ends	265,039	845	302,035	332
Laths, pailings and pickets	270,227	124,118	258,259	143,847
Planks, boards and joists	8053878	287,720	6637878	327,703
Scantling	119,575	26,027	151,370	33,826
Staves standard	13,705	55,174	14,521	41,699
" all other and headings	345,796	20,259	330,686	36,479
all other lumber	201,907	1,344	357,344	34,910
Masts and spars	42,691	300	37,454	—
Oars	—	—	—	—
Shingles	183,732	72,030	142,347	68,478
Shingle bolts	2,906	—	936	—
Sleepers and railway ties	197,826	—	367,457	20,670
Stave bolts	97,863	—	116,900	—
Staves, box	28,710	1,555	86,106	4,875
Timber, square, viz.—				
Ash	111,770	1,014	83,490	—
Birch	246,031	—	265,273	—
Elm	257,168	3,316	259,768	123,163
Maple	3,001	—	1,799	—
Oak	575,575	66,078	704,986	123,163
Pine, red	101,210	2,412	131,043	6,368
" white	2019310	21,450	1750529	137,291
All other	100,221	5,476	75,732	9,712
Other articles of the forest	144,253	182	150,212	696
Total	20989708	1383597	21034611	1830476

The proportion of exports from British Possessions to the United Kingdom to the total exports was, in 1885, not so large as that of imports, it having been 42·78 per cent., and the amount per head was only $1.81 as compared with $2.43 per head of exports to other countries. The proportion of imports from British Possessions to the total imports into the United Kingdom has remained much about the same for a number of years, as shown by the following figures :—

Proportion of Imports from British Possessions to Total Imports into the United Kingdom.

1871	22·03 per cent.
1875	22·57 "
1880	22·50 "
1884	24·56 "
1885	22·75 "

But the proportion of exports to Great Britain to the total Colonial exports has decreased during the same period :—

Proportion of Exports to the United Kingdom to the Total Exports from British Possessions.

1871	50·45 per cent.
1875	49·47 "
1880	46·46 "
1884	42·33 "
1885	42·84 "

The total foreign trade of British Possessions has increased very largely since 1871, but, as will be seen from the following figures, the trade with foreign countries has increased in a greater ratio than that with the United Kingdom :—

Proportion of the Trade with the United Kingdom to the Total Foreign Trade of British Possessions.

1871	51·41 per cent.
1875	52·33 "
1880	49·36 "
1884	46·72 "
1885	48·44 "

It has been shown that the Colonies buy considerably more from England that England buys from them, and that the quantity is steadily increasing. This fact, which is probably at present more particularly the consequence of the numerous financial transactions that take place between them, shows that the greater portion of the wants of the Colonies can be supplied by the United Kingdom. It has also been shown that, in proportion to their total exports, the exports to Great Britain are not keeping place with those of foreign countries.

The Permanent Exhibition.

Every visitor to Toronto should spend an hour or two at the Permanent Exhibition of Manufactures, open free to the public. It occupies a spacous building specially constructed for the purpose on Front Street West, opposite the Queen's hotel. All who have seen it are surprised and delighted with the comprehensiveness of the display and the system and elegance of the arrangement. The benefits of such a scheme to the manufacturer, the merchant and the retailer are obvious at a glance. It saves a vast amount of expense and trouble by bringing sellers and customers into closer relations. The Permanent Exhibition offers to firms ontside the large centres of distribution the advantages of a branch office at a much less cost. Their goods are seen by thousands who might not otherwise take the trouble to make special enquiry after them. To a public familiarized with the benefits of yearly exhibitions the idea of a permanent exhibition where the advantages, instead of being temporary, will be continuous, need only be stated to be appreciated. Messrs. Nicholls & Howland deserve great credit for the enterprise they have shown in successfully carrying out this useful project.

New Brunswick Matters.

The New Brunswick correspondent of *The Empire* has the following to say regarding the trade of that province :—The feeling in business circles in New Brunswick is astonishingly cheerful in view of the commercial disasters which befell the province during the first six months of the past year. During that holy year the failures aggregated $5,000,000 liabilities. The returns for the past six months indicate a return to normal conditions, the total liabilities being $300,000. Nearly all the later disasters are the heritage of the Maritime Bank collapse. To get back to the beginning of things, every failure of any consequence was caused directly or indirectly by lumber. Lumber brought down the firms which the Maritime Bank with foolhardy recklessness had been trying to carry, had thus swamped the bank, which in its turn caused the suspension of McLellan and Blair's private bank, and swept away other business houses. The private banking firm did not deserve its fate and but for the terror that prevailed at the time, might have pulled through. The St. John agent [illegible] leading bank was strongly in favor of helping Mr. Blair out, and the facts that the creditors have now eighty per cent. from the liquidators, and that Mr. Blair has resumed business with the confidence of the public, goes to prove that the banker was right.

The bottom did not suddenly drop out of lumber. Some of those firms which breathed their last in the disastrous days of last winter and spring had been long in *articulo mortis*. The end of two, if not three, was only delayed so long [illegible] Mr. McLellan, [illegible] of his depositors. The weeding out process has on the whole increased public confidence, and it is safe to say that the community is better off than it was this [illegible] year.

But the lumber business has not improved. The sales last year to transatlantic points were smaller by about ten per cent. than in 1886. It is believed that the export to the United States has also declined, but complete returns are not yet available. The greater part of the New Brunswick export of lumber to the Republic is of United States produce. It is sawn from logs cut on the St. John River in the State of Maine, the mills being situated at St. John [illegible] United States subjects residing here. By [illegible] this lumber is admitted into the United States duty free, a privilege which has not as yet been accorded to Minnesota logs manufactured in Ontario. The exports of "non-produce" from the port of St. John is altogether comprised in this item. Returns received from the Custom House show that the value in 1886 was $1,874,000 and in 1887 $1,403,000. At a recent commercial union debate in the board of trade the great advance and prosperity of this Aroostook free lumber business was cited as evidence in favor of the scheme. But these figures do not appear to point to much increase.

New Timber Limits.

The Winnipeg *Free Press* is authority for the statement that the present surveyors are engaged in examining the timber limits to the north of the Riding mountains, along the rivers that flow into Lake Dauphin and Lake Winnipegosis, in the interest of Mr. P. McLaren, of Perth, Ont., who having disposed of his Ontario timber limits, is now turning his attention towards the Northwest. Hitherto the timber limits in that district have been regarded inaccessible, but McLaren, with long experience in the lumbering regions in the Ottawa valley, evidently considers himself capable to wrestle with the difficulty.

The Birtle *Observer* observes : There may be two or three ways of getting at those great northern forests. Any course will be difficult and expensive. One plan is to float the logs down the rivers to Lake Winnipegosis and Lake Manitoba and then follow the connecting rivers to Lake Winnipeg. In this way all the timber on the various streams could be secured, steam tugs being used to convey the rafts of logs through the lakes. There is also fine and extensive groves of spruce on the islands and shores of Lake Winnipegosis that could be cut and removed in the same manner. Judging from maps there seems to be a roundabout and difficult connection between Lake Winnipegosis and Lake Manitoba, from which Water Hen river issues, but there is some way to overcome this obstacle. A railway from Portage la Prairie to Lake Manitoba, eighteen miles distance, would secure the great lumber trade which will be developed in the near future. There is still another way of getting at considerable of the spruce timber of the north. Some of the most extensive and valuable forests are on the Swan river ; this large stream approaches the Assiniboine to within a distance of eight miles in the neighborhood of Fort Pelly. The land between the rivers is level and is mostly covered by scrub. In some places the creeks that flow north to Swan river and others that flow south into the Assiniboine nearly join and with a little cutting to form a connection, a dam on Swan river would send a flow of water through to the Assiniboine. Should Mr. McLaren connect Swan river with the Assiniboine near Fort Pelly a vast timber trade would find its way down the Assiniboine river, and would most likely leave the water at the crossing of the M. & N. W. Railway at Millwood, where there are already extensive saw mills which could no doubt be secured.

—It is said that Mr. Hugh Robertson, projector of the big timber raft, which recently came to grief, is about commencing the construction of a timber ship, with spars and steering apparatus. It is not the intention to sail the ship to her destination unless circumstances compel them to do so. The ship will be erected at the Finger Board, Joggins

CANADIAN CHEAP LUMBER.

DES MOINES, IOWA, Dec. 20, 1887.

EDITOR LUMBER TRADE JOURNAL :—The question raised in the President's message so far as it effects the lumber interest is naturally exciting considerable attention among those interested in the trade. We hear arguments both in favor of and adverse to a removal of the tariff of lumber, and in the multitude of assertions we find confusion rather than wisdom. Those who are in favor of free lumber assert that a removal of the duty would have little or no effect upon lumber values in this country; but the volume of manufacture in Canada is insignificant as compared with that of the United States, and that if the whole of that volume was turned into this country its effects would be hardly noticed. Some assert that the original cost in Canada is greater that the United States, and that this alone would prevent such a reduction in price as would seriously effect American manufacturers. The advocates of a tariff assert that lumber is cheaper in Canada than in the States, that it can be produced cheaper, and would flood the country to the injury of American lumbermen if the duty were removed. They assert that the injury to manufacturers would more than offset the advantages to the many million of consumers, while arguing that the country would be flooded with cheap lumber. Can you throw any light upon the subject that will enable your readers to form a reasonable correct opinion as to which is right, and as what would be the effect upon the lumber trade if the duties were to be taken off, and oblige an

INTERESTED READER.

Replying to the above the Chicago *Lumber Trade Journal* submits the following statistics which it claims should throw considerable light on the subject. Regarding the "cheap" labor theory, it reproduces the particulars of the sale of Ontario timber berths, which appeared in the last issue of THE LUMBERMAN, with the object of comparing the cost of timber lands in Canada with that of the United States. It says :—

This shows an average cost to the purchaser of $4.62 per acre, *for the privilege of cutting the timber and of paying a further stumpage duty to the government of $1.00 per thousand feet for all that he may cut*, and in addition a yearly direct tax of $2 per square mile. If we average the cut at 10,000 feet per acre, we shall find the cost of the stumpage to be

License cost $4.62 per acre is per thousand	46.2
Duty on cut logs per thousand	1.00
Yearly taxes allowing but one year	.20
Total paid to government	$1.66 2-10

With a proposition under consideration to increase the stumpage duty on logs to $2, which would bring the stumpage cost up to $2.66 2-10 per thousand feet, with no fee in the land. The United States government sold its pine lands at $2.50 per acre giving a title in fee simple. Averaging these at 10,000 feet to the acre which is as near the mark as the estimate on Canada lands, the stumpage cost to the purchaser was 25 cents per thousand as compared with say $1.66 paid by the purchaser of Canada timber. We will not insult the intelligence of our readers by asking which government furnishes the cheapest stumpage.

But while the government values are the only ones on which a proper computation of stumpage cost should be estimated, we are not unmindful of the fact that the United States has parted with nearly, if not quite, all of its valuable pine lands, and that stumpage in the hands of present holders is a different thing from that which is offered by the government; nor of the still further fact that Canadian limit holders know how, and have just as selfish an interest to hold stumpage at all it will bring, as holders of United States timber, and American buyers of Canadian logs to be towed to American mills do not find themselves able to buy these logs in Canada at a cost delivered in mill boom enough below what they would pay for the same grade of American logs, to get very rich from the difference. But if the customs duty of $2 be removed, would not the lumber be sold that much cheaper? Yes, *provided* the limit holders in Canada exhibit a trait in human nature so vastly at variance with all our experience to show that they don't know a good thing when they see it, and are so unselfish as to be willing that the American operator shall take all the persimmons, and the principal Canadian lumbermen are American born. A ten years' lumbering experience in Canada taught us that down east Yankees were not the only people in the world who were entitled to credit for shrewdness, but that a Canadian could often double discount and then beat him at his own game. When you set the Canadian lumberman down as a fool, you have need to look after your own laurels. But will they not overstock the market? Let us again appeal to the government for some information as to what they have been doing in the past. In the statistical abstract of the United States for the year ending June 30, 1886, the last official data obtainable, we find that the "quantities of dutiable wood and manufactures of wood, boards, blank deals, and other sawed lumber" imported from *all Countries*, Canada being the principal source of supply, were as follows for the years named :

	1886.	1885.	1884.	1883.
Lumber etc.	517,832,000	555,582,000	600,762,000	571,009,000
Shingles	79,150,000	69,511,000	86,219,000	104,657,000

Value of the Same.

1886.	1885.	1884.	1883.
$8,704,836	$9,103,041	$10,332,590	$10,295,631

Taking a period of ten years, 1877 to 1886 inclusive, the imports of lumber from all countries into the United States aggregated 4,978,175,000 feet and of shingles 715,770,000, the total value being placed at $76,505,232, an average of less than 500,000,000 feet of lumber and 70,577,000 shingles valued at $7,650,523 for each of the ten years. About one-quarter as much as the receipts of Chicago for one year in lumber and one-tenth of her receipts for shingles. The receipts of lumber at Chicago this year are three and a half times greater than the average yearly importation into the United States for the period of ten years. At an estimated yearly consumption in the United States of 500 feet per individual, Canada's average shows a supply of one foot in sixty feet. The wildest controversialist would not dare to assert that figures would be doubled in case of free trade with Canada, but if they were, it would only raise her quota to one foot in each thirty feet of the nation's supply. How deeply this would affect American producers we leave it for our correspondent to figure out. We have aimed only to state facts, and shall have something further to say in the future.

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Since the above was in type, Government reports for the year ending June 30, 1887, are at hand, from which we gather still further valuable information on this subject. The value of "wood imports" for the year is stated as follows :

	Value.	Duty Collected.	Average Ad-valorem Rate of Duty.
Unmanufactured	$ 15,087.39	$ 2,977.26	19.73
Manufacturers of	8,208,416.67	1,500,206.83	18.28
Total	$8,223,504.06	$1,503,184.09	18.28

In a table of "*total values of imported merchandise*" our imports from *British North American Provinces* is shown as follows : 1860, $23,570,000 ; 1880, $33,220,000 ; 1882, $51,113,000 ; 1883, $44,740,000 ; 1884, $39,020,000 ; 1885, $36,960,000 ; 1886, $37,500,000 ; 1887, $38,020,000, and the percentage of total imports 6.66 in 1860, and 5.49 in 1887. Our export trade *with the Provinces* was as follows ; 1860, $18,660,000 ; 1880, $28,060,000 ; 1882, $35,290,000 ; 1883, $42,831,000 ; 1884, $42,510,000 ; 1885, $35,980,000 ; 1886, $31,960,000 ; 1887, $33,495,000, and the precentage of total exports 5.90 in 1860, and 4.76 per cent. in 1887. The exports of the United States for 1887 are set down at $703,022,923 and are classified as follows :

	Value.	Per Cent.
Products of Agriculture	$523,073,798	74.41
Products of Manufacture	136,735,105	19.45
Products of mining including mineral oil	11,758,662	1.67
Products of the Forest	21,126,273	3.01
Products of Fisheries	5,133,775	.73
Other products	5,173,310	.73
Total	$703,022,923	100.00

The figures given above apply only to the general imports and exports from and to all countries. The Canadian "blue book" for 1886 will reach the Canadian Parliament Jan. 31, and from it we shall be able to gather more definite information regarding our trade with Canada.

We have a very warm friend now residing in Canada, one whom we have known *as a lumberman* since 1845, competent therefore to speak intelligently upon the question propounded by us "Who will get the benefit if the $2 tariff is removed from Canada lumber?" We append his answer :

"From many years observation, and with intimate knowledge of the Canadian lumber trade, as well as that of our own country, I am certainly of opinion that if the entire lumber cut of Canada was dumped into the United States, it would not effect the price of Southern lumber, and I doubt if it would have the slightest effect upon values in Northern lumber. You ask, 'who will get the benefit of the $2 off duty?' I say, *the Canadian*. It will simply enable him to advance prices that much, or approximately, and not a rap of good to the American purchaser. Is it at all reasonable to suppose that the American lumbermen will reduce their prices? Not a bit of it. The working of free lumber will be $2 *out* of the United States and $2 *into* Canada. No surplus of pine lumber will ever again be seen. Combine the abilities of both the United States and Canada (and they represent the total of white pine growth) and *they can never again overstock the market*. Pine is not being reproduced, it is simply sliding away, and in ten years more, as in the last ten, a big difference in quality and quantity will be seen. The sliding scale is so evident that all must admit it.

"The English trade in lumber is increasing, while that in timber is decreasing. The entire output of deals as low as 4ths (sound common) to be made in 1888 is already sold for the English market, leaving only the very coarsest logs and the siding for the American market, of which the sidings form good deal logs are already heavily sold for the English market. The Canadian lumber as a rule is very coarse and very shaky. The "Grove" timber makes a very good "piece board" (13 feet) and does not make deal. Stock will not be plenty here the coming season, for advance sales will not leave much for the open market."

THE news that ship building is looking up in Great Britain, and the yards on the Clyde, the Tyne and elsewhere have received extensive orders, is evidence of reviving trade. These iron vessels are fast ousting wooden ships from the carrying trade of the world, and this is the reason why shipbuilding in our Maritime Provinces does not progress as do our other industries.

EXCHANGE ECHOES.

Mississippi Valley Lumberman.

The lumber dealers in the Twin cities, and the northwest generally, are watching with interest the attempt now being made by the Chicago yard men to crush out the scalper, and to annihilate him as an element in trade. The agreement signed by a majority of the lumber merchants of Chicago is apparently sweeping enough to accomplish its results, but it is still to be demonstrated whether all the parties thereto are impregnable to the assaults of the scalper who may have tempting bills of lumber for which he has a market. The scalper in any trade is an incubus, draining the profits which should legitimately go into the pocket of the producer, the man furnishing the capital and sustaining all the risks of the credit system and the consumer.

Northwestern Lumberman.

It really looks as though the turning point in the poplar market had been reached. We dare not anticipate too much; but the horizon looks brighter, and it may be an omen of future prosperity. The demand for choice poplar is active. The supply, which in a measure regulates the price, is already curtailed, appearances point to a further scarcity of stock in the season to come. Whether this will have a decided or slight effect upon selling price remains to be seen. Certain mills have already contracted for next season, while others have so far declined what during the last year would have been considered good offers. The scarcity of stock, and a refusal of producers to longer accept the beggerly selling price of the last three years, should have a marked effect on prices, particularly for the better grades of poplar.

Dominion Mechanical and Milling News.

The statement will soon be published that a couple of well-known gentlemen are trying to obtain a lease of a tract of timber land, comprising no less than 26,000 acres, in British Columbia. In view of the rapid depletion of the United States pine forests, and the fact that the supplies of that country must in future be largly drawn from Canada, the wisdom of giving individuals control of such large areas is open to question. The wonderful advance which is taking place in the value of such lands was clearly shown at the Government sale in Toronto the other day. Seeing, therefore, that our timber lands are certain to double and treble in value within a few years, the Dominion and Provincial Governments should manage things so that the profits resulting from increased values shall go into the public exchequor instead of into the pockets of private individuals.

Southern Lumberman.

THE CANADA LUMBERMAN has figured out the conclusion that the Southern lumbermen are opposed to the repeal of the duty on Canadian lumber. Correct. It may also make up its mind that the South don't want unrestricted free trade with the Dominion because that would simply mean free trade with England and all her colonies who choose to do business through Canadian agents.

Chicago Timberman.

An experiment is about to be tried by New York parties, which will result in lowering the rate of transportation on spruce and pine by water from the Province, if it proves to be successful and practical. The fact that enormous rafts of logs have been towed hundreds of miles successfully has given rise to the idea that manufactured lumber might be marketed in the same manner, and at a much less rate per thousand, than it was possible to transport it by vessel. A huge raft containing over 20,000,000 feet has lately been launched in the Bay of Fundy, which it is proposed to tow to New York. The trip of this pecular raft, if it may be so called, will be watched with much interest by the owners of coasting schooners; for, should it prove a success, their source of income will be very materially curtailed. The probable success or non-success of this method of transporting lumber is being discussed very generally by eastern operators, but it is not generally believed that the scheme will be at all practicable. Should the raft chance to encounter a stiff easterly gale, it is quite probable that there would be large quantities of driftwood afloat to offset any saving in freight.

Timber Trades Journal, London, Eng.

Rumors are again current as to extensive contracts that have been closed for next season, but on careful inquiry in various usually well-informed quarters we cannot find that these reports have any solid basis. As we have already mentioned, a few sales of some magnitude have been made to continental buyers, but in England the business transacted is confined to staves, firewood, and sundry extras, but can have little effect upon the future of the market. There is unquestionably, however, a stronger demand on the spot, while the reports that reach us from the outports tend to show that importers are at last enabled to conduct their business on fairly remunerative principles. In London, again, the tone of the market appears healthy, and we notice, as a favorable sign, the absence of disquieting rumors which tended to disorganize trade last autumn.

THE NEWS.

ONTARIO.

—Mr. Henry Powley's saw mill at Trecastle is in full swing.

—A new saw mill is being erected by Mr. Wm. Whalley at Mersea.

—Mr. John Zoeger's saw mill at Newton will be running shortly.

—A young man in Hamilton was severely injured by being caught in a steam saw.

—A large brick planing factory is being erected on Northcote Avenue, Toronto.

—Mr. Wm. Asselstine, Roblin, near Napanee, Ont., is building a new shingle mill.

—Mr. Thomas Whaley, late of Milverton, is now lumbering on an extensive scale in Muskoka.

—Gas lamps have been erected all through the Rathbun Co.'s yards and docks, at Deseronto.

—Mr. Neibergall has closed his mill at Dunlop, and transferred his employees to Sheppardton.

—The celebrated Gilmour-Paradis case is to come up for decision before the Privy Council next spring.

—Daniel Hayes, lumber merchant, Toronto, has assigned with $15,000 liabilities, and showing a surplus of $5,000.

—Fred. Richardson and Wm. Baird, of Trimble's Corners, have gone to northern Michigan to purchase a timber limit.

—The village of St. Arns, near Lowville, will shortly be able to boast a sawmill. Mr. John Readhead is the builder.

—The Jerseyville planing mill, now belonging to Messrs. Weaver & Howell, has been overhauled and placed in thorough working order.

—Mr. Gildersleeve's saw mill which was the chief support of the village of Lake Opincon has shut down and will shortly be removed.

—About 25,000 railway ties from the Rathbun mills, Campbellford, have been landed at Port Covington, Maine, and 45,000 more to follow.

—A number of jobbers are getting out railroad ties up the river near Buckingham. They expect to have a large quantity down for shipment in the spring.

—The Owen Sound Dry Dock Company, Owen Sound, will build during the present winter another 150-foot barge for the Spanish River Lumber Co.

—Mr. David Wallace, of Brantford, has built a saw mill on his farm, Talbot St., Scotland. He intends to do business extensively in this line during the winter.

—Mr. Walter Beatty, Pembroke, whose sash and door factory was recently destroyed by fire, has refused the offer of a $3,000 bonus to assist him in rebuilding the same.

—It is estimated that the cut of white pine square timber in the Ottawa district this winter will reach one and one-half million feet; waney or board six hundred and fifty thousand, and square red pine half a million.

—The failure is announced of Messrs. Joseph Kidd & Sons, of Dublin, who in addition to other extensive business enterprises, operated lumber mills on the North Shore. The firm's liabilites is estimated at $150,000.

—The Rathbun Co., through their Kingston agency alone, have handled off the K. & P. railway 1061 car loads cedar posts, shingles, lumber and railway ties. This would make a train, with engines enough attached to move them, over eight miles long. This material, together with what has arrived from Ottawa and other points, makes 121 vessel loads shipped by this firm from Kingston during 1887.

—Mr. T. F. Hawthorn, of Oshawa recently waited upon the Minister of Customs on behalf of the manufacturers of axes, forks, etc., and argued the necessity of placing white ash lumber, out of which axe handles are made, upon the free list. The ground urged was that a sufficient quantity of this material cannot be procured in Canada. Mr. Bowell promised to lay Mr. Hawthorn's representation before the Minister of Finance on his return from Washington

—In a report just issued by the department of agriculture, Ottawa, regarding the experimental farm, on which all kinds of seeds are put to practical tests, the following statement is made concerning the forestry branch: "Eighty-eight thousand young forest trees and ornamental shrubs have been procured and planted, comprising both evergreen and deciduous sorts, including many native and foreign species. The total number of species and varieties exceeds 500, among which are many never before introduced into Canada. This collection will be largely augmented by the products of the seed beds. It is intended that such sorts as prove hardy shall be propagated for testing in other parts of the Dominion."

—A Montreal dispatch says: Judge Dean, of Victoria, Ont., is here sitting on the commission to take evidence in the action of Michael Babcock against the lumber firm of Smith & Co. Testimony was taken to-day in the case which arises out of the trouble as to the consequences of certain mortgages. Messrs, Seth Smith, of Port Hope; Cassels, Q. C., of Toronto, and Dugal, of Belleville, are counsel in the case.

—John O'Connor, pine land agent, of Chippawa Falls, Wis., agent for T. W. Dobie, of Tilsonberg, Ont., sold to Charles Barker, of Chippawa Falls, a tract of pine land, estimated at from 40,000,000 to 50,000,000 feet, lying in Douglas and Bayfield counties, for $40,000. Eau Claire parties were anxious to obtain the land, and when the sale was nearly completed they served an injunction to prevent it. Mr. O'Connor closed the bargin at once, and Barker paid $20,000 down.

—The Manufacturers Life Insurance Company is called upon to chronicle the first death among its members, in the person of one of its trusted and valued agents, Mr. Andrew Wilson, of the firm of Wilson & Morrison, Peterboro', general agents for Eastern Ontario. Mr. Wilson was the pioneer agent of the Company, his name being on the first contract issued from the office. He carried an insurance of $7,000 in the above, which amount was promptly paid over to his widow a few days after his death.

Among the many commendatory letters which THE LUMBERMAN has received of late, the following extract from a letter received from a well-known Toronto lumberman speaks for itself: "At different times I started to write you regarding the great change you have made in the paper, but being inclined to laziness I, like the Roman of old, put of doing so until a more convenient season. You must surely deserve all the possible patronage which lumbermen can bestow. Your paper is one of which you and all interested in lumber may well be proud. You have raised it to the front rank of trade journals and have placed it high among the ones pertaining to the lumber industry."

—Mr. T. H. Hawthorn, of Oshawa, has been in Ottawa urging the Government to place white ash on the free list. He is representing the A. S. Whiting Manufacturing Co., of Oshawa; the Severn Wheel Manufacturing Company and the Welland Vale Manufacturing Co., of St. Catharines. He says white ash is used for all kinds of handles, shafts and poles, and he considers the companies referred to are making only a reasonable request, on account ot disastrous fires of late years having made white ash very scarce. They do not propose, however, that black and rim ash should be placed on the free list. Mr. Hawthorn, it may be remembered, was in Ottawa last session agitating for an increase duty on axes, and created diversion by depositing a number of Canadian axes on the clerk's table. Messrs. Charlton, Casey, and other members, opposed the increased duty, but when it was demonstrated to them that the Canadian axe was better than the American made article they withdrew their opposition. In doing so Mr. Casey observed to Mr. Hawthorn, "You will not forget us when the proper time comes." Accordingly a fortnight ago, at Christmas time, with the intimation that as they now had axes to grind he hoped they would make good use of them, and sell their chips as Mr. Gladstone does.

NEW BRUNSWICK.

—Provincial lumbermen are yarding logs.

—The Annagenee mills are still running and will not shut down before February.

—About fifteen mills have been built in the province of New Brunswick during the past season.

—On the upper St. John, in New Brunswick, the lumbermen have had sufficient snow for skidding.

—Ramke Bros., of St. Martins, will cut 1,500,000 feet of board timber on the Salmon river this season.

—Citizens who are connected with the coasting trade are jubilant over the loss of the big Joggins raft.

—W. H. Veysey & Son intend building a sawmill at the thoroughfare, between North and Grand lakes, N. B. in the spring.

—The upper St. John, in New Brunswick, is to be dammed above the falls for the purpose of holding lumber till the swinging of the booms in the spring and assisting in driving logs in low water.

—Frank Stetson, of Bangor, Me., has three saw mills on the St. John river, which cut yearly from 35,000,000 to 40,000,000 feet of long lumber, 52,000,000 shingles, and 25,000,000 lath, besides clapboards and box shooks.

—There is at the present time an unusual demand for sleepers in this province, principally owing to extensive railway building in northern and eastern Maine. The Short line contractors are now booming things in the line of cedar posts, 75,000 of which have been called for by one firm.

The fine shingle mill for Miller & Woodman is nearing completion. It is 165 feet long and 80 feet wide. Eight shingles, with clapboard and stave machines and probably a rotary, will form its equipment. The machinery will be placed in position this winter and work will begin in the spring.

The cedar business on the Miramichi promises to be a lively one this winter. Two large contracts are already reported signed, one at Freder[illegible] at Boiestown, by Douglas, of [illegible] paid for sleepers on the Western railroad.

There is great rejoicing in [illegible] cision that the Duren & Hill mills, owned by H. F. [illegible] Sons, are American. [illegible] up the Messrs. Eat[illegible] that the people are indebted for the continuance of an industry the suspension of [illegible] to the town.

MANITOBA AND THE NORTHWEST

-Lumber is being shipped from the Chemaninus saw mill, Vancouver Island, for Austr[illegible]

-Several of the lumber dealers at S[illegible] the supply of lumber received last summer [illegible]

—S. J. Hogg, of S. J. Hogg & Co., lumber dealers, Calgary, a well known business man of the western territor[illegible]

—A large force of men are now in the spruce timber belt of the Riding Mountains, Northern Manitoba. There is sufficient snow for hauling logs.

—Hugh Law, manager for the Selkirk Lumber Co. at Selkirk during the past summer, has taken up his abode in Winnipeg.

—In the far northwest, Moore & McDonald [illegible] mill on the Saskatchewan river, forty miles above [illegible] where they have purchased a timber limit.

—Messrs. Fraser & Co., Edmonton, Man. have sawed 850,000 feet of lumber this season and have about seventy five thousand feet of logs up the river at the present time. They will take out half a million feet this witner.

—W. H. Cushing's planing mill and sash and door factory at Calgary, has been exempted from taxation for the current year, by action of town council. A largely signed petition was presented in favor of a five years exemption.

—The library of the Hastings Sawmill Institute, Vancouver, consisting of 400 volumns of standard works, has been turned over to the Vancouver Reading Rooms. The conditions are that all the members of the former in good standing on the 1st of June last are to become life members of the latter.

—The Assessippi Milling company, owners of a flour mill at Assessippi, Man., have built a saw mill this season, which is now about completed. The mills are located on the Shell river, and are run by water power. The logs come from Duck mountain country, southwestern slope.

—Owing to the death of S. J. Hogg, the lumber business of the firm of S. J. Hogg & Co., of Calgary, will be closed out. The lumber handled was principally from the Royal City mills, of Westminster, B. C., and the Pallieer mills, situated in the mountains.

—A new saw mill will probably be erected where the Manitoba & Northwestern crosses Rirt Tail creek, four miles from Birtle. There is a mill at present at Birtle, but owing to the fact that the lumber has to be hauled a mile up a steep grade to the railway station, the balance is in favor of a new mill at the crossing. The Birtle *Observer* is anxious that some effort should be made to keep the mill inside the corporation.

—It is said that there is every probability of an early advance being made in the price of lumber in the Winnipeg markets, as an outcome of the agreement among the Lake of the Woods lumbermen to form an association. It has already been intimated that an advance has been agreed upon, and an authoritative announcement may be expected soon. It is understood the advance will be $2 per M.

—The Winnipeg *Free Press*, in accordance with its custom, reviews the season's lumber operations in that locality and says: "The past season has been a very good one as regards quantities. Prices, however, have been low, principally because banks and others holding stocks of defunct companies have slaughtered them and thus kept rates down. However, these stocks are pretty nearly exhausted. A large inroad has also been made on the regular dealers' stocks of cut lumber. About the same time last year there were about forty-two million feet of lumber in the country. Now the amount is estimated at twenty-six million feet. The normal aggregate stock is about thirty-six million feet. Under ordinary circumstances the result of this reduction of stocks would be an increased cut of logs, but lumbermen are still somewhat timorous owing to their

losses in the last few years and their present preparations only contemplates a cut about equal to that of last year which was short. In the district about Lake Winnipeg, Brown & Rutherford will take out about 2,000,000 feet; Mather & Co., have a large number of logs which were cut last year and which will now be taken out; Captain Robinson will take out 2,000,000 feet; Jonasson, Frederickson & Walkley, 2,000,000 feet; H. Crowe & Co., and the Selkirk Lumber Co. together 3,000,000 feet; Mr. Meegan has bought about 3,000,000 feet of old logs belonging to the defunct Northwestern Timber Company, which he will get out and saw; Woods & Co. have about 500,000 feet of logs at their mill on the Winnipeg river which they will saw but they have not yet decided whether they will take out any more logs or not this year; D. E. Sprague & Co. have men out prospecting and will not decide upon their operation till these return which will be in about a week's time. In the Lake of the Woods district the cut of logs will be about as follows: Rainy Lake Co., Rat Portage, 10,000,000 feet; Ontario Lumber Co., Norman, 8,000,000; Cameron & Kennedy, Norman, 8,000,000; Dick Banning & Co., Keewatin, 8,000,000; Keewatin, Lumber Co., Keewatin 10,000,000; total 44,000,000 feet. The Ontario & Minnesota Co., get their entire cut from Minnesota; the Keewatin Lumber Co., get 8,000,000 feet in Minnesota and the balance on their own lands on the Lake of the Woods; the other mills are supplied entirely in Canada.

BRITISH COLUMBIA.

—The saw mill at Griffin Lake, Kamloops district, B. C., was sold by the sheriff recently, and purchased by James McIntosh.

—A large quantity of lumber is being shipped by the Moodyville Saw Mill Co., Burrard Inlet, to China, South America and Australia.

—Mr. Chase, of Chicago, has lately been through the mountain district of British Columbia. He owns timber limits east of the Selkirk range of mountains, and contemplates erecting a mill in that region.

—Ottawa valley lumbermen are commencing to look to British Columbia as a field of operations. It has just been announced that Jas. G. Ross and Jas. McLaren, two well known Ottawa lumbermen, are about securing a very extensive timber limit in the Pacific Province. The lands are situated west of Duncan Bay, Sayward district, and comprise over 25,000 acres. This is said to be the largest limit in the province, and would indicate that another large mill will shortly be established on the Pacific coast, thus increasing the already thriving industry in that district. A survey of the property has been made, and that country is described as level and heavily timbered with the famous Douglas fir, or Oregon pine as it is often called. There is also a sprinkling of white pine and cedar, the former a somewhat harder wood than the pine of the east.

QUEBEC.

—Quebec timber merchants are commencing to leave for Europe to push sales in the European markets.

—Mr. T. Selby, East Dunham, is putting machinery into his steam saw mill to make cheese boxes.

—Messrs. Chapman & Drysdale, Lachute, manufacturers of sashes, doors, etc., who recently increased the capacity of their factory, report that they have all the businesss they can handle.

AMERICAN NOTES.

—Reports by the local papers in the Saginaw valley district announce the erection of a vast number of shingle mills and the prospects are good for the largest cut which has been made for years.

—Shingles are so scarce that the prices have stiffened considerable on the Saginaw river. Sales are reported within a short time at $3.65 and $3.75 for XXX, and $2.65 and $2.75 for clear butts.

A telegram from Washington announces that Representative Nelson is to introduce a short tariff bill proposing to put lumber on the free list. Coal, salt and other staples are also included in the list. The same telegram announces that Mr. Nelson will introduce a bill authorizing the Duluth, Rainy Lake & Southwestern railway to build a bridge across the Red river of the North on the boundary line between Marshall and Kittson counties and Dakota. This is the road to be built from Rainy Lake river on the boundary line southwest, and it is not at all improbable that the two propositions are more or less connected. With lumber admited free and the railroad built, the mill men at Rat Portage would have a satisfactory outlet. Mr. Nelson has been the champion of the proposition to throw open the Red Lake reservation, so that the pine on that extensive tract would be brought into competition with Mr. Walker's holdings outside, but thus far this plan has failed. The fate of the bill will be watched by Minnesota lumbermen with interest.

Bring Out Your Money Bags.

Northwestern Lumbermen.

If, at the present session of congress, there is to be any lobbying in favor of free lumber, Canadian timber owners are the men who should be on hand at the capital with their money bags. These timber owners could afford to pay millions of dollars to have our import duty on lumber removed. Canada will be the gainer. Nothing is plainer than that lumber will not go on the free list if the will of the lumber manufacturers be respected. It will be arwued that the lumbermen is selfish in this respect; not more selfish, however, than the polition whose vote will help to decide whether lumber shall, or shall not, be admitted into the states from Canada, free. This week our Puget sound correspondent describes the feeling that exists in Washington territory on the subject. The verdict is against free lumber. The same verdict will be rendered in the south. Not one saw mill man in fifty in the southern states wants free lumber. It is not a party issue—repudlicants and democrats are of the one opinion. They have in view the protection of an industry that is just getting out of its swaddling clothes. Thoroughout the northwest and in the east there are a few lumbermen who are in favor of removing the duty, for the simple season that it will be money in their pockets to have it removed. There are others, and in large number, who insist that free lumber would be of no benefit to the United States, but beyond this they take no stand. Our law makers should understand, before they decide the question, that to remove the duty on lumber would not be helping the "dear people" of their own country one cent's worth, but that it would be a direct contribution, and a heavy one, too, to the Canadian government principally.

QUEBEC TIMBER TRADE.

J. Bell Forsyth & Co.'s Annual Trade Circular.

We have again the pleasure of publishing our annual statements of supply, exports, and stocks wintering, together with prices current, etc., etc.

The increase in arrivals of Ocean Steamships referred to in previous circulars still continues, also the tonnage from the Lower Ports, while in the number of sailing vessels from sea there is a marked falling, off and each year the business of the Port from one cause or another seems to be steadily on the decline. Owing to the very limited production last winter the supply has been unusually small especially of White Pine, and the Cove returns now laid before you show greatly diminished stocks wintering, notwithstanding that the export has fallen far below the average of past years. The accounts from Great Britain are on the whole more encouraging than they have been for a long period; still it must be borne in mind that the consumption of Canadian Woods has been greatly curtailed of late years, owing to the rates at which Pitch Pine and other cheap woods are imported and sold at there.

WHITE PINE.—The supply of both Square and Waney has been exceptionally short, the shipment slightly over that of last year and the quantity wintering exceedingly light. The market opened weak and without buyers last spring, and continued in a very unsatisfactory state during the summer months, the few sales then effected being at low and unremunerative rates. Towards the middle of September an increased demand set in, and from that time to the present higher prices ave been obtained. The greater portion of the stock wintering is in the hands of shippers, a few lots only remaining on manufacturers account. The greatest difficulty is now experienced in obtaining first class wood which is becoming more scarce every year, and the very high prices paid at the Government sale in Ontario last week for Timber Limits must enhance the value of White Pine, especially of choice quality.

WANEY—Has been in better request than square all season, and with a light supply and a shipment below the average the quantity wintering is less by 817,691 feet than it was twelve months ago. The present stock contains a portion of old wood which has been some years in the Coves, a good deal of this quality remaining unsold. Owing to a decidedly better feeling in the market as well as to the certainty of a small production this winter, large sales have recently taken place at our quotations; no fresh timber wintering now remains in first hands.

SQUARE.—The supply this year is perhaps the lowest on record and the stock in the Coves very light. The demand in the United Kingdom is not by any means as great as formerly and with the exception of choice grades for deck-plank and other purposes the consumption of Square Pine has considerably fallen off. The stock on hand is less by 2,277,813 feet than last year and continues about the usual proportion of old and inferior wood quite unsuitable for export. From latest accounts the production this winter will be confined to a few operators only, and a very limited manufacture is looked for. There has been a fair local demand all season, the consumption being equal to former years.

		Supply.	Export.	Stock.
1887	Square	1,168,547	5,127,080	4,294,851 Square.
	Waney	2,060,083		2,449,403 Waney.
1886	Square	3,032,738	4,524,760	6,572,664 Square.
	Waney	3,077,331		3,267,094 Waney.

RED PINE.—There has been rather a better demand for this wood than during the past few years. The supply has been ample, the shipment under the average, and the quantity now on hand very light, though slightly in excess of last season. With the recovery of trade in Ireland we may look for a better demand and heavier export.

	Supply.	Export.	Stock.
1887	591,646	405,720	404,124
1886	273,767	405,520	256,904

OAK—Has also been in much better request during the past three months and commanded higher rates in the early part of the season, when it was very dull of sale. The supply has been a very moderate one, the export close on that of 1886, while the Cove returns show 248,040 feet less than when we last issued our Circular. The quantity at Garden Island and Collins' Bay is unusually small. This winter's production promises to be light, and our highest quotations are now asked.

	Supply.	Export.	Stock.
1887	746,243	1,012,160	748,637
1886	1,039,632	1,051,360	996,713

ELM—The receipts have been trifling, most of this timber in the Supervisor of Cullers' returns having wintered in drams, was estimated in last year's stock. The shipment though light is equal to the previous year, and the wintering stock 404,028 feet less. The enhanced cost of standing timber and the difficulty in procuring it militates against its manufacture, and the production this winter will be on a very limited basis.

	Supply.	Export.	Stock.
1887	221,358	405,040	502,773
1886	399,698	407,120	906,791

ASH.—This wood in supply and export is under the average, but does not receive as much attention as formerly. The stock wintering comprises some old timber, and is slightly under that of last season. The production will be light.

	Supply.	Export.	Stock.
1887	114,282	191,840	287,174
1886	138,485	174,360	321,211

BIRCH—The quantity wintering is almost *nil*, but if prices advance and with a favorable winter, no doubt ample for all requirements will be made.

	Supply.	Export.	Stock.
1887	112,990	192,680	12,935
1886	221,291	236,680	67,336

STAVES.—This branch of our trade, at one time so important, has dwindled down to the shipment of a few thousands—exceedingly low rates of freight from the States having been the chief cause in bringing this about. The stock is a diminutive one.

		Supply.	Export.	Stock.
1887	Pipe	44	220	41
	Puncheon	156	306	33
1886	Pipe	65	151	254
	Puncheon	129	308	159

DEALS—PINE—Our comparative statement shows a considerable decline in the supply and export. We fear this branch of our lumber trade is finding its way through other channels where greater facilities of shipment and cheaper rates of stowage prevail than in our port. The demand during the early months was rather slow, but with the autumn prices stiffened and large transactions have taken place at about our quotations. Most of the "large cuts" have already been disposed of for next season's delivery. The Supply from Michigan will be trifling owing to the improved rates current there for sawn lumber.

	Supply.	Export.	Stock.
1887	1,487,138	1,365,510	670,341
1886	2,578,004	2,271,069	798,713

Do —SPRUCE.—The business done in this article has been considerable, the demand though very slack during the spring and summer months improved towards the autumn, prices have advanced and some large sales are reported at our quotations. At the same time Mill-Owners will do well not to increase on last year's production.

	Supply.	Export.	Stock.
1887	2,301,996	2,399,489	990,591
1886	2,102,883	2,318,335	1,288,084

SAWN LUMBER—Has been in good request, more especially for the higher grades. We quote Pine at $10 to $15 per 1,000 feet b. m. and Spruce at $5.50 to $10.50, according to quality and specification.

Freights have ruled low all season,—Opening at 16s. to 20s. for Timber, and 45s. to 47s. 6d. Deals, closing at 19s. to 20s. Timber, and 40s. Deals.

STOCK OF LUMBER IN THE PORT OF QUEBEC—INCLUDING MERCHANTABLE AND CULLS—ON THE 1st OF DECEMBER, 1887.

COVES.	White Pine Square.	White Pine Waney.	Red Pine.	Oak.	Elm.	Ash.	Birch.	Basswood.	Tamarac, Square.	Black Walnut.	Whitewood and Balm of Gilead.	Butternut.	Maple.	Hickory.	Cherry.	Hemlock.	STAVES. Stand. Mer.	Stand. Cull.	W.O.W.I. Mer.	W.O.W.I. Cull.	Barrel.	Pine Deals. Standard. Mer.	Pine Deals. Standard. Cull.	Spruce Deals Standard. Mer.	Spruce Deals Standard. Cull.	1, 1¼, 1½ and 2 in. Pine and Spruce Plank.	C'ds Lathwood.	White P. Masts.	P. & S. Spars.	Longitudinals (White Pine) B. M.	Hardwood Plank.
Jacques Cartier Mills—E. L. Sewell	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	28,700	6,000	132,000	.....	.....	.....	.....	.....
Lake St. Joseph Mills— do	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	150,000	7,000	450,000	.....	.....	.....	.....	.....
Cap Rouge P. & W. Company	592,092	165,038	106,495	.....	74,134	157	.....	.....	311	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,898	.....	.....	.....	31,817	9	.....	.....	.....	.....
Ring's End—A. H. Falardeau & Co	8,700	6,770	21	96,692	4,080	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New London—O'Connell & Co	110,744	62,200	9,415	7,996	54,157	23,513	.....	.....	321	1,284	2,042	.....	60	436	62	.....	6	6	1	.....	.....	39,951	289	.....	.....	.....	.....	25	.....	.....	.....
Union—M. Stevenson & Co	17,496	365,583	662	128,248	7,134	178	.....	.....	41	.....	.....	.....	.....	208	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sillery—Dobell, Beckett & Co	715,029	296,773	17,448	118,504	27,975	924	.....	22	368	.....	.....	.....	.....	.....	19	87	2	1	22	3	4	26,082	.....	.....	.....	17,000	.....	6	.....	.....	.....
Do Safety & Bridgewater—Sharples Bros	.....	27,000	3,000	.....	17,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75,000	.....	8,000	.....	.....	.....	.....	.....	.....	.....
Do Bowens—Dobell, Beckett & Co	118,281	615	167	122,022	18,175	1,593	.....	.....	.....	825	.....	.....	.....	687	.....	.....	20	6	.....	.....	4	38,921	150	.....	.....	39,558	.....	.....	.....	77,262	.....
St. Michael's—G. E. Humphrey, Jun	191,69	498,898	6,338	82,488	93,370	125,468	936	912	1,970	1,973	3,337	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Woodfield and Spencer—J. Burstall & Co	337,193	337,541	119,085	75,836	38,563	25,813	.....	.....	.....	.....	5,769	619	62	5,535	492	.....	.....	.....	.....	.....	.....	69,861	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wolfe's and Ottawa—John Roche	4,913	82,089	49	.....	18,966	10,567	.....	.....	.....	.....	113	.....	.....	59	.....	.....	.....	.....	.....	.....	.....	7,157	3,711	1,253	.....	52,825	.....	.....	.....	943,000	34,692
Cape and L'Anse des Meres—Hall's Booms	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11,690	.....	.....	.....	.....	.....	15,700	550	3,075	1,000	27,637	.....	63	121	.....	.....
J. H Clint's	.....	.....	.....	.....	.....	.....	4,221	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9,700	53,000	10,650	13,400	2,450,000	.....	.....	.....	.....	.....
Montmorency Mills—Hall Bros. & Co	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11,148	19,744	196,158	31,598	2,809,760	.....	.....	.....	.....	.....
Chaudiere Basin—J. Breakey	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	19,000	6,000	250,000	7,000	1,240,000	.....	.....	.....	.....	55,000
New Liverpool—James Walker	368,081	277,107	87,712	106,727	68,268	8,941	.....	.....	641	5,866	337	28	...	2,816	.....	.....	.....	.....	.....	.....	.....	84,553	278	767	.....	28,264	.....	.....	.....	.....	.....
Etchemin Mills—Quebec Timber Co	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,627	.....	99,421	33,930	1,200,548	.....	.....	.....	.....	.....
Mill Cove—S. J. Bennett	.....	.....	.....	.....	.....	.....	6,232	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	27,887	.....	.....	.....	.....	.....	.....	.....
Hadlow Cove—Price Bros. & Co	33,783	.....	779	24	.....	.....	1,546	.....	64	8,513	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	26,816	.....	11,795	.....	50,307	.....	.....	.....	.....	.....
St. Lawrence W. Dock & W. Co	1,763,417	288,913	46,727	49	343	56,266	.....	1,154	4,279	.....	.....	274	.....	.....	.....	.....	.....	.....	.....	.....	.....	21,500	1,750	45,000	1,250	25,000	.....	.....	.....	.....	.....
Quebec Warehouse Co	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	128,985	1,370	50,115	6,258	82,967	.....	.....	.....	.....	1,948
Indian Cove (West)—J. S. Murphy & Co	33,134	40,876	6,226	10,087	80,608	33,754	.....	.....	.....	39	1,719	791	44	1,664	1,947	.....	.....	.....	.....	.....	.....	3,658	1,933	334	.....	10,680	.....	.....	.....	.....	.....
Total	4,294,851	2,449,403	404,124	748,673	502,773	287,174	12,935	2,088	7,995	18,500	13,317	1,622	166	11,405	2,520	11,777	28	13	30	3	8	581,557	88,784	883,155	107,436	8,648,363	9	94	121	1,020,202	91,640

COMPARATIVE STATEMENT OF THE SUPPLY, EXPORT AND STOCK OF LUMBER, To the 1st of December, for the years 1883, 1884, 1885, 1886 and 1887, respectively—with averages for the same period, and five years preceding.

ARTICLES.	SUPPLY. From Returns from Supervisor and others, for years ending 1st December. 1883.	1884.	1885.	1886.	1887.	Average of 5 years' Supply. '78 to '82.	'83 to '87.	EXPORT, From Customs' Returns for years ending 1st December. 1883.	1884.	1885.	1886.	1887.	Average of 5 years' Export. '78 to '82.	'83 to '87.	TOTAL STOCK, INCLUDING MERCHANTABLE AND CULLS, On the 1st December 1883.	1884.	1885.	1886.	1887.	Average of 5 years' Stock. '78 to '82.	'83 to '87.
TIMBER.																					
Oak ..... Feet.	1,916,322	772,260	1,566,968	1,039,632	746,243	1,690,730	1,208,285	2,132,880	1,212,520	1,526,400	1,051,360	1,012,160	1,903,176	1,387,064	1,203,347	837,715	1,078,051	906,713	748,673	1,432,400	972,000
Elm ..... do	309,531	657,919	1,018,932	399,698	221,358	638,723	521,487	739,920	658,000	884,160	407,120	405,040	744,224	618,848	87,424	114,961	500,453	900,701	502,773	450,483	434,840
Ash ..... do	263,448	451,984	287,595	138,485	114,282	204,561	251,159	346,320	360,080	262,480	174,360	191,840	251,720	267,016	135,228	339,358	428,635	321,211	287,174	255,058	302,321
Birch ..... do	132,624	194,346	379,059	221,291	112,990	251,326	208,062	233,040	241,120	457,160	236,680	192,680	289,128	272,136	6,629	23,028	22,138	67,330	12,935	90,804	20,413
Tamarac ..... do	37,736	19,289	3,622	6,864	5,733	29,202	14,649	.....	.....	.....	.....	.....	.....	.....	208	.....	5,250	12,658	11,948	13,984	7,995	79,582	10,367
White Pine—																					
Square ..... do	7,412,034	3,707,159	2,820,045	3,032,738	1,168,547	5,750,986	3,628,104	10,427,000	6,047,680	6,758,240	4,524,760	5,127,080	8,403,232	6,576,952	7,780,620	7,501,520	6,651,604	6,572,604	4,204,851	8,001,732	6,500,253
Waney ..... do	3,786,523	2,199,867	2,876,753	3,077,331	2,060,083	2,374,836	2,800,111								2,758,840	2,300,001	2,588,003	3,207,004	2,440,403	2,213,000	2,002,588
Red Pine ..... do	498,111	327,735	73,766	273,767	591,646	1,315,602	353,005	1,048,960	614,280	644,160	405,520	405,720	1,088,704	623,728	1,510,025	1,012,426	473,130	256,004	404,124	1,854,837	731,503
STAVES.																					
Standard ..... Mille.	680	94	144	65	44	332	205	594	183	152	151	220	516	251	470	379	349	254	41	415	298
Puncheon ..... do	663	261	186	129	156	664	279								805	474	310	159	33	738	356
Barrel ..... do	116	10	209	19	15	19	74	933	700	469	308	306	874	543	65	10	55	31	8	16	34
DEALS																					
Pine ..... Standard.	3,228,622	2,247,240	2,666,240	2,578,004	1,487,138	4,227,697	2,441,449	3,993,072	2,422,946	2,376,737	2,271,069	1,365,510	4,148,670	2,480,807	1,543,350	847,053	955,048	708,713	670,341	2,420,783	963,143
Spruce ..... do	3,569,440	2,222,557	2,535,324	2,102,883	2,301,996	2,816,273	2,546,440	2,729,635	2,636,465	2,473,529	2,218,335	2,299,489	2,965,388	2,511,490	1,752,725	838,817	822,032	1,288,084	990,591	860,192	1,138,570
LATHWOOD.																					
Red Pine & Hemlock ..... Cords.	328	290	72	50	28	556	153	353	145	125	72	38	694	146	20	136	67	24	9	232	51

ARRIVALS AND TONNAGE at the Port of Quebec for the years:

1883.	1884.	1885.	1886.	1887.
SAILING VESSELS FROM SEA.				
Vessels. 627	499	502	432	393
Tons. 504,962	380,147	382,826	331,568	295,921
OCEAN STEAMSHIPS.				
Steamships. 269	240	242	285	287
Tons. 451,509	427,834	445,522	528,950	541,324
LOWER PROVINCES.				
Vessels. 355	335	315	348	425
Tons. 144,523	129,756	131,121	145,189	193,136

COMPARATIVE STATEMENT of Sailing Vessels cleared at the Port of Quebec, for Sea, (Lumber Laden,) 1877 to 1887, from the opening to the close of navigation, compiled by Mr. F. Johnston, Quebec Exchange.

	Vessels.	Tons.
1877	796	670,627
1878	476	399,831
1879	433	364,623
1880	634	524,451
1881	459	385,481
1882	426	380,186
1883	487	359,925
1884	366	416,164
1885	359	294,750
1886	325	250,625
1887	271	206,172

J. BELL FORSYTH & CO.'S PRICES CURRENT OF TIMBER, DEALS, ETC.

WHITE PINE,	in the Raft, inferior and ordinary, according to average, measured off			$0 16 @ 0 18
	for Fair average quality	do	do	do	0 19 @ 0 22
	for Good and Good Fair average,	do	do	do	0 23 @ 0 26
	for Superior,	do	do	do	0 26 @ 0 28
	In shipping order,	do	do		0 24 @ 0 28
	Waney board, 18 to 19 inch,	do	do	measured off	0 31 @ 0 34
	do 19 to 21 "	do	do	do	0 34 @ 0 36
RED PINE,	in the Raft, measured off, according to average and quality				0 16 @ 0 18
	In Shipping order, 35 to 45 feet	do	do		0 20 @ 0 27
OAK, Canada,	by the Dram, according to average and quality				0 42 @ 0 45
Do	Michigan and Ohio, do	do	do	do	0 47 @ 0 48
ELM,	by the dram	do	do	45 to 50 feet	0 27 @ 0 32
	do	do	do	30 to 35 "	0 25 @ 0 [illegible]
ASH,	14 inches and up	do	do		0 27 @ 0 [illegible]
BIRCH,	16 inch average,	do	do		0 20 @ 0 [illegible]
TAMARAC,	Square, according to size and quality				[illegible]
	Flatted,	do	do		[illegible]
STAVES,	Merchantable Pipe, according to quality and specification				[illegible]
Do	W. O. Puncheon, Merchantable,	do			[illegible]
DEALS,	Bright, Mill Specification				[illegible]
Do	do Michigan				[illegible]
Do	do do Spruce do				[illegible]

N. B. Parties in England will bear in mind, that the measurement in the Raft requires the pine to undergo great expense in dressing, butting, and at times heavy loss for culls. If sold in shipping order, the expense of shipping only to be added.

NEW BRUNSWICK.

The Lumber and Timber Export Trade of the Province for 1887.

There has been a very considerable falling off in the lumber and timber export trade of New Brunswick for 1887 as compared with previous years. A comparison of last year's shipment of deals from St. John to the trans-Atlantic ports with that of 1886 shows a decrease of ten million feet. As compared with the export of 1885 the falling off amounts to twenty-eight million feet. According to J. B. Snowball's Miramichi Wood Trade circular the lumber exports for the province have decreased about 26,000,000 sup. feet as against those of last year. The season's shipments of square timber were about one-half those of 1886. The circular also notes the circumstance that for the first time the United States has taken the larger portion of the wood product shipped from St. John. Of a total of 300,000,000 superficial feet in round numbers for the year ending September 30th, 1887, 170,000,000 went over the lines and only 130,000,000 to Europe and elsewhere. The same feature is noticeable with regard to wood products from other parts of the province. Prices have ruled low in the European market and the trade has declined owing to its being unremunerative. There are indications of a better feeling in the near future. The stock of woods, manufactured and unmanufactured, being wintered is estimated at 25,000,000 sup. feet. The season's production is on a very restricted scale, and while it cannot possibly exceed that of last year may possibly be much less should the remainder of the season prove unfavorable. Many operators have retired from the business. The extent of the total lumber shipments of New Brunswick in 1886 as compared with 1887, were as follows:

Ports.	No. Vessels.	Tons.	Sup. ft. deals, etc.	Tons timber.
1886.				
Miramichi	144	85,205	72,103,391	1,784
St. John	201	161,221	138,934,392	11,667
Bathurst	31	18,469	16,392,183	
Dalhousie	39	21,454	18,205,895	1,154
Richibucto	33	14,119	13,119,800	
Shediac	18	7,535	7,130,360	
Cocagne				
Caraquet	1	1,197	1,004,377	
Sackville	22	9,884	9,421,000	
Totals	489	319,084	276,320,398	14,605
1887.				
Miramichi	126	75,548	68,121,629	157
St. John	155	136,107	118,450,590	6,784
Bathurst	29	15,676	13,589,769	
Dalhousie	41	20,976	18,059,828	928
Richibucto	37	15,956	14,751,000	
Shediac	20	8,769	8,122,882	
Cocagne	2	595	635,530	
Caraquet		Included in Bathurst.		
Sackville	19	8,393	8,555,000	
Totals	429	282,020	250,286,278	7,869

ST. JOHN SHIPMENTS.

The following statement gives a comparison of the export trade in lumber from the port of St. John for 1887 with that of 1886.

Year.	Port.	No. of ves'ls.	Tons.	Deals, etc. sup. ft.
'87	Liverpool	42	57,941	50,645,485
'86	"	55	62,638	51,768,613
'87	London	6	6,934	2,237,474
'86	"	4	4,163	1,739,566
'87	British Channel	31	25,694	23,355,406
'86	"	33	28,588	25,872,450
'87	Continent	6	3,084	3,376,307
'86	"	11	5,958	5,501,517
'87	Africa	1	506	493,444
'86	"	4	2,758	2,586,176
'87	Avonmouth	..	....	.....
'86	"	1	1,183	1,042,445
'87	Arklow	1	267	273,816
'86	"	..	....	.....
'87	Barrow	4	5,667	5,543,483
'86	"	6	5,773	5,490,862
'87	Belfast	6	5,612	5,283,638
'86	"	5	4,810	4,338,776
'87	Ballyshannon	1	204	198,856
'86	"	..	....	....
'87	Bantry	1	429	482,129
'86	"	1	428	482,129
'87	Carnarvon	2	1,568	681,596
'86	"	1	595	116,944
'87	Clonakilty	1	288	316,975
'86	"	1	270	237,752
'87	Clare Castle	..	....	....
'86	"	1	395	365,402
'87	Conway	1	325	308,587
'86	"	..	....	....
'87	Cork	7	4,255	4,028,541
'86	"	8	4,576	4,471,189
'87	Coleraine	2	680	741,956
'86	"	2	565	603,773
'87	Crookhaven	1	313	375,196
'86	"	1	638	586,149
'87	Drogheda	1	281	345,960
'86	"	1	314	341,793
'87	Dundalk	4	1,520	1,763,056
'86	"	4	1,365	1,592,756
'87	Dungarvon	..	....	....
'86	"	1	196	210,431
'87	Dublin	6	4,115	3,888,852
'86	"	7	4,876	4,540,702
'87	Fleetwood	7	6,501	5,053,433
'86	"	8	5,399	4,493,001
'87	Foynes	..	....	....
'86	"	1	450	348,204
'87	Garston Dock	1	686	695,580
'86	"	..	....	....
'87	Galway	2	859	931,269
'86	"	3	1,460	1,439,136
'87	Glasgow	4	2,373	2,552,997
'86	"	2	1,262	772,318
'87	Hare Island	..	....	....
'86	"	1	395	372,812
'87	Limerick	2	1,293	1,219,652
'86	"	4	2,518	2,288,125
'87	Llanelly	3	971	921,074
'86	"	2	765	708,208
'87	Londonderry	3	2,106	1,880,768
'86	"	6	3,841	3,549,454
'87	Mersey River	3	2,071	1,902,959
'86	"	..	....	....
'87	Milford Haven	..	....	....
'86	"	1	314	246,765
'87	Newry	1	348	393,209
'86	"	2	385	915,366
'87	Queenstown	3	1,735	1,565,743
'86	"	5	4,128	3,762,880
'87	Sligo	1	331	513,854
'86	"	3	996	1,098,212
'87	Tralee	2	613	699,304
'86	"	3	1,211	1,220,243
'87	Waterford	..	....	....
'86	"	1	406	406,041
'87	Westport	1	220	231,109
'86	"	1	192	210,666
'87	Wexford	1	411	339,039
'86	"	1	348	397,484
'87	Youghal	1	375	305,564
'86	"	..	....	....
'87	Las Palmas	3	1,056	819,078
'86	"			
	Total, 1887	162	142,032	124,361,389
	Total, 1886	191	154,659	134,123,207
'87	A. Gibson	87	90,349	81,088,611
'86	do	54	54,160	48,674,319
'87	W. M. Mackey	45	35,311	29,565,430
'86	do	46	33,429	26,458,213
'87	George McKean	16	9,255	8,238,207
'86	do	22	12,910	11,231,579
'87	Knight & Co.	4	5,370	2,160,323
'86	do	3	1,501	1,375,538
'87	A. Cushing	3	1,056	819,078
'86	do	..	....	....
'87	McLachlan & Wilson	2	1,568	681,596
'86	do	..	....	....
'87	R. A. & J. Steward	1	599	500,726
'86	do	41	32,240	29,619,139
'87	W. M. P. McLachlan	1	506	493,444
'86	do	..	....	....
'87	N. B. Trading Co	1	532	308,587
'86	do	..	....	....
'87	C. McLauchlan & Sons	1	325	492,529
'86	do	..	....	....
'87	S. Schofield	1	1,161	42,858
'86	do	9	5,114	3,017,016
'87	Guy, Bevan & Co			
'86	do	15	14,851	13,342,755
'87	Chas. Hamilton & Co.	..	....	....
'86	do	1	385	334,618
	Total, 1887	162	142,032	124,361,389
	Total, 1886	191	154,659	134,123,207

The export of timber also shows a decline, as will be seen by the following figures:

	1887		1886	
	Tons birch	Tons pine	Tons birch	Tons pine
Liverpool	4,240	683	5,950	2,322
Continent	....	....	11	....
Avonmouth	....	....	....	76
Carnarvon	957	....	506	....
Dublin	....	....	125	....
Fleetwood	....	904	400	706
Glasgow	....	....	512	9
Wexford	....	....	8	....
Total	5,197	1,587	7,512	3,113

	1887.		1886.	
	Tons birch	Tons pine	Tons birch	Tons pine
W. M. Mackay	3,360	1,586	4,172	2,827
A. Gibson	880	1	1,056	8
M'Lachlan & Wilson	957	....	....	....
S. Schofield	....	....	2,265	202
Geo. McKean	....	....	8	....
R. A. & J. Stewart	....	....	11	76
Total	5,197	1,587	7,512	3,113

DISTRIBUTION, BY PORTS, OF MIRAMICHI SHIPMENTS.

GREAT BRITAIN.

Port.	No. ves'ls.	Tons.	Sup. ft. deals, scantling, ends and boards.
Barrow	1	454	421,370
Birkenhead	1	584	514,961
Bowling	1	405	381,176
Cardiff	6	4,038	3,763,674
Fleetwood	1	551	520,166
Garston	6	4,236	3,032,167
Glasgow	1	537	452,079
Glasson Dock	1	584	539,022
Liverpool	9	5,590	4,765,114
London	5	2,932	2,670,418
Mersey	6	4,678	4,381,521
Mumbles	4	2,970	2,258,804
Maryport	1	454	429,531
Newport	2	1,057	980,838
Penarth Roads	4	2,185	1,997,987
Plymouth	1	609	664,032
Sharpness	6	4,796	4,537,654
Swansea	1	645	587,540
Silloth Eock	1	445	426,731
Whitehaven	2	932	901,064
Totals	60	38,682	34,234,849

ITALY.

Genoa	2	1,017	918,414
Naples	1	496	426,173
Totals	3	1,513	1,344,587

IRELAND.

Belfast	21	13,175	12,737,868
Dublin	12	7,553	6,877,587
Dundrum	1	238	246,876
Kinmore	1	281	333,843
Larne	4	1,724	1,702,329
Limerick	3	1,740	1,483,540
Londonderry	2	1,142	1,041,884
Totals	44	25,853	24,423,927

AFRICA.

Bougie	1	438	453,923
Oran	3	1,087	920,022
Totals	4	1,525	1,373,945

FRANCE.

Bordeaux	2	724	718,467
Cette	2	1,109	1,018,078
LaRochelle	1	624	556,406
Marseilles	8	3,995	3,252,107
Rochefort	1	880	660,376
Totals	14	7,332	6,205,434

SPAIN.

Carthagena	1	643	538,887

SHIPPERS FROM PORT OF MIRAMICHI, SEASON OF 1887.

Shippers.	No. ves'ls.	Tons.	Sup. ft. deals, scantling, ends and boards.
J. B. Snowball	43	24,854	21,681,392
Wm. Richards	19	12,268	11,363,836
D. & J. Ritchie	19	10,857	10,237,569
N. B. Trading Co.	19	10,687	8,928,163
E. Hutchinson	13	8,097	7,760,926
G. Burchill & Sons	5	3,207	3,068,000
W. M. Mackay	4	3,138	2,877,200
G. K. McLeod	2	1,066	967,500
Geo. McKeen	1	686	687,043
A. Morrison	1	598	520,000
Totals	126	75,548	68,121,629

Country.	No. ves'ls.	Tons	Sup. ft. deals, scantling, ends and boards.
Great Britain	60	38,682	34,234,849
Ireland	44	25,853	24,423,927
France	14	7,332	6,205,434
Africa	4	1,525	1,373,955
Spain	1	643	538,887
Italy	3	1,513	1,344,587
Totals	126	75,548	68,121,629

OTHER N. B. SHIPPERS.

DALHOUSIE (INCLUDING OUT-PORT OF CAMPBELLTON.)

Shippers.	No. ves'ls.	Tons.	Sup. ft. deals, scantling, ends and boards.
Geo. Moffatt & Co.	11	6,110	5,336,000
Henry O'Leary	11	6,036	4,672,147
N. B. Trading Co.	3	1,971	1,828,000
W. M. Mackay	3	1,691	1,659,636
J. P. Mowat	3	1,238	910,879
Wm. Richards	2	1,058	960,802
King Bros.	2	1,026	1,019,000
John McNair	3	825	720,000
S. D. Sowerby	1	622	543,364
Geo. Dutch	2	399	410,000
Totals	41	20,976	18,059,828

SACKVILLE.

E. C. Gooden	5	2,164	2,119,000
Copp Bros	4	1,794	1,739,000
Geo. McKeen	3	1,692	1,909,000
Joseph Read	3	1,235	1,208,000
J. L. Black	3	1,045	1,002,000
M. Wood & Sons	1	463	518,000
Totals	19	8,303	8,555,000

COCAGNE.

W. M. Mackay	2	595	635,580

RICHIBUCTO (INCLUDING BUCTOUCHE)			
Geo. K. McLeod	18	7,271	6,566,000
Ed. Walker	7	2,523	2,450,000
J. & T. Jardine	4	3,194	2,947,000
J. B. Wright	4	1,297	1,236,000
Henry O'Leary	2	628	527,000
B. O'Leary	1	743	695,000
J. & W. Brait	1	300	330,000
Totals	37	15,956	14,751,000
SHEDIAC.			
Geo. McKean	8	3,314	3,180,114
J. L. Black	6	2,512	2,266,036
W. M. Mackay	5	2,330	2,230,438
E. J. Smith	1	613	446,293
Totals	20	8,769	8,112,882
BATHURST.			
K. F Burns & Co	19	9,421	8,043,769
N. B. Trading Co	10	6,255	5,546,000
Totals	29	15,676	13,589,769

NOVA SCOTIA.

Owing to the same causes which have so seriously affected the lumber and timber export trade in New Brunswick the shipments of forest products from Nova Scotia for 1887 as compared with those of 1886 manifest a falling off of about four million and a quarter superficial feet. The outlook cannot be regarded as satisfactory unless on the principle of the old adage that when things are at the worst they begin to mend. There is feeling that prices abroad are likely to look up shortly and that the export trade may be expected to improve in consequence.

SHIPMENTS FROM NOVA SCOTIA, 1887.

Ports.	No. of ves'ls.	Tons.	Sup. ft. deals, etc.
Amherst	34	16,538	11,454,300
Annapolis	1	908	54,000
Guysborough	2	730	56,500
Halifax	57	26,488	23,247,877
Jeddore	1	236	235,809
Jordan River	1	342	306,637
Liscomb	5	2,487	2,245,906
Moose River	2	625	550,000
Pictou	7	3,799	1,851,920
Parrsboro	53	34,900	31,681,475
Port Medway	2	878	825,064
Sheet Harbor	14	6,264	5,726,099
Ship Harbor	2	975	878,716
St. Margaret's Bay	3	1,290	1,221,637
St. Mary's	2	656	605,389
Yarmouth	5	2,215	2,018,260
Totals	191	99,331	82,959,589

COMPARATIVE STATEMENT FOR THE YEARS 1882-1887.

The shipments of deals from Nova Scotia to Trans-Atlantic Ports

1882	were	85,752,000
1883	"	77,918,000
1884	"	69,159,000
1885	"	79,647,765
1886	"	87,280,125
1887	"	82,959,589

TRADE REVIEW.

Toronto, Ont.

TORONTO, FEB. 6th, 1888.

CAR OR CARGO LOTS.

1¼ and thicker clear picks, American inspection	$34 00@35 00
1¼ and thicker, three uppers, American inspection	40 00
1¼ and thicker, pickings, American inspection	30 00
1x10 & 12 dressing and better	20 00 22 00
1x10 & 12 mill run	15 00 16 00
1x10 & 12 dressing	14 00 16 00
1x10 & 12 common	12 00 13 00
1x10 & 12 spruce culls	10 00 11 00
1x10 & 12 maple culls	9 00
1 inch clear and picks	24 00 26 00
1 inch dressing and better	18 00 20 00
1 inch siding mill run	13 00 15 00
1 inch siding common	12 00 13 00
1 inch siding ship culls	10 00 11 00
1 inch siding mill culls	8 00 9 00
Cull scantling	8 00 9 00
1½ and thicker cutting up plank	22 00 25 00
1 inch strips 4in to 8in mill run	14 00 15 00
1 inch strips, common	11 00 12 00
1¼ inch flooring	14 00
1½ inch flooring	14 00 15 00
XXX shingles, sawn	2 40 2 50
XX shingles, sawn	1 40 1 50
Lath, Sawn	1 80

YARD QUOTATIONS.

Mill cull boards & scantling	$10 00	Dressing stocks	14 00@15 00
Shipping cull boards, pro-		Picks Am. inspection	30 00
miscuous widths	12 00	Three uppers, Am. inspect.	40 00
stocks	13 00	B. M.	
Scantling & joist, up to 16 ft	13 00	1½-in. flooring, dres'd	25 00 30 00
" " 18 ft	14 00	1½ " " rough	14 00 15 00
" " 20 ft	15 00	1¼ " " dres'd	23 00 25 00
" " 22 ft	16 00	" " undres'd	14 00
" " 24 ft	17 00	" " dres'd	16 00 20 00
" " 26 ft	18 00	" " undres'd	12 00 14 00
" " 28 ft	19 00	Beaded sheeting, dress-	
" " 30 ft	20 00	ed	18 00 20 00
" " 32 ft	21 00	Clapboarding, dres'd	12 50
" " 34 ft	22 50	XXX sawn shingles per M	2 75 2 90
" " 36 ft	24 00	Sawn Lath	2 25
" " 38 ft	27 00	Red oak	20 00 25 00
" 40 to 44 ft	30 00	White "	25 00 30 00
Cutting up planks 1¼ and		Basswood, No. 1 & 2	18 00 20 00
2 x 6	25 00	Cherry, No. 1 & 2	50 00 60 00
board	18 00	20 00 White ash, 1 & 2	25 00 30 00
		Black ash, 1 & 2	20 00 25 00

Montreal, Que.

MONTREAL, FEB. 4th, 1888.

Pine, 1st qual'y per M	$38 00	40 00	Basswood, run of log
Pine, 2nd " "	28 00	30 00	culls out per M	$18 00
Pine, shipping culls per M	14 00	16 00	Oak, per M	40 00
Pine, 4th quality deals per M	10 00	12 00	Walnut, per M	60 00 100 00
Pine, mill culls, per M	8 00	10 00	Cherry, per M	80 00 100 00
Spruce, per M	10 00	13 00	Butternut, per M	35 00 40 00
Hemlock, per M	9 00	10 00	Butternut, per M	35 00 40 00
Ash, run of log culls out per M	20 00	25 00	Birch, per M	20 00 25 00
			Hard Maple, per M	25 00
			Lath, per M	1 50
			Shingles, 1st, per M	2 00
			Shingles, 2nd, per M	1 00 2 00

Ottawa, Ont.

OTTAWA, FEB. 5th, 1888.

Dimensions, Inches.	*Per M.*
Mill culls	
"	$8.00
"	
" selected 16 ft. long, above dimensions	8.50 to 9.00
Cull strips, 1 in. thick, 5 to 7 wide	7.00 to 8.00
Mill cut outs	4.00 to 5.00
Scantling	12.00
" culls	7.00
Laths	1.25
Stock shorts, 12 x 1	10.00
1 inch siding outs, 1¼, 1½, 2	15.00
" outs from shorts, 1¼, 1½, 2	6.50 to 7.00
Outs from stocks	10.00 to 12.00
Shingles, X	1.25
" XX	2.
" XXX	3.00
" cedar, No. 1	2.00 to 2.75
" cedar, culls	1.25
Difference in planed lumber, in waste and planing	5.00
Ditto, on average good stock	20.00 to 25.00

Hamilton, Ont.

HAMILTON, FEB. 6th, 1888.

Mill cull boards and scantlings	$ 9 00@10 00	Dressing stocks	$ 6 00 18 00
Shipping cull boards, promiscuous widths.	10 00 12 00	1¼ flooring, rough	16 00 18 00
Shipping cull stocks.	13 00	1½ flooring, rough	16 00 18 00
Scantling and joist up to 6 feet	13 00	1¼ flooring, dressed	25 00
do up to 18 feet	13 50	1½ flooring, dressed	32 00
do up to 20 feet	14 00	1 " flooring, dressed	23 00
do up to 22 feet	15 00	Beaded sheeting 1	28 00 30 00
do up to 24 feet	16 00	Picks, Am. inspection	30 00
do up to 26 feet	17 00	Three uppers Am. In.	40 00
do up to 28 feet	18 00	XXX sawn shingles	2 60 2 70
do up to 30 feet	20 00	Sawn Lath	2 25
Cutting up plank 1¼ and thicker, dry	20 00 25 00	Red Oak	20 00 25 00
Cutting up boards	20 00	White Oak	25 00 30 00
		Basswood No. 1. & 2.	18 00 20 00
		Cherry No. 1 & 2	50 00 60 00
		White Ash No. 1 & 2.	25 00 30 00
		Black Ash, No. 1 & 2.	20 00 25 00

Goderich, Ont.

GODERICH, FEB. 7th, 1888.

PRICES IN CAR LOTS.

1 inch Mill Culls	$8 00@ 8 50
1x6-8-10 & 12, common	12 00
1x6-8-10 & 12, dressing	16 00
1x14, and wider, common	12 00
1x14, " " dressing	16 00
1¼ dressing	16 00
1½ "	16 00
1¼ Norway pine flooring	14 00
1½ " " "	14 00
1 inch clear and picks	26 00
1 inch clear and picks 4 to 8 inch	25 00
1¼ and 1½ clear and picks	35 00
Lath 1½x4 feet	1 85

Saginaw Valley.

SAGINAW, FEB. 4th, 1888.

CARGO LOTS.

Uppers	36 00@38 00	Norway	9 00 10 50
Common	15 00 20 00	Box	10 00 10 50
Shipping Culls	8 00 10 50	Straight measure	12 00 23 00
Mill Culls	6 00		

YARD QUOTATIONS—CAR LOTS DRY.

Drop Siding.

Clear, ⅞ in	44 00@46 00	C, ⅞ in	30 00
A	38 00 41 00	D	19 00
B	36 00		

Flooring and Siding—Dressed.

Flooring, clear, d & m	46 00	Siding, clear, ½ in.	22 00
No. 1	31 00	A	20 00
No. 2	30 00	B	17 00
No. 3	20 00	C	14 00
No. 4	13 00	D	12 00

Finishing Lumber—Rough.

Three uppers, 1 in.	43 00@45 00	Fine common, 1 in.	28 00 31 00
1¼ & 1½	44 00 46 00	1¼ & 2 in.	32 00
Selects, 1 in.	35 00 36 00	C, 7, 8 & 9 in.	25 00
1¼ & 2 in.	36 00	Base, 2 to 9 in. No. 1	40 00
		No. 2	30 00
		No. 3	20 00
		Coffin boards 16 in. and over	16 00

Joist, Scantling and Timber.

12 to 18 feet	10 00	22 feet	12 00
20 feet	11 00	24 feet	13 00

Plank and timber, 12 inches wide, $1 extra.

Wide Select and Common—Rough.

C (No. 1 com.) 13in. and up 28 00 D (common) 14 in. and up 16 00

Lath, Shingles and Pickets.

Lath, No. 1	1 40	Country brands XXX	3 25 3 35
Lath No. 1	1 25	Clear butts	2 25 2 35
Shingles, river brands		P'kts, 2 to 2½ in rough	12 00 13 00
XXX	3 40@ 3 50	Dressed	20 00
Clear butts	2 40 2 50	1¼ in. square, dressed	14 00 19 00

St. John, N. B.

ST. JOHN, FEB. 5th, 1888.

Deals, Boards, Scantling, etc

Spruce deals	$12 00	Pine "	12 00@50 00
Pine "	15 00	Oak "	40 00
Deal ends	6 00	Ash "	15 00@25 00
Scantling	10 00	Hemlock "	7 50
Spruce boards	12		

Spruce.

Spruce, extra	$3 50	No. 1	1 25
" clear	3 00	Pine	1 25
No. 1 extra	2 2		

Clapboards

Pine, extra	50 00	Spruce, extra	25 00
" clears	45 00	" clears	23 00
2d clears	35 00	" No. 1	15 00
		" No. 2	10 00

Flooring, Dressed

6 in., No. 1	12 00	4 in., No. 1	12 00
" No. 2	10 00	" No. 2	10 00

Miscellaneous

Staves	3 00@ 4 50	Laths	1 80
Heading, 17 in. per pr.	04	Pickets	6 50@15 00
" 18 in. "	04½ 05½	Railway ties	15
" 22 in. "	04½		

Buffalo and Tonawanda, N. Y.

TONAWANDA, FEB. 6th, 1888.

Norway Pine—Boards.

No. 1, 1 & 1¼ in.	19 00@20 00	Stocks No. 1, 1 & 1¼ in	21 00
No. 2, 1 & 1¼ in.	15 00 15 50	No. 2, 1 & 1¼ in.	17 00
No. 3, 1 & 1¼ in.	11 50 12 00	No. 3, 1 & 1¼ in.	12 00
		2x12	18 00 20 00

Uppers, 1 in.			
1¼, 1½ and 2 in.			
2½, 3 and 4 in.			
Selects, 1 in.	39 00	40	
1¼, 1½ and 2 in.	39 00	40	
2½, 3 and 4 in.	45 00	50	
Cuts, No. 1, 1 in.	25 00	28	
1¼, 1½ and 2 in.	32 00	33	
2½, 3 and 4 in		40	
No. 2, 1 in.		17	
1¼, 1½ and 2 in.		22	
Moulding, 1 in.		28	
1¼, 1½ and 2 in.	28 00	32 00	1x12
Siding strips, 1 in.		38 00	B stocks, 1x6 to 16
			C stocks, 1x6 to 16

Dressed Lumber.

	No. 1.	No. 2.	No. 3
Base and Casing under 6 inches	$33 00	$23 00	$16 00
Base and Casing, 6 inches	34 00	25 00	17 00
Base and Casing, 6, 7 and 8 inches	40 00	28 00	18 00
Flooring, 1 and 1¼ inches, 2½ to 5 in. wide	30 00	20 00	15 00
Ceiling, ⅞ in., 2½ to 5 inches wide	33 00	23 00	16 00
Ceiling, ⅝ in., 2½ to 5 inches wide	28 00	22 00	14 00
Ceiling, ½ in., 2½ to 5 inches wide	24 00	18 00	13 00
Philadelphia Fencing	39 00	30 00	21 00
Bevel Siding, 6 inches	23 00	21 00	11 00
Bevel Siding, 5 inches	23 50	21 00	17 00
Novelty Siding, 6 inches and over	40 00	23 00	16 00

Shingles and Lath.

Shingles, 18 in. XXX	3 85@ 3 90	Lath, pine No. 1	2 10 2 15
XX	2 85 2 90	No. 2	1 70
X	1 25	Norway	1 60
Shingles, 16 in. XXX	3 00	Hemlock	1 60
XX	2 10		
X	90		

Burlington, Vt.

BURLINGTON, FEB. 4th, 1888.

Canada Pine Sidings—1x8 in. and up, 12 to 16 ft. d 2 or 4 s.

Select & shelving	$46 00	Finish	$38 00
Pickings	37 00	Dressing	28 00
Pickings & better	40 00@42 00	Common	20 00@21 00

Canada Pine Stacks—1x10 in., 12 to 16 ft., d 2 or 4 s.

Selects (clear)	55 00	Pickings & better	40 00
1st shelving	42 00	As run, common out	28 00@30 00
2nd	39 00	No. 1 barn boards	25 00
3rd	30 00	Common	21 00
Pickings	38 00		

Canada Pine Stock—1x12 in. 12 to 16 ft. d 2 or 4 s.

Selects (clear)	57 00	Pickings & better	44 00
1st shelving	47 00	As run, common out	33 00
2nd	41 00	No 1 barn boards	26 00
3rd	32 00	Common	21 00@22 00
Pickings	38 00		

Canada Pine Stock—14 in. 12 to 16 ft. d 2 or 4 s.

Pickings & better	45 00	3d shelving	33 00
As run, common out	33 00	Common	22 00

Canada Pine S. B'ds—1x8 in. & up, 11 ft. and under, d 2 s or r.

Pickings & better	33 00@35 00	Dressing & common, d 2 s or	
As run, common out	30 00	d 2 s & m	20 00
		Common	18 00

Canada Pine Sheathing, d. m. & b.—1," 4 to 7", 5" & up, cb ⅞".

1st quality, 12 to 16 ft	46 00	1st & 2nd quality, 9 to 11 ft.	33 00
2d	37 00	7 & 8 ft.	34 00
3d	27 00	3rd quality, 11 feet & under	22 00
4th (selected Common)	22 00	4th "	18 00

Canada (Quebec) Spruce—1 & 1½ in., 4 to 7 in. d 2 s & m.

Clear, 10 to 16 feet	32 00	No 2, 10 to 16 ft.	15 00@16 00
No 1	22		

Above prices delivered on a rate of $33

—Mr. J. B. Charleson of Quebec, appointed overseer of lumbering operations on the Upper and Lower Ottawa by the Quebec Government has commenced his duties. His division includes the Montreal and Ottawa agencies. The necessity for his appointment arose from assimilation of the Quebec to the Ontario system under which instead of collecting dues on two sizes of logs stumpage will be charged by board measure at the rate of $1.30 per 1,000 feet. Mr. Charleson expects that the provincial revenue from lumber will now reach $500,000 annually, an increase of about $150,000.

AMONG THE MANUFACTURERS.

MESSRS. GEO. F. HAWORTH & CO., Toronto, in addition to their manufacturing business, have been appointed exclusive agents in Canada for the sale of Hoyt's pure American oak tanned leather belting, known the world over for its superior quality, and which has been used by some of the largest mill owners in Canada for the past thirty years.

MESSRS. J. P. WAGNER & CO., of Toronto, the old established sash and door manufacturing firm, are retiring from business after a successful career of nearly 33 years. They commenced in a very small way and have seen their business increase with the growth of the city until at one time they had in their employ about 100 men. The jobbing business of the firm will be continued by Mr. William Munro.

The Canada Lumber Cutting Machine Co., of Toronto, which was recently organized with a capital stock of $350,000, are erecting a mill at Belleville, Ont., in which will be placed the lumber cutting machinery the operation of which, in Toronto, was described in these pages in September last. The works will probably be in operation this month, and the products will consist of box veneers, barrel staves, etc. It is the intention of the company to add several other machines when their Belleville works are fairly in operation.

MR. W. W. PARSONS of McLaren's Depot, claims to have had an economical run in saw sharpening since he has been using the Rogers' Saw Filer. He did all the filing for a circular mill and changed saws every four hours (no pointing up between shifts) cutting 2,500,000 feet of lumber, nearly all inch boards, and 9,000 railroad ties, without the use of a file and with the consumption of just fifty cents worth of emery wheel. The machine used was a No. 3 Rogers' saw filer, manufactured by the Hart Emery Wheel Co., Hamilton, and the emery wheel was one of the celebrated Hart's Patent made by the same firm. The average daily output was 25,000 feet.

AMONG the new firms whose advertisement appears in the current issue of THE LUMBERMAN will be found The Polson Iron Works Co., of Toronto, a name already quite familiar to the majority of our readers. The manufactures of this company comprise the "Brown" and "Allan" automatic engines, vertical, hoisting and marine engines, steam yachts and launches, iron tools and boilers of all descriptions, etc. They are also extensive dealers in nearly every kind of second-hand machinery, and extend a welcome to all intending buyers to call either at their works, Esplanade street, or at their show rooms, 38 Yonge street, Toronto, and inspect their stock on hand.

WE have pleasure in directing the attention of our lumbermen readers to the advertisement on another page of this issue of Taper Pike Poles, Peevie Stocks and Cant-Hook Handles, manufactured by Mr. Wm. Forsyth, Peterborough, Ont. This gentleman has for the past two or three years been turning out a pike pole which is generally considered by all who have used them superior in every way to anything heretofore introduced to the trade. They are made of the best straight rock maple, turned in a machine specially constructed for the purpose, and measure twelve and thirteen feet long. Anyone doubting the superiority of these poles over others are invited to correspond with the gentlemen whose names are furnished in Mr. Forsyth's advertising space.

AMONG the callers at THE LUMBERMAN office during the past month was Mr. Alonzo W. Spooner, patentee and manufacturer of Spooner's Copperine, a purely non-fibrous, anti-friction metal, for use by engineers in fitting axle boxes. This gentleman has recently issued a handy pocket catalogue fully setting forth the merits of his invention. He informs us that this new metal is being rapidly introduced into all the leading manufacturing establishments both in Canada and the United States, and from the host of testimonials published it is evident that Copperine is becoming a positive favorite. Saw and planing mill owners, who are not already using this metal, can obtain samples and full particulars by addressing A. W. Spooner, Port Hope, Ont.

MESSRS. F. E. Dixon & Co., Toronto, manufacturers of patent lap-joint star rivet leather belting, address themselves through these pages to mill owners, manufacturers, and all who use leather belting, proclaiming the excellence of their products and the great variety in which they are made. They speak of their belting as that which will run straight on the pulleys, thoroughly well stretched, will not tear at the lace holes, and which will give entire satisfaction. They manufacture their leather belting from the very best Canadian and American genuine oak-tanned leather, and they are also large dealers in rubber and cotton belting, lace leather and Phenix oil, which they say is the only perfect belt dressing made. They ask that any interested will write to them for their price lists and discounts, and for their pamphlet on belting, which they will take great pleasure in sending. The pamphlet alluded to, in addition to other valuable matter relating to the subject, contains some useful hints to users of belting, in which is shown the per cent. of resistance on different pulleys, etc.; value of rubber and canvas belts as compared with leather; strength of belts; care of belts; directions for calculating the width of belts required for transmitting different amounts of power under different circumstances, and for calculating the amount of power which a belt will transmit; general maxims in regard to belts, etc.

The Sturtevant Patent Progressive Lumber Dry-Kiln, which appears for the first time among our advertisements in this issue, has been extensively introduced throughout the United States. The designer and builder has had an experience of twenty five years in this line, has sold over 5,000 of his Hot Blast Steam Heating Apparatus, and over 40,000 of his blowers for various uses. The ultimate object in all dry-kilns has been to secure a circulation of the heated air. By making the system positive by causing such a circulation by means of a fan, Mr. Sturtevant has made a great stride in the matter of drying lumber. The entire apparatus is so entirely under control that any temperature, humidity or quantity of air may be had at a minutes notice. The apparatus is conveniently placed in a building adjacent to the kiln. No steam pipes are to be found in the latter and the risk from fire is avoided with a consequent reduction in insurance. The same apparatus is employed for the ventilation and heating of buildings. The Houses of Parliament at Ottawa and many public buildings in the United States are furnished with it. By its use a comfortable healthy atmosphere is maintained, and the employes in manufacturing establishments to which it is applied do 15 to 20 per cent. more work. The same party also manufactures exhausting fans for removing chips and shavings from wood working machinery, smoke from forges, fumes and bad air from rooms, and dust from polishing furnaces, for ventilation and the like; forges, lumber trucks, lumber dry-kiln apparatus, steam heating apparatus, etc. It is a constant surprise to many to learn of the thousand and one uses to which a blower is put in every day practice. Catalogues descriptive of the various styles of apparatuses and their applications can be obtained by writing to B. F. Sturtevant, Boston, Mass. U. S.

NEW BRUNSWICK BUDGET.

ST. JOHN, N. B. Feb. 1st, 1888.

To summarize the operations of New Brunswick lumbermen is no easy task. The nearest estimate that can be made is to say that the North Shore operators cut, last season, about 140,000,000 sp. ft., and operators in all other parts of the province about the same quantity. This covers the logs obtained in New Brunswick only. Take in those cut in Quebec and Maine, the total quantity handled in New Brunswick sums up about 430,000,000 sp. ft. The cut this season will not exceed this, if it comes up to it, for while the American millmen hope to increase their output, most of those who are engaged in the trans-Atlantic trade are limiting their productions and several heavy shippers have gone out of the business altogether.

The lumber shipments of New Brunswick in 1887 as compared with 1886 are as follows:—

TRANS-ATLANTIC.

Port	S.ft.deals, etc. 1887	Tons tim'r. 1887	S.ft.deals,etc. 1886	Tons timber. 1886
St. John	124,361,389	6,384	134,123,207	10,625
Miramichi	68,121,629	157	72,276,391	1,784
Dalhousie	18,059,828	928	18,615,319	1,154
Bathurst	13,589,769		16,392,183	
Richibucto	14,751,000		13,117,800	
Sackville	8,555,000		9,421,000	
Shediac	8,322,882		7,209,370	
Cocaque	635,580			
Caraquet			1,004,377	
	246,397,077		272,159,647	

The trans-Atlantic exports in 1885 amounted to 291,081,759 feet; 1884, 331,000,000 feet; 1883, 404,287,676 feet.

TO THE UNITED STATES.
(FROM THE PORT OF ST. JOHN.)

	1887	1886
Long lumber	$ 185,224.33	$ 107,877.02
Short "	123,755.54	107,416.29
Round timber	22,357.81	18,932.53
Piling	1,909.00	
American long lumber	1,011,987.85	1,186,593.29
" short "	252,726.38	247,692.94
	$1,577,960.91	$1,668,512.07

It will be seen that, while the export of American lumber has lessened, the export of our own product increased about $100,000. It may be noted here that last year, for the first time, the volume of our exports to the United States exceeded the amount of the trans-Atlantic trade. The export from other portions of the Province to the United States, has also shown a marked increase, whilst the export to Europe is diminishing.

The operations of our 15 local mills supply a fair criterion for judging of the business of the province. They have sawed about 155,000,000 sp. ft. of lumber. Our six shingle mills have manufactured about 65,000,000 shingles. These figures fall below those of last year, for the reason that the heavy spring freshets shut down all the mills about the harbor. The business in most lines has been only fair, but the shingle business has boomed. Improvements and additions which are now going on, indicate that our millmen expect great things from the coming season. Miller & Woodman's new shingle mill—165 feet long and 80 feet wide—will run eight shingler, with clapboard and stave machines, and probably a rotary. W. H. Murray will put several stave and clapboard machines into his new edition. D. W. Clark & Son will add planing and dovetailing machines. Edward Gewett & Co. are putting in new boilers, and shingle, stave, clapboard and heading machines. Moses Cowan will add shingle, stave and clapboard machines. As nearly as I can judge, about 15 new mills have been built in the province during the year, or are now building.

G. B. Snowball estimates the stock of woods manufactured and unmanufactured, being wintered, at 25,000,000 sp. ft—the same as last year.

The wages of men in the woods are higher than they were last season, and the contract figures have correspondingly advanced.

MONEY LOST BY WASTE OF POWER.

Below are some figures by a New England Cotton Mill Engineer of high reputation, and large experience, showing the power it takes to average modern mills with first class shafting, to drive the shafting alone.

Mill No.	Whole Load, H. P.	Shafting alone, H. P.	Per Cent. of Whole.
1	190	51	25.6
2	472	111.5	23.6
3	486	134	27.5
4	677	190	28.1
5	750	174.6	22.7
6	235	84.8	36.1
7	670	262.9	39.2
8	677	182	26.8

These may be taken as a fair showing of the power that is required in many of our best (not worst) mills and factories to drive shafting. It will be seen that the percentage is large—from 22 per cent upwards.

It is unreasonable to think that all that power is consumed by a *legitimate* amount of friction of bearings and belts. It is out of all reason, and we know of no cause for such a loss of power but *tight belts and heavy slippery iron pulleys.*

According to the best scientific authority it costs one-horse power to keep in motion one ton of metal or weight; thus every unnecessary 2000 pounds weight on your line shaft, cost you one-horse power. To maintain a horse power costs from $25 to $125 per year. Any manufacturer who will take the pains to investigate the unnecessary weight by heavy iron pulleys, too tight belts, etc., will be surprised to find the enormous waste of power caused in this manner—to say nothing about the loss resulting from the shortened life of the entire equipment. In order to avoid this great loss of power use the Dodge Wood Separable Pulleys, they are 70 per cent. lighter than iron and are in more perfect balance than is possible for any iron pulley to be made. As a material for pulleys wood is better than iron from the fact that it holds a belt much better. Most good mechanics are aware of this fact, but it may not be generally known how great is the difference, and for the benefit of our readers we give the results of two tests made and published by two of the most eminent mechanical authorities:—

Portion of Circumference embraced by Belt.	Rel. value of leather belt: On Wooden Pulleys.	On Iron Pulleys.	Portion of Circumference embraced by Belt.	Rel. value of leather belt: On Wooden Pulleys.	On Iron Pulleys.
.20	1.80	1.42	.20	1.90	1.40
.30	2.43	1.69	.30	2.40	1 70
.40	3.26	2.02	.40	3.30	2.00
.50	4.38	2.41	.50	4.40	2.40
.60	5.88	2.87	.60	5.90	2.90
.70	7.90	3.43	.70	7.90	3.40
	Morin.—Appleton's Encyclopedia of Mechanical Arts.			Haswell.—Engineers' and Mechanics' Pocket Book.	

A Dodge Patent Wood Pulley is better than iron from the fact that it can be made very much lighter and thus save weight on the line shaft and bearings, thereby saving in expense from a saving in friction.

The advantages of the separable pulley are very apparent. By its use the necessity of taking down shafting already up for the purpose of putting on additional pulleys when needed.

or to be changed, is avoided, thus saving time, trouble and expense, while their first cost is much less than any other pulley made not having these advantages.

The Compression Fastening whether used with keys in iron center or compression alone, keeps the pulley always in balance as the compression on the shaft, and key is always towards the center.

The most perfect balanced iron pulley fastened with set screws or key, is invariably out of balance by being thrown from the center, this fact is obvious to all mechanics.

The advantages of our mode of fastening over any other are: It is the only absolutely true fastening for a pulley. A pulley once properly balanced cannot be thrown out of balance in securing with this fastening. A pulley fastened with key or set screw in the ordinary way, cannot be screwed without lifting the pulley from the shaft at that point where the key or set screw is placed, thus throwing the pulley out of balance.

Manufacturers should carefully avoid any pulley with a set screw fastening for shaft; also a key, unless the pulley is compressed on it. The Dodge Patent Bushing system is a great convenience to manufacturers and also to agents who carry pullys in stock, as with the aid of the patent bushings every pulley will fit 22 different sizes of shafts.

Haswell the acknowledged authority and most quoted by American mechanics, summarizes thus: The ratis of friction to pressure for leather belts, when worn over wooden pulleys is 47, over turned cast iron pulleys, 24, thus showing the average advantage of a wood pulley over iron to be 50 per cent.

While on the subject of transmitting power effectually and economically we would respectfully draw the attention of all interested to the system of grooved hardwood pulleys manilla rope as advertised by the Dodge Wood Split Pully Cot on another page of this paper. The transmission of power by ropes is not new but the Dodge patent system of adjusting the pulleys applying the ropes, taking care of the slack and stretch is new and most effectual, and is giving the best of satisfaction, as certified by the testimonials of numerous well known manufacturers who are using this method of transmission.

Illustrated cataloges of belt pulleys and the rope transmission system will be furnished on application to the Dodge Wood Split Pulley Co., 81 to 89 Adelaid Street West, Toronto.

FIREWOOD IN ONTARIO.

To the Editor of the Canada Lumberman.

SIR.—Perhaps you can afford me room for a reflection on the above subject, which the following paragraph has suggested:—

SCARCITY OF FUEL IN KANSAS.

There was last week great suffering in Kansas for want of fuel. Much of that state is treeless, and wood is not to be had. Corn is sometimes used there for fuel, but the corn was a failure this year, and the unfortunate settlers were deprived of that resource against the inclemency of the winter weather. In some counties the inhabitants had nothing to depend upon but a scanty and uncertain supply of coal. Some of them had to travel thirty, forty and fifty miles to a railway station for coal, only to find that there was none to be had. The roads were working to their utmost capacity, yet they could not supply all who needed fuel. In one place the cars were stopped by the citizens, who were ready to perish, and they helped themselves to what they wanted. Many persons have been frozen to death, and many who have not actually perished with cold have endured great suffering.—*Motnreal Star.*

This was two weeks before the late windstorms in the west. Returns from a great number of Ontario townships have brought out the fact that, throughout settled Ontario, the average amount of firewood standing is but fifteen years' consumption, at the present rate of using, when most of our best farming sections will be in the same position, as far as fuel is concerned, as Kansas, which has great forests near her, as Ontario would still have, but in both cases they are so distant that carriage costs more than would purchase coal. When in Kansas last year, I found people doing as they do here. The wise were planting groves of maple, hickory, and ash, the others were not—they were even cutting down, dragging long distances and burning the few great trees which fringe the river banks.

The moral to Ontario is obvious. Why should not the coming spring witness a great tree-planting movement?

Yours truly,

R. W. PHIPPS.

Toronto, January 27, 1888.

—Mr. W. P. Sayward, Victoria, B.C., proprietor of the Rock Bay Saw Mill, has the only saw mill in that place. It has the capacity to cut 6,000,000 feet of lumber per annum.

—Toronto dealers report a large demand for big bill stuff and red pine for car building purposes. J. B. Smith & Co. have had an enquiry from Montreal for 200,000 feet 16x8 inches, and 16 feet in length, for the construction of a Howe Truss bridge. The same firm last year filled an unusually large contract of this character, supplying 300,000 feet 3x14, and averaging 40 feet in length, for the building of the Christian Brothers College, Montreal. The stuff was cut on Lake Nipissing.

LETTERS FROM CORRESPONDENTS.

What the Millmen are Doing, Here, There and Everywhere--Prospects for Next Season's Operations.

BRYSON, QUE.—The shipments of lumber from Canada past Rouse's Point last year, the great bulk of which went from this section of the country, were as follows:—Pine lumber, 138,017,880 feet; spruce, 24,007,168; hemlock, 9,502,757; basswood, 553,662; ash, 1,348,294; birch, 76,445; elm, 63,749; maple, 240,006; lath, 45,103,530 pcs.; shingles, 4,389,500; pickets, 2,630,177 feet; match blocks, 745½ cords; hemlock bark, 6,415; wood (fine), 1,360; R. R. ties, 243,750; telegraph poles, 9,550; cedar posts, 13,987; wooden doors, 10,458; reel stock, 396,000 feet; shooks, 4,314,000; match splints, 140,220 gross. The above does not include the exports by Burlington in barges, say 60,000,000 feet. The approximate value of the exports is as follows:—Lumber, pine, spruce and hardwood, $3,644,000; shingles, $15,000; pickets, $32,000; match blocks, $4,500; hemlock bark, 36,000; firewood, $3,000; R. R. ties. $75,000; telegraph poles, $15,000; cedar posts, $1,100; wooden doors, $13,072; shooks, $50,200; match splints, say $5,000, or say in round figures, $4,000,000.

MCKELLAR.—Lumbering operations are brisk in this neighborhood this winter, and the weather has favored the work so far. The snow is now only about 22 inches deep and comparatively loose, so that operations go on in the woods without the need of shovelling roads. S. & J. Armstrong will get out three million feet of saw logs for The Georgian Bay Consolidated Lumber Company on Maganetawan river, and two million feet for Mr. Richard Power, of Barrie, on Parry Island. They are also taking out some saw logs in McKeller for C. Beck & Co., of Penetanguishene, and have some three thousand pieces of cedar out for telegraph poles. These last are the result of a new venture and they expect to get market for them next summer at Parry Sound or Midland. Cedar in some parts of this district is very good, and if a market can be got there will likely be large quantities of it got out hereafter. The Parry Sound Lumber Company, Midland, and North Shore Lumber Company, and Conger Lumber Company, of Parry Sound, are all stocking up heavy for next summer's cut. The Georgian Bay Consolidated Lumber Company, of Waubaushene, will stock their Byng Inlet mills by way of the Maganetawan river. They are also taking out some board pine in Croft. Chew Brothers, of Midland, are getting out stock in Burpes, and there are numerous lumber concerns operating heavily in the northern portion of the district toward French river. Oats are in good demand at 40 cents; hay plentiful at $8 to $10; teams are in demand at $1.50 to $1.75 per day, and men's wages are very good, $20 to $22.

NIPISSING DISTRICT.—A correspondent writes from Wahnapitae as follows:—I am much surprised to find such a centre of business among the mountains of Nipissing as I find here. At Wahnapitae there are quite a number of new buildings—a hotel or boarding house, a post office, a general store, kept by Messrs. Simard & Roy. The Emery Lumber Company's buildings make quite a show in the embryotic town. The Georgian Bay Lumber Company has also built a magnificent storehouse and office alongside the C. P. R. track, and in close proximity to the Emery buildings. These two companies are lumbering extensively on the Wahnapitae river, principally saw logs. I took a trip up through the lumber woods, and I was very much pleased to see how these Americans conducted their work. To see their teams moving away from the skidways with their loads of logs was a grand sight. But they spare no expense in grading their roads and using sprinklers, making a solid ice road in a very short time. Mr. Robert Gorman, of the firm of Timmins & Gorman, is also logging in this locality. His camp is only two miles from the railway. All these firms have now got pretty well into the hauling, and their logs are all of a superior quality. As a rule they cut and take out smaller logs than we do on the Ottawa river.

BRUSSELS, ONT.—There is a large falling off in the cut of logs from year to year, in this section. Timber is about exhausted and in a very short time saw mills can be dispensed with. Local demand uses the greater part of lumber manufactured here, except perhaps a little hardwood. We do not saw much till spring opens up, generally.

CHIPPAWA, ONT.—There will probably be about three millions of oak and as much of elm, ash and basswood banked on the Chippawa creek canal feeder and Grand river. No pine to speak of.

PARRY SOUND LUMBER CO., Parry Sound, Ont.—We are getting out about 9,000 feet to saw, which, with 4,000 ft wintered over, will give us 13,000 feet to cut next summer. We are building a shingle mill of about ten million capacity, and are taking out a full stock for it. We expect to start the mill early in April, and expect to see business good this coming season.

OTTAWA, ONT.—The lumber cut in this section was much smaller than usual, owing to the lowness of the water, but we expect the cut for 1888 will be of normal proportions. The winter has thus far been favorable for logging operations, and we look for an advance in all the lower grades of lumber, and possibly a decline in the better grades.

GOODEVE & BRIGHAM, ALLEN PARK—Logs are coming in freely. We expect to get this winter about 1,000,000, feet, principally hardwood, such as maple, rock and soft elm, basswood and a quantity of cedar and hemlock. The demand is better this season so far than last, but prices are not much better. We keep our mills running all the time.

ALLAN'S MILLS, ONT.—The local demand for lumber is dull, owing to a scarcity of money amongst the farming community, on account of slight grain crops. During the last season J. & R. Ritchie fitted their mill with a set of new machinery throughout, of modern design, made by the Waterous Engine Works Company, of Brantford. The principal lumber exported from here is ash and basswood. Very little pine goes across the lines now.

JOSEPH P. WALLIS, Port Carling, Ont.—The lumber business in this vicinity is fairly active, and the prospects for the coming season are good. Next season, all being well, I will have a small steam tug on the water, and my shingle mill, which I sold some time ago, but have re-purchased, will be in operation, as well as the saw mill and planer which I have been running for some years.

FENELON FALLS, Ont.—There are only two lumber firms operating here at present. Their combined cut for the coming season will be about 10,000,000 feet, made up as follows: Thomson & Co., 5 to 5½ million, Green & Ellis, 4½ to 5 million. Report says Mr. Mossom Boyd is negotiating for the purchase of the large gang saw mill belonging to the R.C. Smith estate. If he succeeds in buying he will cut a large stock here this season.

KINGSBURY, Que.—Lumberers are busy getting out logs in this vicinity. The Pierreville Mills Co. are getting out 45,000 logs on Salmon Creek. Williamson & Crombie are having 30,000 logs put in same stream. The latter are also getting a quantity of cedar out, and propose going into the manufacture of shingles. This firm also do a large business in butter tubs and spruce clapboards. The New Rockland Slate Company, who have a saw mill for cutting their own lumber, are also getting out a supply of logs. Spruce and hemlock are the kind of logs made here, pine is exhausted. The Quebec Government are supplying blank books, to be filled in by the lumbermen, with the quantity of logs cut by them. The cut of logs in this vicinity will be nearly as follows:—Pierreville Mills Co., 45,000 logs; Williamson and Crombie, 30,000; New Rockland Slate Co., 3,000. The above will be nearly all spruce logs, no pine of any amount down here.

H. L. LOVERING & Co., Coldwater, Ont.—Lumbering operations in this section are unusually brisk this season. Owing to the extensive bush fires last summer large quantities of timber has to be taken out to keep it from spoiling. Our output this season in lumber and shingles will be between three and four million feet. Our shingle mill will start about the first of February and will continue running until the opening of navigation, at which time the lumber mill will be started. Most of the mills here will start as soon as the lakes open in the spring and all anticipate a busy season. Our mill is especially adapted for cutting bill stuff, and we have overhauled it this winter, putting it in first-class shape. We expect to do a good trade in that line next season.

TORONTO.—Were it not for various causes, some remote and others near, trade might be better. Of course the truth of the above is apparent. To state as briefly as possible the condition of the lumber trade, it may be said to be non-existent. No sales of any censequence. Dealers are engaged in the pleasant pastime of taking stock, closing their books and looking for profits or losses. Prices about as usual.

J. E. MURPHY, Hepworth, Ont.—I am operating two mills this winter, and will cut from two to two and a-half millions of mixed stock: hemlock, maple, beech, bass, cedar and pine, principally hemlock. The hemlock and hardwood shipped from this station during the season will probably amount to six millions.

PONTYPOOL, Ont.—The following is a rough estimate of the proposed output of lumber in this neighborhood during the coming sawing season: John Kennedy, saw and shingle mill, 1,500,000 feet; W. C. Irvin, saw and shingle mill, 2,000,000 feet; Charles Ashby, saw mill, 800,000 feet; H. Staples, in his new saw mill, about 2,000,000 feet; George Lapp, saw mill, 400,000; John Barnick, saw mill, 1,500,000 feet. Logs for these mills are secured entirely from local forests. Mr. W. C. Irvin, is about the only one who is doing any considerable stocking.

PERLEY & PATTEE, Ottawa.—We are doing about the same quantity of work as usual. We look for a prosperous year in 1888, and think prices of all pine lumber, except the very best, will be stiffer than in 1887.

A. & P. WHITE, Pembroke, Ont.—We are cutting about 40,000 pieces of logs and dimension timber, half of which will be sawed at Pembroke and the balance at Deux Riviere. Shipments to all points *via* C. P. R.

J. P. BALDWIN & SON, Baldwin's Mills, Que.—We are doing the usual amount of lumbering, and the prospects are fair for good prices. There would, however, be better protection for lumbermen in this vicinity if logs were not allowed to be taken across the border to be sawed free of duty, and returned, and also if the export duty was always paid. It ought to be $2 per M. feet.

GEORGE GALE & SONS, Waterville, Que.—We have got out about 1,000,000 feet per year for the past three years, but are not operating at this point this season. We are just starting a steam mill at De Roches, but do not expect to get in more than 500,000 feet.

EASTMAN SPRINGS, Ont.—John N. Stewart is running his mill at full blast and turning out 10,000 feet per day. Between Messrs. Stewart, Hager, Flat & Bradley and others, there will be about 30,000 logs taken out in this section this winter, besides a quantity that will be got out by Messrs. Sterns & Rainbow, and driven to their mills at Duncanville. Mr. George Perley has a large force of men taking out logs to be cut into bill lumber next season at Stewart's mill.

MEAFORD, Ont.—The prospects for the season's trade are good. It is anticipated that business will be about equal to that of last year. T. E. Butters expects to cut about 250,000 feet of maple, bass and elm, and 350,000 feet of hemlock.

WICKHAM, Que.—Some of the mills here are stocking lighter than usual owing to the scarcity of logs. Mr. T. Barrie expects to cut 15,000 logs this season. He manufactures dimension timber to supply the home trade, also stock boards planed or rough.

JAMES COCKBURN, Edgar Ont.—The season is fairly good in this locality, and I will cut about 1,200,000 feet of pine and bass, principally the former.

HAMILTON, Ont.—At this season of the year the lumber trade in this city as in all other places, is, comparatively, at a standstill. Building, from which source the principal revenue is derived, being now almost, if not quite, *nil*. During the season of 1887 there was considerable building done in Hamilton, with good expectations for the coming season's trade. We receive the lumber which is used here principally by the N. & N. W. and the G. T. railways, they being the only lines running into this city. Very little lumber now comes by boat. There is a large quantity of logs being cut in the Parry Sound and Muskoka districts which will find its way to this market in its finished state.

WEST LORNE, ONT.—In all respects this season, thus far, has been one of unprecedented activity in the timber business in and throughout these parts. The township of Aldborough has for 30 years been the home of the lumberman and has each winter since their first entrance into its stately woods, yielded a bountiful tribute to their courage and energy, but though a large portion of the valuable timber lands have been bereft, still we venture to say that in its palmiest days in the log season it has never seen a buisier one than at present. The village of West Lorne is crowded with teams bringing in the logs that are destined to supply the trade for the summer of J. C. Schleihauf, J. H. Greer and McKillop & Sons mills. Though barely two weeks of sleighing have passed since they began freely to move, the yards are nearly full, and there is some talk already of a fall in prices consequent on the large amount of timber offered over and above amount necessary to supply the mills which have already begun cutting. The prospects for the year just opening are good and prices will remain about the same as last year, with a slightly increased demand, but the quality will in some of the softer kinds be a little inferior to last season's cut.

A. CALDWELL & SON, ALMONTE.—As we only drive logs to this mill every alternate season, we will have no drive during the coming season, but will cut about 1,500,000 feet of lumber. There has been some good sales made recently in the Ottawa Valley and the prospects encouraging. We expect to commence sawing about the beginning of April.

THE GEORGIAN BAY CONSOLIDATED LUMBER CO.—Our cut of sawlogs this winter will be about 60,000,000 feet in addition to about 350,000,000 feet board pine. Our probable cut in our five mills will be about from 55,000,000 to 60,000,000 feet, as the nature of the season permits. It is very hard to say at what time the mills will begin sawing, as their beginning depends to some extent on the time of the ice going away. The 1st of May is about as soon as may be expected.

J. HADDEN & SONS, Foxmead.—Trade has been fairly good in our estimation. Lumber has been all sold, and also one-half of next season's cut at $1 advance of last year's prices. Our motto is, never refuse a fair offer. We will cut during the coming season 2,000,000 feet, one-third long lengths to forty feet, which is promptly taken up. We are anxious to know how the railway companies propose treating us this year; may it be more liberal than in the past.

QUEBEC.—No transactions in timber or deals have transpired since the commencement of the new year, business being at a standstill. Reports from England foreshadow a good business in the shipping and export line next season. The Quebec mercnants are now on their way over and in a short time several contracts are likely to be placed for spring shipments, stocks now being very low on the other side of the water.

SAWYERVILLE, QUE.—The prospect of a railroad is giving an impetus to the lumber trade here. A considerable amount has been brought into requisition for local building purposes. The mill yards are crowded and the streams filled with lumber. Many teams are employed in hauling lumber, ties and posts and taking supplies to the camps in the neighborhood.

PENETANGUISHENE, ONT.—Messrs. Marchildon & Lalonde are engaged on Mr. Brady's contract in getting out logs in the Vent settlement for Mr. McGibbon. They will take out half a million feet. Mr. Davidson has eight jobbers at work taking out timber for him this winter besides the camp under his own supervision. Messrs. Belyea & Robertson are engaged getting out wood for the railway as well as buying large quantities, paying as high as $800 weekly.

PARRY SOUND, ONT.—Lumbering operations are very brisk throughout the District at present. Drawing is being rapidly pushed forward and the season's cut promises to be very large. The Parry Sound Lumber Company are getting out a large quantity of shingle bolts for their new mill, which will be ready to commence cutting when the spring opens.

CARLETON PLACE, ONT.—Much speculation has been indulged in as to where the Canada Lumber Co., otherwise Messrs. McLaren, Edwards & Co., would establish their mills. It was feared that Carleton Place, in which the leading man of the concern, Mr. Peter McLaren, had his mill, would be abandoned in favor of Ottawa or some other point, but the question was settled by the company buying out the Carleton Place site. They are now enlarging and refitting the mill, which, when completed, will be one of the finest in the country with all the latest improvements.

VANCOUVER, B. C.—The lumber trade at this point is very active and prospects bright. The Hastings saw mill, one of the largest in the country, underwent considerable repairs last summer. During last season the company loaded 13 ships. They employ about 100 men, besides 70 who work in the camps, and devote themselves entirely to supplying the foreign trade especially that of South America. Three large barges, each of which will carry 1,000,000 feet of lumber, are loading and will shortly sail, one to Chili and two to Australia. A vessel capable of carrying 1,500,000 will shortly arrive for a cargo, when the mill will run night and day, turning out 50,000 a day on this contract besides other work. The Royal City Mills have largely increased their business during the past year. They have 95 men in their employ, and saw about 35,000 ft. of lumber per day. They have built a large sash and door factory which gives employment to twenty men. The pay roll of this establishment amounts to $4,500 per month. The mills of McKay & Co. and the Brunette Saw Mill Co. are also doing a rushing trade. These mills and that of the Moodyville Co., who have the largest lumber business in the province, give employment to a large number of men not directly connected with them, as the greater part of the logs come from different parts of the coast and rivers, and much of the lumber is transported in lighters, to do which tugboats must be employed.

H. CARGILL, Cargill, Ont.—The lumber trade the past season has been the best in my experience, but is, as usual, at this time of the year, a little slack. I intend getting out my usual stock of logs this winter, provided the snow holds out.

BURK'S FALLS, ONT.—Train & Son are taking out 3,000,000 feet of pine this season and have contracted with Messrs. Flatt & Bradley, of Hamilton, to saw and ship their cut of about 2,500,000 feet. Train & Sons expect to put electric light in their mill and run night and day which will enable them to cut about 60,000 feet per day, including shingles. Mr. W. W. Belding is taking something like 5,000,000 feet out of the Thompson limit which he will cut at his new saw mill now in course of erection at Katrine.

HOBSON & WILSON, Huntsville, Ont.—We do a small business, our stock of logs this season is 10,000 feet, and we have our last years cut of 800 feet on hand. Our mill is on Fairy Lake three miles from Huntsville, to which point we ship by barge.

THE TORONTO OUTLOOK.

The failure of the large lumber firm of S. C. Kanady & Co. has been the principal subject of interest in lumber circles lately. It is understood that a compromise is likely to be arrived at by which on paying 40 cents on the dollar the firm will be able to resume business. The affair has directed attention to the great evil of over-trading, and extensive credits, and some of the dealers are very outspoken in their denunciation of the system.

"Why should there be any failures in the lumber business," said one operator, "It is not subject to the disabilities of many other trades. We have no losses from dead stock or shop worn goods. The article in which we deal is not liable to become unsaleable by reason of a change in fashions, or be superseded by newer styles. We are not forced to sell at any price the goods will fetch for the fear of their becoming a drug in the market. There need be no lumber failures if men were not anxious to do too much business and launch out beyond their resources. Too much credit causes all the trouble. There is plenty of money to be made for all of us by doing a steady quiet trade in accordance with the legitimate demands of the market. Why we could all live on one-quarter of the present trade if it were done on sound business principles.

"Trade is quiet" said Mr. Kerr of the firm of Christie Kerr & Co., "very quiet, I have no important transactions to report. I may say that there is considerable enquiry from the United States for good lumber for cutting up. Yes, I think trade prospects promise fairly when the season opens up, but it is not anticipated that there will be the same amount of speculative building that there was last year. The wholesale men are not disposed to grant credit as easily as they have been doing."

Mr. Tennant of the firm of Tennant & Co., expressed similar views. "The prospects" he said, "are good if money gets somewhat easier. At present there are more enquiries for good lumber for factory purposes than in any other department. There is some demand from the Western section of the province. As to speculative building I may say that the demand for lumber for building purposes has dropped off more than 50 per cent., on account of the loan companies closing down on speculators."

"The outlook is good" said Mr. John Waldie of the Victoria Harbor Lumber Co. "The enhanced value of stumpage seems to have stiffened the prices of manufacturers and a better feeling prevails. There is some American demand for good lumber."

Mr. F. Hammet, of the Ontario Lumber Co., said that the great difficulty in the way of a good season's business was the recent failures, but he nevertheless regarded the prospects hopefully. Operations in the woods had so far been favorable. Not so much board pine was being taken out for Quebec as usual. In other respects the output was about the same as last year. The United States' demand for the upper grades of lumber was about an average one.

ENGLISH TIMBER CIRCULARS.

The circular of Farnworth & Jardine notes only a moderate demand for Canadian forest products, though the deliveries have been in excess of the usual business at this season. Both waney and square yellow pine timber have maintained their value. Market is almost bare, but there is little enquiry and only for large sized wood. Oak in the log has been more in demand but there are few transactions to report, and no change in value. The arrivals of both pine and spruce deals have been in excess of the average. There is no change in value, and the present stock is much too heavy.

Denny Mott & Dickson in their circular state that the market is cleared of first class waney pine. The wintering stocks in Quebec of both square and waney board pine, fall far short of the previous years' light stocks, and lighter prices are confidently anticipated for next season's imports. In the meantime there will be great difficulty in buying this timber on the English market. Prices for oak have advanced and are firm. For pitch pine timber better prices are predicted, as a steady demand has dimiminished the slender stocks on hand.

Simson & Mason's circulars note that stocks in deals and battens are heavy, but looks for an improvement in the trade consequent upon a general business revival. Dock stocks of timber are lower than for some years past. The supply of pitch pine planks and board, though moderate, have been ample to meet the lessened requirements.

Churchill & Sims point out that the principal difficulty in the Canadian export trade is due to the want of attention on the part of shippers to the state of the English market, "shippers in Canada" they say, "pay no great attention to what takes place here, and their market seldom acts in sympathy with ours. As they transfer their stocks to this side prices will rise with them, while here the market staggers under the weight of a supply which will not pass into consumption unless sold below its cost. It is of great importance that only small shipments should be made from this port during the forthcoming season; even the reduction of 500,000 pieces in the years importation has failed to prevent a further growth of the stocks.

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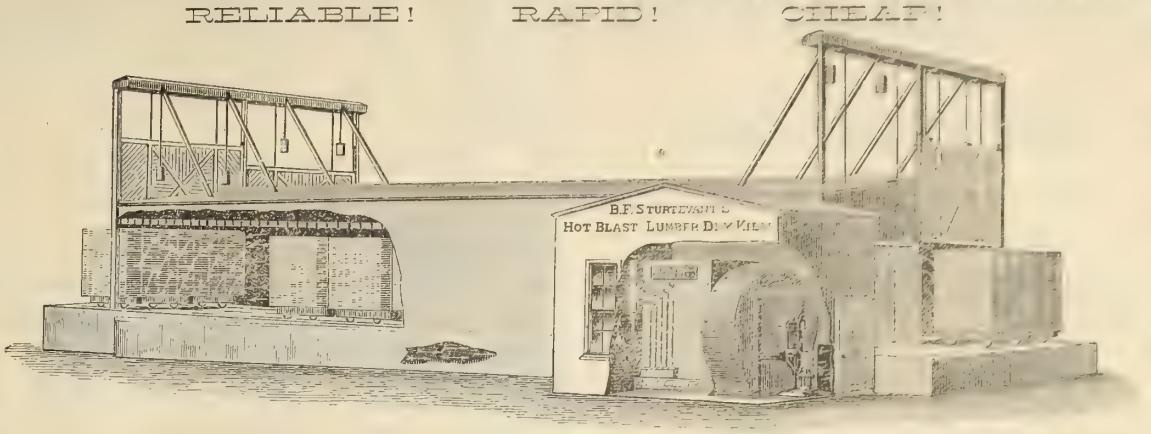

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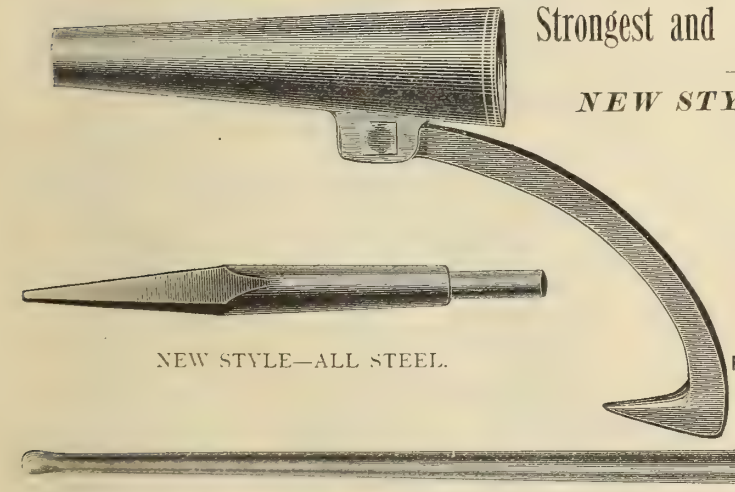
BELTING, HOSE, PACKING, &c.
STEAM PUMPS, POWER PUMPS, CENTRIFUGAL PUMPS, &c.
VALVES, STEAM and WATER GAUGES, EMERY WHEELS,
MACHINE KNIVES, PLATFORM SCALES, &c., &c.

The Permanent Exhibition of Manufactures and Commercial Exchange.

NICHOLLS & HOWLAND.

The ORONO CANT DOGS.

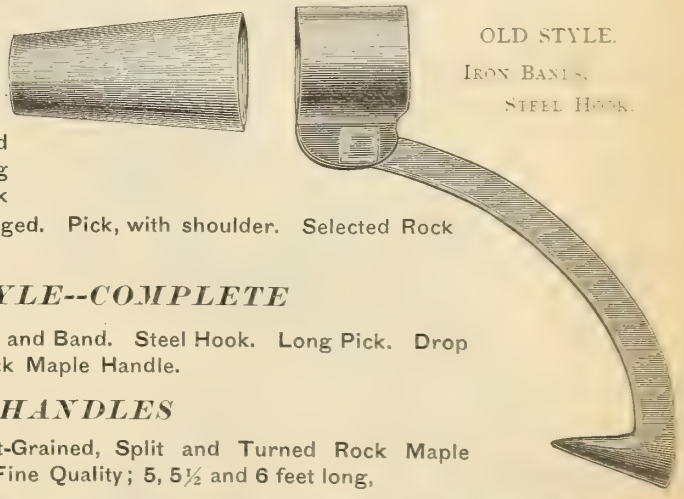
Strongest and Lightest in the Market.



NEW STYLE—ALL STEEL.

NEW STYLE--COMPLETE

Socket is in one piece and extends above hook, adding strength. Drop Forged Hook and Round Bill; easily disengaged. Pick, with shoulder. Selected Rock Maple Handle, specially bored.



OLD STYLE.
IRON BANDS.
STEEL HOOK.

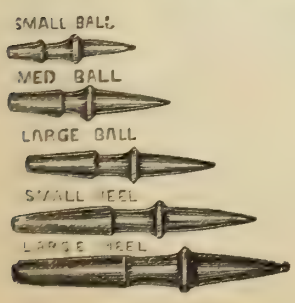
OLD STYLE--COMPLETE

Wrought Norway Iron Socket and Band. Steel Hook. Long Pick. Drop Forged Hook, Round Bill. Rock Maple Handle.

HANDLES

Selected Straight-Grained, Split and Turned Rock Maple Handles. Extra Fine Quality; 5, 5½ and 6 feet long.

LUMBER DRIVER'S BOOT CALKS



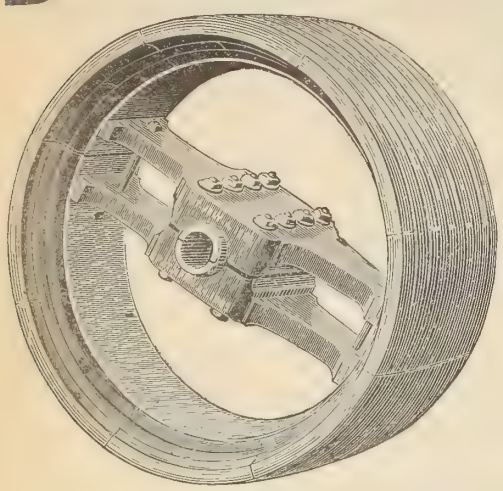
Made from the best Refined Tool Steel and forged. The method used in tempering leaves every one of the same temper, rendering them stronger and more durable than any other Calks.

Ask your dealer for our make, and see that our Labels are on the boxes.

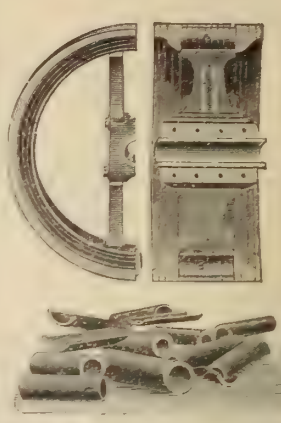
SEND FOR PRICES.

T. McAvity & Sons, St. John, N.B.

DODGE ⁜ PATENT ⁜ WOOD ⁜ SEPARABLE ⁜ OR ⁜ SPLIT ⁜ PULLEYS.



BEST BELT SURFACE, LIGHTEST, STRONGEST, BEST BALANCED AND MOST CONVENIENT PULLEY IN THE WORLD.



⁜ WITH OUR PATENT BUSHING SYSTEM ⁜

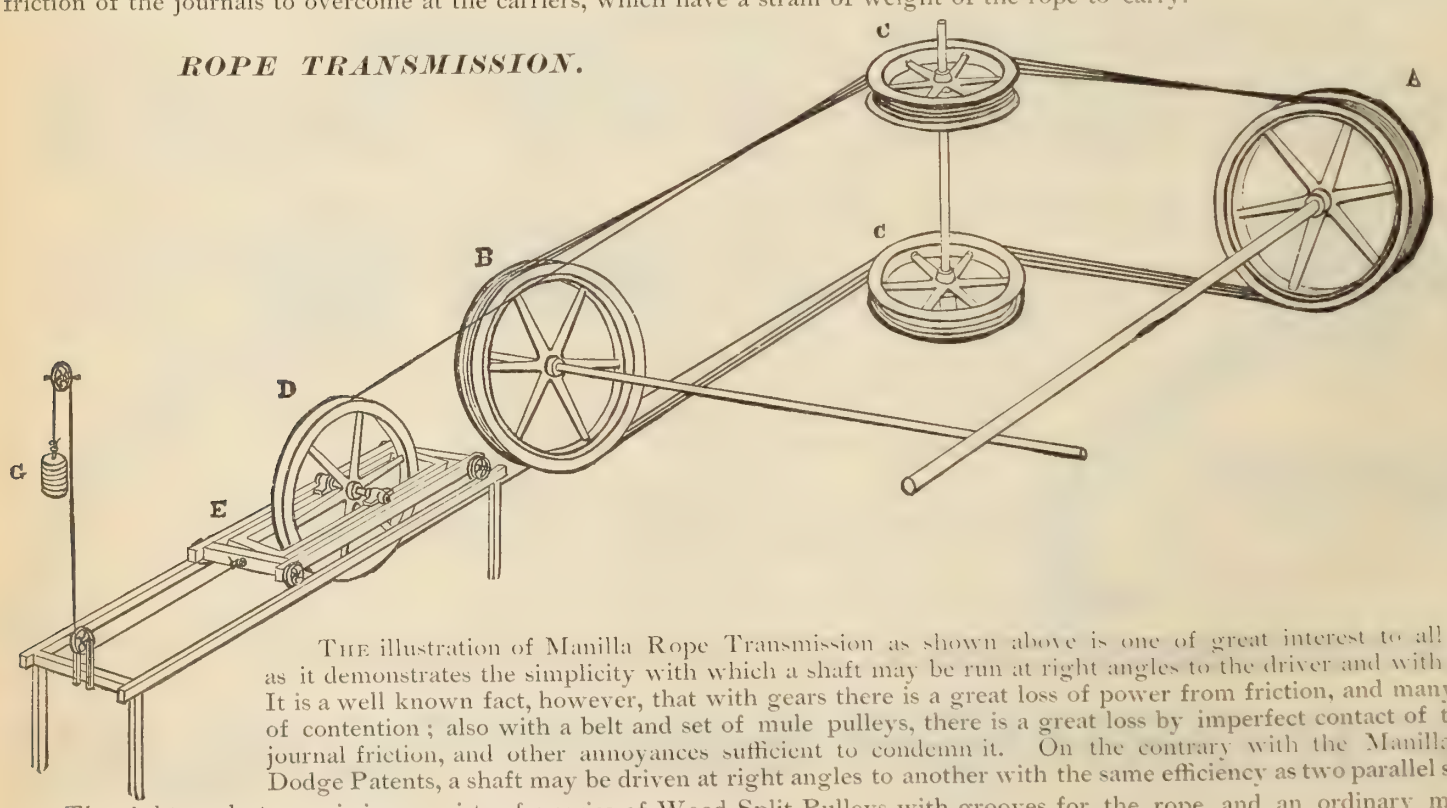
Every pulley will fit 22 different sizes of shafting, and guaranteed to give from 30 to 60 per cent. more power from same belt and like tension than any iron or steel pulley. Every pulley a split pulley, 70 per cent. lighter than cast iron, and 50 per cent. lighter than wrought iron or steel. Strong enough for any power required. Made in any size from nine inches to sixteen feet diameter.

⁜THE TRANSMISSION OF POWER BY ROPES AND THE DODGE PATENT WOOD PULLEYS⁜

THE great advantage of Wood over Iron as a material for belt pulleys (or drums) to transmit power economically, has induced the DODGE WOOD SPLIT PULLEY CO., of Toronto, to introduce grooved hardwood pulleys for the special purpose of transmitting power by ropes (manilla tallow laid) and in this connection Mr. Dodge has taken out Canadian Letters Patent for a system of applying the ropes, adjusting the pulleys, and taking up slack, that is giving the most unqualified satisfaction. This system of transmitting power by ropes is cheaper and superior to belts in many cases, such as where the driven shaft is at right angles with the driver, also where the drive is perpendicular, particularly when it is quarter twist and perpendicular; also where the driver and driven are close together; also for long drives, such as across a street, or a stream, etc. For transmitting power from an engine to the line shaft this system is unequalled; steady all the time, not like a heavy belt, which is always more or less flapping, jerking and stretching, then slipping and losing power. It is safe to say that an engine hitched up by the Dodge Rope System will do 25 per cent. more work on the same consumption of fuel than the same engine would do with a belt. We have put up a number of the Dodge Patent Rope transmissions during the past year, all of which are in most successful and satisfactory operation, as certified by the testimonials published in our catalogue of well-known manufacturers who have them in use.

WITH OUR SYSTEM OF MANILLA ROPE TRANSMISSION is overcome the objection to Wire Rope (because of crystallizing) and gearing, (because of loss of friction) and shafting (because of the liability to get out of alignment, hence loss of power by friction), and a separate engine plant (because of its great expense); on the contrary, with the Manilla Rope System, under the Dodge patents, the power is transmitted with the same efficiency as though the shafts were close together, there being no loss of power by excessive tension, or bad alignment, but simply the friction of the journals to overcome at the carriers, which have a strain of weight of the rope to carry.

ROPE TRANSMISSION.



A—Main Driving on Line Shaft.
B—Main Driven on R. A. Line Shaft.
C C—Carriers for carrying Rope around corner.
D—Carriage Pulley for Slack.
E—Travelling Carriage on Wheels
G—Impelling or Tension Weight, 60 pounds.
Rope Travel, 3,140 FPM.
Power Transmitted, 30-h.p.

THE illustration of Manilla Rope Transmission as shown above is one of great interest to all Manufacturers, insomuch as it demonstrates the simplicity with which a shaft may be run at right angles to the driver and with little or no loss of power. It is a well known fact, however, that with gears there is a great loss of power from friction, and many other disagreeable points of contention; also with a belt and set of mule pulleys, there is a great loss by imperfect contact of the belt with the pulleys, journal friction, and other annoyances sufficient to condemn it. On the contrary with the Manilla Rope System, under the Dodge Patents, a shaft may be driven at right angles to another with the same efficiency as two parallel shafts are ordinarily driven. The right angle transmission consists of a series of Wood Split Pulleys with grooves for the rope, and an ordinary manilla rope, [tallow laid.] The power is taken from the main line which makes 250 RPM. and transmits about 20 HP.

The driver A and driven B, and mule pulleys CC each have four grooves, and the carriage pulley D has one groove. It will be noticed that the driver A and driven B act as winders, and the rope is wound from one to the other to get surface in contact; the mule pulleys CC are simply carriers, carrying the rope around the corner, and are so placed that the travelling carriage always keeps the rope at an even tension, so that the ropes will always follow the grooves, and the rope is thus guided to and from the driven, always keeping its alignment.

We have lately put in a great variety of rope transmissions for the following well known Manufacturers, viz:—The Granby Rubber Company, Granby Quebec, one drive of 250 H.P.; A. R. Clark & Co., Leather and Glove Manufacturers, 50 H.P.; T. Tushingham & Son, Builders, 35 H.P.; J. R. Black, Carriage Works, 50 H.P.; Barber & Ellis Co., Stationers, 8 drives, 87 H.P.; Jas. Lochrie, Rope Manufacturer, 60 H.P.; J. P. Wagner & Co. Show Case and Keyboard Manufacturers, 50 H.P.; J. Taylor, Morse Soap Works, 60 H.P.; Joseph Simpson, Knitting Mills, 80 H.P.; and numerous others whose testimonials can be seen in our catalogue. Parties who are in want of anything in this line, or who are interested in the efficient and economical transmission of power, are cordially invited to call at our works and see the ropes and wood pulleys in operation, as we are driving our whole factory by this system. Send for Price List, Catalogue and Cypher Code, for ordering by telegraph, to

The Dodge Wood Split Pulley Co., 89 Adelaide St. W., Toronto.

HART EMERY WHEEL COMPANY,

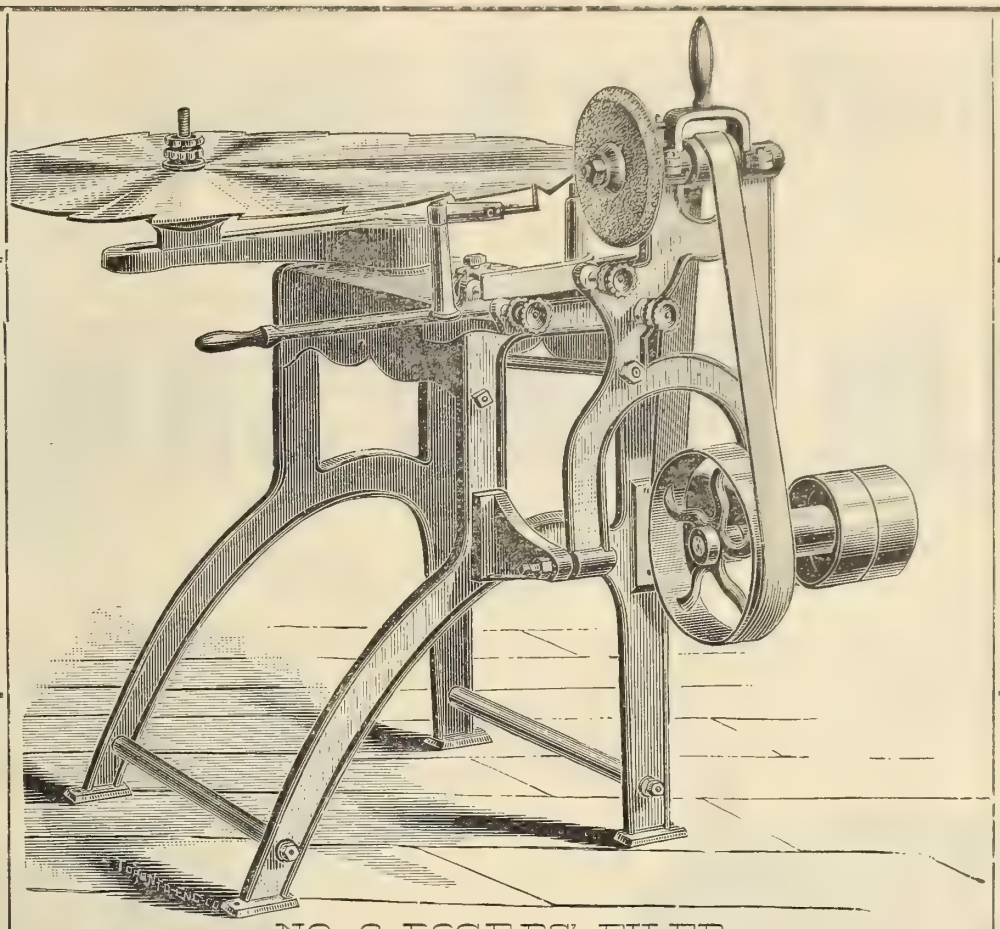
HAMILTON, ONTARIO.

EMERY *and* CORUNDUM

WHEELS

FOR ALL KINDS OF

Wood-working Tools and Saws.



NO. 3 ROGERS' FILER.

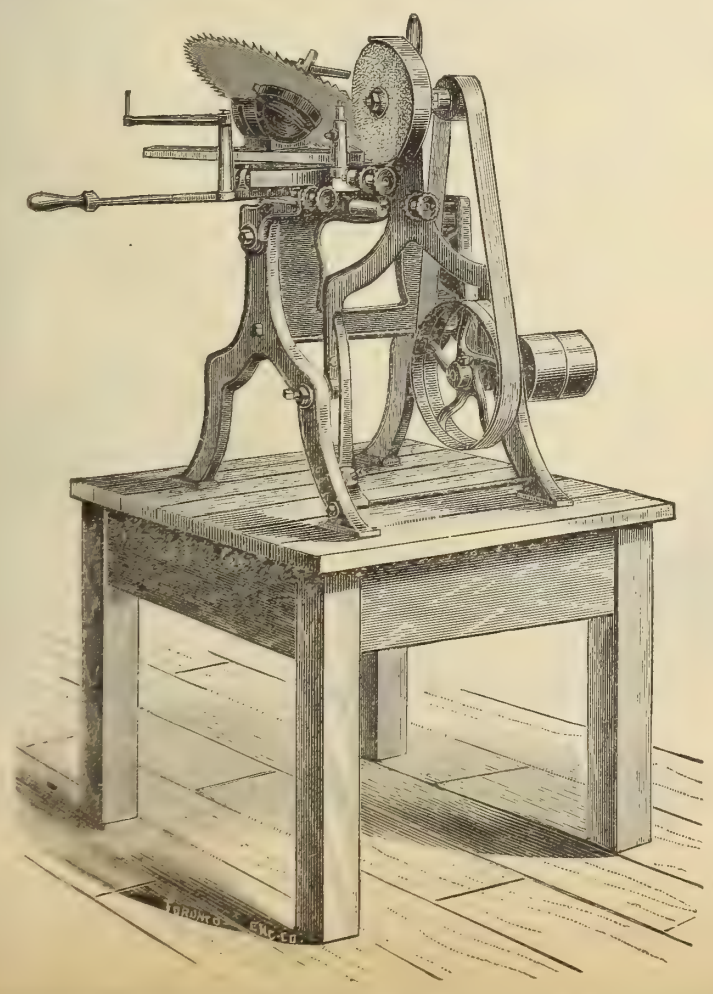
EMERY MACHINES

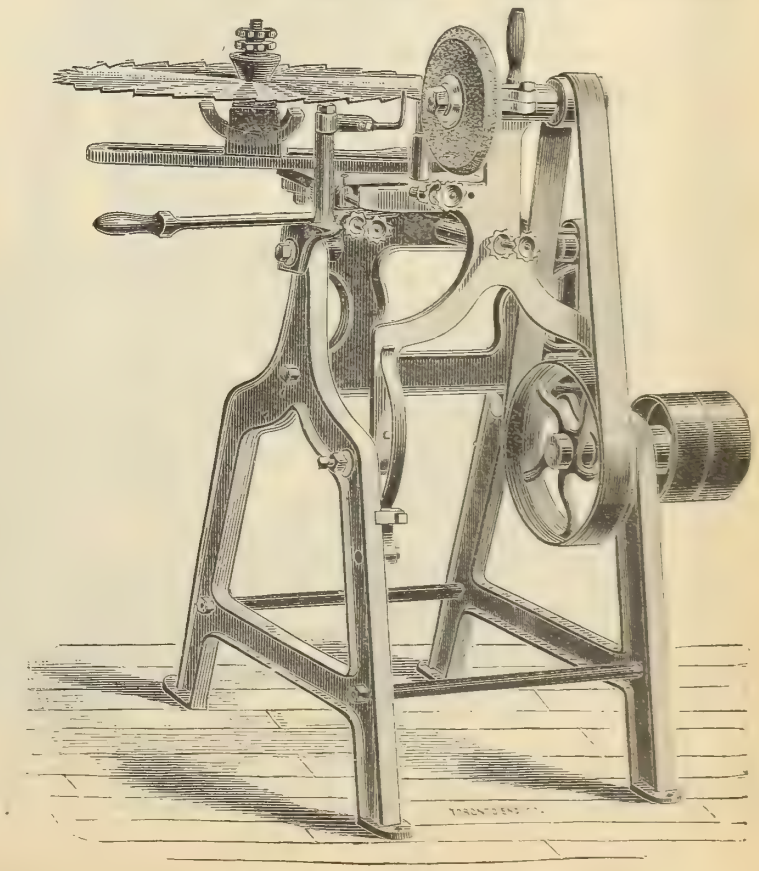
FOR

Grinding,
Polishing *and*
Saw Gumming.

ROGERS' FILERS A SPECIALTY.

1st—The machines are moderate in price; 2nd—They are exceedingly simple; 3rd—They do not readily get out of order; 4th—They are so provided with stops that exact work is done without any trouble; 5th—They are very quickly and easily adjusted to any size of circular, rip or cross-cut saw, and finish the sharpening without files.





MANUFACTURED BY

HART EMERY WHEEL CO., HAMILTON

CHARLES ESPLIN,

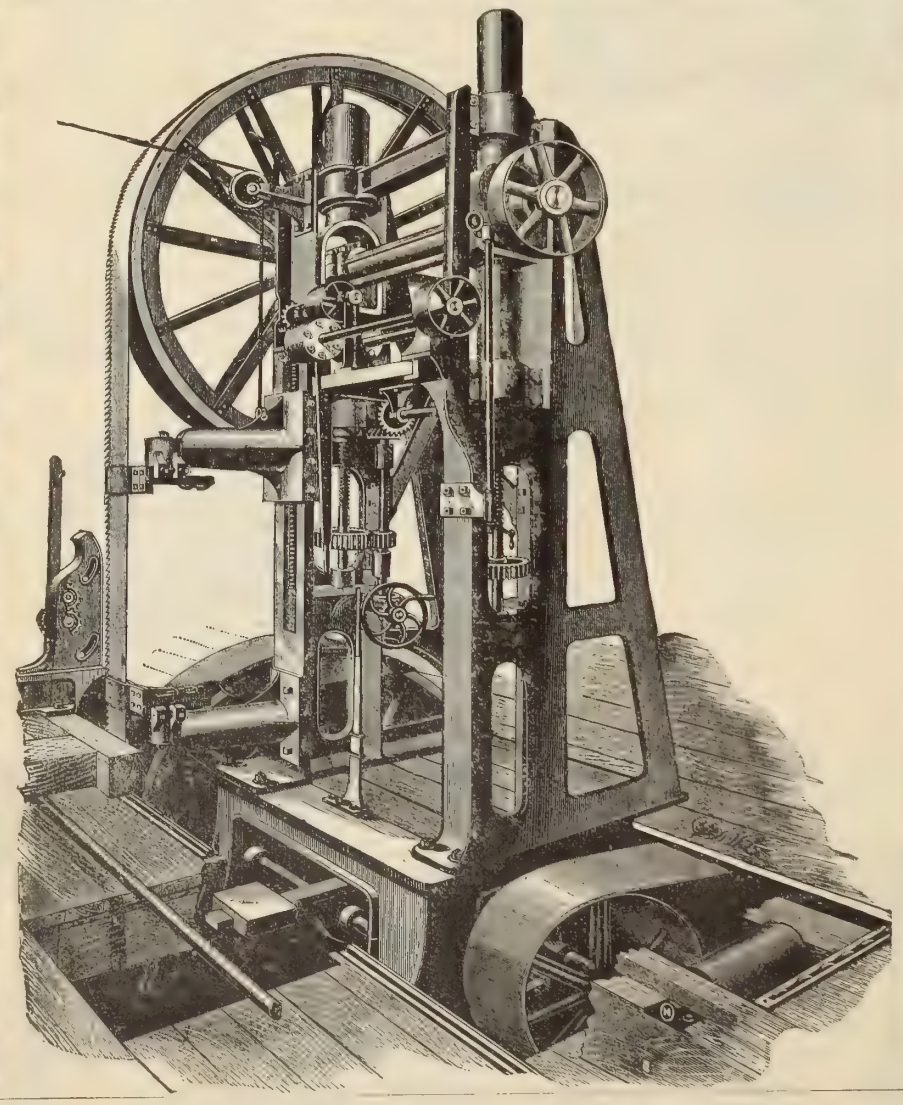
MILLWRIGHT * AND * MECHANICAL * ENGINEER,

Patentee and Builder of the

ESPLIN BAND SAW MILL

The Only Perfect Mill in Use.

THE following statement of Dimensions will give some idea of its proportions: Diameter of Wheels, 8 feet; diameter of lower and top Wheel Shafts, 5⅜ inches; length of Lower Shaft, 8 feet 6 inches; length of Top Wheel Shaft, 8 feet 4 inches; length of Bearings for Wheel Shafts, 18 inches; Weight of Mill alone, 22,000 Pounds.



ENDORSEMENTS

IN ABUNDANCE.

The Following is Only a Sample:

ASHLAND, Wis., Nov. 10th, 1886.

CHAS. ESPLIN, ESQ.,
Minneapolis, Minn., U. S. A.

DEAR SIR,—The band mill placed in our saw mill by you we consider the best and most complete band mill we know of. It has advantageous features which we have not seen in any other mill. The strength of all its parts is ample for every demand upon it. It is massive. The guide arms in their proportions and adjustments seem beyond improvement. The drive wheel by taking up the tension of the saw from below is a great advantage gained. The long distance between the bearings of the upper wheel shaft steadies the motion and the whole machine moves with ease and steadiness.

We have never seen lumber so perfectly manufactured as made by this band mill. The mechanic that planned it and the company that manufactured it deserves the congratulation and thanks of all manufacturers of lumber,

Very respectfully,
SUPERIOR LUMBER CO.

John H. Knight, Secretary-Treas.; D. A. Kennedy, Supt. and General Manager.

Address, CHAS. ESPLIN, care of Wm. Hamilton Mfg. Co., Peterborough, Ont.,

OR TO MY AMERICAN OFFICE:

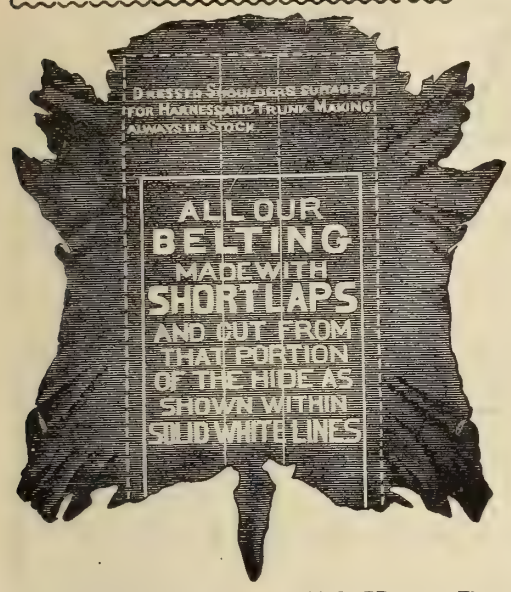
623 Franklin Ave, Minneapolis, Minn.

Cotton and Rubber

BELTING.

ALL SIZES KEPT IN STOCK.

ORDERS * PROMPTLY * FILLED.



ROBIN & SADLER

MANUFACTURERS OF

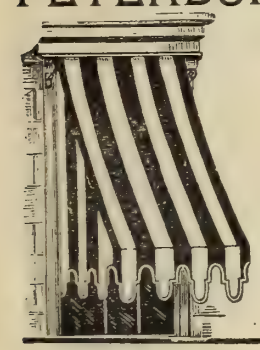
LEATHER **BELTING** LACE LEATHER

Send for Price Lists and Discounts.

2518, 2520 and 2522 Notre Dame St.
MONTREAL.

129 Bay Street,
TORONTO.

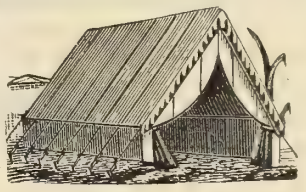
PETERBOROUGH TENT AND AWNING FACTORY.



J. J. TURNER, Proprietor,

The subscriber would call particular attention of **Surveyors, Lumbermen and Prospecting Parties**, to his facilities for the manufacture of every description of commodious Waterproof Tents, Awnings, Horse and Wagon Covers, Tarpaulins, Rick Cloths, Portable Store and Private Window Awnings, from English, French and American Stripes and White Duck.

☞ Lawn and Camping Tents, in every variety of Style and Color. Refreshment Tents, Photographers' Tents, and all kinds of Waterproof Clothing in stock and made to order. American and English Oakum. All kinds of Rope spliced. Orders by mail promptly filled. Tents of every description to rent.



J. J. TURNER, PETERBORO', ONT.

THE "SIMONDS" SAWS

R. H. SMITH & CO., St. Catharines, Ont.

Sole Manufacturers for Dominion of Canada.

OUR Circular Saws, manufactured by the above patent process, having been in use by a large number of Millmen and Manufacturers for the past ten years, have won a reputation never attained by any other make in the Dominion.

WE ATTRIBUTE THIS SUCCESS

First—To the superior quality of the STEEL, which is of a finer texture than is or can be used by any other process, and for which we pay a far higher price, being manufactured expressly for us.

Second—Our patented process of TREATING the steel, producing a uniformity and quality of temper never before attained.

Third—To our patented method of ADJUSTING, which insures a perfect running saw when correct cutting speed is given.

IF YOU WANT THE BEST CIRCULAR SAW MADE,

One that will stand up to its work better, and run longer without hammering than any other make, buy the

SIMONDS

OUR NEW CROSS-CUT SAW—"THE LEADER,"

Four gauges thinner on the back than teeth, ahead of all others, will be on the market shortly. Ask your Hardware men for them.

☞ **All Communications or Orders will receive prompt attention.**

WINTER SAWING.

W. R. THISTLE & CO.

Manufacturers and Wholesale Dealers in

LUMBER

Manning Arcade, King St. West,

TORONTO, - - - ONTARIO.

IRON AND STEEL RAILS.

A QUANTITY OF SECOND-HAND RAILS, 20, 30 and 40 lbs. to the yard, for sale Cheap. In good order for re-laying

JOHN J. GARTSHORE,
49 Front Street West, Toronto.

MUSKOKA MILL & LUMBER CO.

Manufacturers and Wholesale Dealers in

LUMBER

Manning Arcade, King St. West,

TORONTO, - - - ONTARIO.

IRON AND STEEL RAILS.

A QUANTITY OF SECOND-HAND RAILS, 20, 30 and 40 lbs. to the yard, for sale Cheap. In good order for re-laying

JOHN J. GARTSHORE,
49 Front Street West, Toronto.

THE

MANUFACTURERS

Life Insurance Company.

Head Office, - - 38 King Street East,

TORONTO, ONT.

Incorporated by Special Act of the Dominion Parliament.

AUTHORIZED CAPITAL & OTHER ASSETS

OVER $2,000,000.

Full Deposit with the Dominion Government.

The following is taken from the *Monetary Times*, of Jan. 20th. "When the announcement was made that a life assurance company was being formed under the above title, with the Premier of the Dominion as its president, and influential manufacturers and capitalists as its vice-presidents and directors, it was natural that considering the *esprit de corps* of our manufacturers and the bonds which hold them together; considering, too, the prestige of the names at its head, a liberal support would be accorded the new company and a large business would be done.

"The result of some five months' business of this company shows even greater success in securing business than the most sanguine of its friends deemed likely. In that period no less than $2,564,000 of insurance has been written, the premiums on which amount to $82,000. The amount of stock subscribed reaches $621,000, and of this $126,000 has been paid up. It is clear that extraordinary energy has been put into the work of securing business, and the result justifies the effort. The agencies of the company are spread over all Canada and the volume of business secured surpasses anything done, to our knowledge, by a Canadian company under like conditions. The low ratio of cost of which the Manufacturers can point is in part accounted for by the large proportion—one-fifth—done at the head office, which either came unsolicited or was secured under circumstances which lessened its cost to the Company. Offered such a volume of risks for approval, it is of the gravest importance that the actuarial and medical departments of a new company shall be adequate to their task. It was made evident at the annual meeting that care and discrimination have been shown by the medical men and it is testimony to the reasonableness of the company's plans that they are approved by Mr. Standen, a New York actuary. The Manufacturers' has what is known in the States as "a good send off," it does not lack for enthusiastic workers and able directors, and it has great reason to look for continued success.

Agents Wanted in Unrepresented Districts.

MESSRS. WILSON & MORRISON,
Managers Eastern Ontario, Peterborough.

REPRESENTATIVE TORONTO LUMBER FIRMS

TENNANT AND CO.

Wholesale Dealers in

LUMBER, LATH & SHINGLES

Dressing and Better Pine.

Also Hemlock in all sizes a Specialty.

OFFICE:
No. 9 VICTORIA STREET, TORONTO.

THOS. H. WILLMOTT. A. K. McINTOSH.

WILLMOTT & McINTOSH,

Wholesale Dealers in

LUMBER

44 and 46 Front Street East,

TORONTO, - - ONTARIO.

Lumber Shipped to all Parts by Rail or Vessel.

Agents for the Celebrated LUFKIN BOARD AND LOG RULE.

Prompt Delivery in all Cases. CORRESPONDENCE SOLICITED.

ONTARIO LUMBER COMPANY

MANUFACTURERS AND DEALERS IN

LUMBER

LATH, SHINGLES.

HEAD OFFICE: Room H, Yonge Street Arcade.

MILLS AT Midland, French River and Gravenhurst. TORONTO, ONT.

BILL STUFF CUT TO ORDER.

WM. LEAK & CO.,

WHOLESALE

PINE & HARDWOOD LUMBER

DUNDAS STREET,

TORONTO.

Lumber Shipped to all parts.

DONOGH & OLIVER,

Wholesale Dealers in

LUMBER

OFFICE:

Nos. 16 and 17 Imperial Bank Buildings,

WELLINGTON STREET EAST.

TORONTO, ONT.

SCOTT, SCOTT & CO.

Manufacturers of and Wholesale Dealers in

LATH AND SHINGLES

LUMBER

MILLS AT MEDONTE, SIMCOE CO.

Office: Union Loan Buildings, 28 & 30 Toronto St.

TORONTO.

CHRISTIE, KERR & CO.

Manufacturers and Wholesale Dealers in

PINE AND LUMBER HARDWOOD

Office: 9 Victoria Street,

TORONTO, = = = ONTARIO.

McCRANEY, McCOOL & WILSON,

Manufacturers and Wholesale dealers in all kinds of

PINE and HARDWOOD LUMBER

LATH AND SHINGLES.

Ship Plank, Decking and Long Bill Stuff, a Specialty.

Mills at Burlington, Bronte and Huntsville.

Head Office: 16 UNION BLOCK, corner Toronto and Adelaide Sts., Toronto.
Branch Office: 208 Wellington Street, Ottawa.

TORONTO and OTTAWA.

THE CANADA LUMBERMAN.

VOLUME VIII. NUMBER 3. PETERBOROUGH, ONT., MARCH, 1888. TERMS, $1.00 PER YEAR SINGLE COPIES, 10 CENT

THE CANADA LUMBERMAN

PUBLISHED MONTHLY BY

ARTHUR G. MORTIMER,

OFFICE: SIMCOE STREET, PETERBOROUGH, ONTARIO.

TERMS OF SUBSCRIPTION:

One Copy one Year, in Advance, - - - - - $1.00
One Copy six months, in Advance, - - - - - 50

Advertising Rates Furnished on Application.

THE CANADA LUMBERMAN is published in the interest of the lumber trade and of allied industries throughout the Dominion being the only representative in Canada of this foremost branch of the commerce of this country. It aims at giving full and timely information on all subjects touching these interests, discussing these topics editorially and inviting free discussion of them by others.

Especial pains are taken to secure the latest and most trustworthy market quotations from various points throughout the world, so as to afford to the trade in Canada information upon which it can rely in its operations.

Special correspondents in localities of importance present accurate report not only of prices and the condition of the market, but also of other matters specially interesting to our readers. But correspondence is not only welcome but is invited from all who have any information to communicate or subjects to discuss relating to the trade or in any way effecting it. Even when we may not be able to agree with the writers we will give them a fair opportunity for free discussion as the best means of eliciting the truth. Any items of interest are particularly requested, for even if not of great importance individually, they contribute to a fund of information from which general results are obtained.

Advertisers will receive careful attention and liberal treatment. We need not point out that for many the CANADA LUMBERMAN with its special class of readers is not only an exceptionally good medium for securing publicity, but is indispensable for those who would bring themselves before the notice of that class. Special attention is directed to "WANTED" and "FOR SALE" advertisements which will be inserted in a conspicious position at the uniform price of ten cents per line for each insertion. Announcements of this character will be subject to a discount of 25 per cent. if ordered for three successive issues or longer.

Subscribers will find the small amount they pay for the CANADA LUMBERMAN quite insignificant as compared with its value to them. There is not an individual in the trade, or specially interested in it, who should not be on our list, thus obtaining the present benefit and aiding and encouraging us to render it even more complete.

THAT phase of the complex Paradis *embroglio* relating to his charges against the late Quebec Administration of acting corruptly and unfairly against the settlers in favor of Messrs. Gilmour, has resulted in the removal of the reverend father to the United States by his ecclesiastic superiors. The Provincial journals are making an ecclesiastical and political squabble of the matter, some upholding the changes and some maintaining that the Ross Administration was falsely accused; some defending the priest and others supporting the authority of his superiors. The action of the ecclesiastical authorities in removing Father Paradis is a strong indication of the opinion formed by independent judges.

THE provisions of the new tariff bill as presented to Congress, by which it is proposed to place timber on the free list, are gladly welcomed by Canadian lumber operators, but we fear it will never pass its third reading. Should this bill pass the House Canada will be benefitted by the free admission of the following products:—Timber, hewn and sawed and timber used for spars and in building wharves; timber, squared or sided; wood, unmanufactured, not specially enumerated or provided for; sawed boards, planks, deals and all other articles of sawed lumber; hubs, for wheels, posts, last blocks, wagon blocks, oar blocks, heading blocks and all like blocks or sticks rough hewn or sawed only; staves of wood, pickets and palings, laths, shingles, clapboards, pine or spruce logs, provided that if any export duty is laid upon the above mentioned articles, or either of them, by any coutnry whence imported, all said articles imported from this country shall be subject to duty as now provided by law.

THE Ontario Government may thank the lumbermen for the good showing that Mr. Ross, their Provincial Treasurer, was able to make in his budget speech. The great success of the sale of timber limits which Mr. Pardee, the Commissioner of Crown lands, offered for competition in December, must have been highly satisfactory to him and his collegues, especially in view of the fact that there were circumstances, to which we need not now recur, that might have been expected to operate prejudicially to a certain extent. The receipts from the lumbermen were so large as to meet not only the liabilities for the year for aid to railways but also a large portion of the contemplated expenditure on the proposed new Parliamentary building. Not only is the capital account thus kept down through the large purchases by the lumbermen of provincial property, but their extended operations will continue to add largely for rental and stumpage dues to the current revenue for some years to come. It will therefore be seen that Ontario is largely indebted to the lumbermen for her prosperity.

AT Washington there is still much talk of reducing the excessive revenue receipts by a modification, if not a total abrogation, of the customs duties on raw materials. Lumber is one of the articles that has been generally mentioned as coming within this category. Indeed several projects looking in this direction have been submitted to Congress, but their fate is altogether uncertain. Just now the two great political parties in the United States are looking to the approaching Presidental election, and every movement is considered chiefly with reference to its probable effect upon that event. The fact that they are thus watching each other tends to neutralize all their efforts and to make any action less likely through the fear of its affording a chance of its being used prejudicially to those making the movement. However, though Presidental elections occur very often they do not happen every year, and next year a mutual arrangement may be more feasible. It is useless to talk business while men are thinking more of elections than of the ordinary affairs of the country.

FROM the fact that the Fishery Commissioners at Washington declined to enter upon any arrangements for reciprocal trade between Canada and the United States, the prospect of any remission through that means of the duty on lumber can be considered at an end. There is evidently to be no reciprocity by treaty at least, whatever other means there may be of attaining the same end. Those who looked to diplomacy to secure the desired result will therefore be disappointed, but few have supposed of late that the Commissioners would seriously entertain the project. It was generally understood that the representative of Canada would not consent to a more extensive exchange of free goods, and that the representatives of the United States were not willing to renew the Reciprocity Treaty, which, rightly or wrongly, they deemed not to have been advantageous to their country. The difference of opinion was too great to be easily adjusted, and they did not deal with this branch of the matters in discussion between the two countries. The publication of the text has put an end to all conjectures on this subject, showing that it provides for no reciprocity, except conditionally as regards fish. Any such free exchange or reduction of duties is left at present to the sphere of legislative action in the two countries.

THE Montreal *Journal of Commerce* attributes the decadence of Quebec, as a lumber port, to the arbitrary interference of the Ship Laborer's Union, since its exorbitant demands forced the shipping trade to ports where these obstacles were not met. On the other hand, Montreal has been built up, it is asserted, by a freedom in stevedorage, in spite of the superior national advantages of Quebec, where the policy pursued has had the effect of turning business over to Montreal. A comparative statement is made in the lumber shipments by sailing vessels from Quebec, from 1877 to 1887, inclusive, showing a decrease of from 796 vessels, with a total of 670,627 tons in 1877, to 721, and 206,172 tons in 1887. The year 1880, with 634 vessels and 555,451 tons, was the second largest, with a continued drop since then, excepting a spurt in 1883, when 487 vessels cleared, with 416,169 tons. One reason for the decrease has been that many mills which formerly sent deals to Quebec now deliver them direct to the ships and steamers. This most marked falling off is seen in the amounts exported from Quebec in 1886 and 1887,—2,271,069 feet, and 1,365,510 feet respectively. Montreal's lumber shipments were 3,500,000 in 1877, and 98,250,000 feet in 1886, with a probable increase for 1887. The competition of Baltic timber in the English markets has affected the export trade, and the outlook is not altogether bright, though a limited production of lumber has left light stocks. Mill concerns are said to be turning their attention more to the United States trade and less to the Quebec buyers. The late half prices realized on timber limits suggests a general advan[illegible] age, induced by the decrea[illegible] and the most difficulty is said to be experienced in getting first class white pine. The supply of red [illegible] is ample. Oak is of stronger feeling, [illegible] been moderate and the export demand fairly large. Other hardwoods show fairly. This winter's log production promises to be small, and prices are now good.

A GENTLEMAN writing form St. John, N. B., to THE LUMBERMAN, calls attention to the following special [illegible] of the New Brunswick lumber trade. He says:

"The trade here is totally different from that of Upper Canada for many reasons. (1) Our stock is nine-tenths spruce, cut full length of tree, and manufactured as far as possible into three and four inch lumber; (2) Such a thing as stock boards is unknown, because we have very little pine and it would not pay to cut it in even lengths, either in the woods or mill; (3) Our stumpage dues are collected on a different principle (Quebec has now adopted our style, but not our log scale); (4) Our lumber is classed differently; (5) On account of the St. John being an international river there are two distinct classes of lumbermen and mill owners here. The American who has the right (by the treaty of Washington and resolution of Congress) to manufacture lumber here cut in the State of Maine, and ship the same to the American market free of duty, and the provincial millman who, no matter where his lumber is cut, would have to pay duty if exported to the United States, and therefore is forced to make England his market. The manufacture for the two markets, too, is very different."

We will at some future time dwell on this matter at further length, and shall be pleased in the meantime to receive any "points" which any of our readers may be able to furnish.

NOW that the Government of Ontario is forming a new Ministry of Agriculture and is consequently making minor rearrangements in other departments, advantage might be taken of these changes to make certain improvements in our system which would be very beneficial both to the country and the lumber trade. If a sub. department, or bureau of Forestry, were formed, the Crown Lands might be divided, after proper examination and survey, into forest lands and land open for agricultural settlement. This would avoid much friction, waste and even destruction of property. On the one hand the settlers would not be grumbling at the lumbermen taking the pine from their farms, for settlement need not be allowed on the limits when there is elsewhere plenty of better land for agriculture. Nor would there be any encouragement for bogus settlers having no object but to secure the pine under pretence of homesteading. On the other hand the lumbermen would not be hurried to cut the timber from those portions of their limits that are settled or about to be settled, such haste often leading to want of economy in their operations or to premature cutting when delay would be expedient. Again the lumbermen would not be exposed to the increased risk of fire which much follow partial settlement with its burnings to prepare the land for the plow; nor would they have their property destroyed by actual forest fires, involving much complete or partial destruction and the necessity for the immediate felling of burnt timber to save it from destruction. With the Crown Lands properly classified much of these evils might be obviated or greatly lessened. And there need be no restriction upon agricultural settlement, for as more farm land was required, former forests where the soil is suitable to agriculture, might be transferred and opened to settlers. Such a system would also have the incidental advantage of determining the extent of the remaining forests of Ontario, thus affording valuable information to the lumber trade, economising our forests resources, and improving the revenue of the Province from the source which even now contributes to it so largely. Sometimes the lumbermen are blamed for the too rapid destruction of our forests, but in many cases haste is forced upon them by the present system. There is now a good chance for its modification.

THE SAFETY OF STATIONARY BOILERS.

A measure very closely affecting the interests of saw-mill proprietors, as well as other manufacturers, has been introduced into the Provincial Legislature by Mr. Garson, M.P.P. It provides for a yearly examination of boilers in connection with stationary engines by a duly appointed government inspector, and also that all engineers and firemen shall be obliged to pass examination as to their competency. The bill establishes four grades of ability and defines the class of engine which the holders of certificates of these respective grades shall be qualified to take charge of as follows :

A first-class engineer shall require a thorough knowledge of steam and its uses, of the use of the steam engine indicator, the principles of combustion, the details of the construction of boilers and engines, the strength of materials used in such construction, general mechanics, the principles of steam heating and the working of condensers and feed pumps, and such certificate shall entitle the holder to operate any steam plant.

A second-class engineer shall require a thorough knowledge of steam and its uses, general mechanics, the principles of steam heating and the working of condensers and feed pumps, and such certificate shall entitle the holder to take charge of and operate any steam plant of one hundred horse-power or less.

A third-class engineer or fireman shall have a fair knowledge of steam and its uses and the principles of steam heating and the working of feed pumps, and such certificate shall entitle the holder to take charge of and operate any steam plant of fifty horse-power or under.

A fourth or special class engineer shall require a fair knowledge of the working of feed pumps and be thoroughly capable of taking care of any boiler under his charge, and such certificate shall entitle the holder to take charge of any steam plant or portable engine of fifteen horse-power or under.

Those at present in charge of engines or boilers are allowed to operate them for one year on payment of $2 for a permit, after which they must pass the examination and apply for a certificate. Certificates will run for one year, and the fee of $5 will be charged to all applying for the first examination, renewals costing $1. Owners of boilers are required to pay $5 for each annual inspection. Owners or managers of boilers who entrust them to persons not duly qualified under the Act are subject to a fine of not less than $10 or more then $250. Licensed engineers who discover that the boilers they are operating are unsafe are to notify the manager and demand that they be repaired. In case of refusal or neglect the responsible party is liable to a fine of not less than $100 or more than $500. The bill came up for a second reading on the 24th ult., and was referred to a special committee. There is a fear on the part of some engaged in manufacturing industries that the passage of the measure will entail undue trouble and expense upon them. Considering the large number of those employed to manage stationary engines, the fee, $5, seems unduly large. The same remark applies to the charge for inspecting boilers. As the object of the measure is to provide for the safety of the general public as well as of those employed about engines, it would only be reasonable that the burden of the necessary expense involved should be partly borne by the public. The startling statistics quoted by the introducer of the bill leave no room for doubt that the present system of allowing boilers to be operated by persons who may be entirely ignorant of engineering is a glaring abuse and causes an appalling loss of life every year. There is just as much need for regulations with a view to secure the safety of steam boilers and the competency of engineers in connection with stationary engines as in regard to marine boilers. The statement that according to the reports of insurance companies 700 of the 6,000 stationary engine boilers in Ontario are unsafe shows the urgent need for government supervision. The principle of the measure is sound and just, but in working out its details we trust that every care will be taken to render it as little oppressive as possible in its bearing upon the important interests with which it deals.

NEW TIMBER REGULATIONS.

An extra of the *Quebec Official Gazette* contains the new regulations recently adopted in respect to the management of Crown and timber lands. They provide that newly acquired licenses and renewals of licenses to cut timber shall be subject to a yearly ground rent charged at the rate of three dollars for each square mile or fraction thereof, and establish the following scale of dues to be levied on all timber cut : Oak and walnut, per cubic foot, 4 cents ; pine, birch, basswood, cedar, spruce, elm, ash, tamarac and all other square timber, per cubic foot, 2 cents ; pine saw logs, boom and dimension timber and all other logs or woods intended for sawing, except spruce, hemlock, cypress and balsam, per standard of 200 feet board measure, (equivalent to $1.30 per thousand feet,) 26 cents ; spruce, hemlock, cypress and balsam saw logs, per standard of 200 feet, board measure, (equivalent to 65 cents per thousand feet), 13 cents ; cordwood, hard, per cord of 128 cubic feet, 20 cents ; cordwood, soft, per cord of 128 cubic feet, 10 cents ; cedar rails, not exceeding 12 feet long, per 100, 30 cents ; cedar pickets, per 100, 15 cents ; rails of other wood than cedar and not exceeding 12 feet long, per 100, 10cts. ; cedar and pine shingles, short, per 1,000, 10 cents ; cedar and pine shingles, long, per 1,000, 15 cents ; cedar or other telegraph, telephone or electric light poles, not exceeding 10in diameter at the butt or large end, per lineal foot, ¼ cent ; ditto, exceeding 10 inches at the butt, per lineal foot, ½ cent ; railroad ties of all kinds of wood, each, 2 cents ; hemlock lathwood, per cord of 128 cubic feet, 20 cents ; hemlock bark, ditto, 32 cents ; pine, cedar, spruce, birch or other small logs, not exceeding 10 feet in length, nor 10 inches in diameter at the smaller end, for shingles, spools, small board stuff, or paper pulp, per cord, 128 cubic feet, 25 cents ; futtocks, knees, floors of birch and other shipbuilding material, and all wood goods not enumerated in the forthgoing list, an *ad valorem* duty on the invoice or bill of 10 per cent.

PERSONAL NOTES.

Mr. A. Lech, secretary-treasurer of the Wm. Hamilton Manufacturing Co., Peterborough, who has been confined to his home through sickness for some months, has, we are pleased to know, fully recovered, and is again attending to his onerous duties.

We are pleased to learn that Mr. T. G. Hazlett, one of Peterborough's most extensive lumbermen, who has been ill for some time is now convalescent.

The Lumberman had the pleasure of a call a short time ago from Mr. John A. McAvity, of the well-known firm of T. McAvity & Sons, St, John, N. B. He was pushing business for the firm in this section of the country and meeting with good success. The Orono Cant Dogs and Boot Calks manufactured by the company are meeting with ready sale wherever introduced.

Mr. Elbridge G. Merrick, for many years engaged at shipping square timber to England from Canada, at which business he grew very wealthy, and of late years engaged in the vessel and lumber business at Detroit, Mich, died Feb. 11th.

Geo. McWilliams, late of the firm of Kincaid & McWilliams, Peterboro', has accepted the position of mechanical supertendant of the Ontario Canoe Co., of the same place.

Martin A. Ryerson, aged 33, heir of the millionaire, lumberman Martin Ryerson, of Chicago, who died recently, has given in trust property worth $250,000 to eight charitable institutions, four Protestant and four Catholic. The gift was a free one on the part of young Ryerson, though in line with his father's oft-expressed wishes.

PUBLICATIONS.

Lumber, a very neat 16-page weekly, under the able editorship of A. H. Hitchcock, late of the *Timberman*, has made its appearance in Chicago. A paper of the same name was previously published in New York, but it was far from being a credit to the influential industry it aspired to represent. Under Mr. Hitchcock's management, however, it ought to command at least a fair share of trade, notwithstanding the fact that Chicago already has three other papers of a similar nature. *Lumber* has our best wishes.

The Toronto *Saturday Night*, edited by Mr. E. E. Sheppard, is one of the best gotten up and most entertaining literary publications on the continent. The latest issue always seems to be the best, and if it keeps this up much longer *Saturday Night* will be a necessity in every home. Those of our readers who have any desire to see a all-round Canadian literary paper should address the Sheppard Publishing Co. Toronto, for a copy of the above.

"Scientific Diary Practice ; or Profitable Diary Agriculture for Canadian Farmers" is the title of a new work just completed by W. H. Lynch and issued by the Dominion Government. Its contents are such as to be of incalculable benefit to every Canadian farmer and owner of cattle. It treats scientifically on the methods necessary for the successful carrying on of a diary, and will prove an invaluable help to all such engaged. The book is well gotten up and contains several illustrations.

TORONTO CORRESPONDENCE.

Toronto, Feb 29.—Business still continues dull. There are some enquiries for bill stuff and the commoner grades of lumber, and prices continue steady with the prospect of an advance. There is some demand from the United States for cutting up lumber. With the opening of spring it is probable that there will be considerable activity in the building trade in Toronto, and at several points in Western Ontario. The demand for house accommodation, consequent upon the continued influx into the city, and the fact that owing to the labor troubles, many building enterprises contemplated last year were postponed, encourages the expectation of a particularly busy season.

Lath is moving at good figures and is in quite a demand. Credit will not be so easily obtained this year as was the case in the past. This is a good thing, the less of that the better for all. There is no necessity that any dealer should sell to parties about whom there is the slightest doubt. It is not very difficult to obtain information respecting any individual builder, and to any one at all doubtful a positive refusal should be given.

The recent bank suspensions and the unsatisfactory state of financial investments, have turned the attention of investors in the direction of real estate. Making every allowance for too sanguine anticipations, the outlook for the building trade is favorable, provided strikes and labor troubles can be avoided. Much, however, depends on the money market and the action of the loan companies. It is regarded as probable that some of the larger loan companies will shorty have to look for re-investments in the direction of loans on city real estate, though more caution and discrimination is likely to be exercised than has hitherto been the case.

The amalgamation of the Northern Railway with the Grand Trunk, is viewed approvingly by some of the lumber dealers, on the ground that it is likely to be helpful to the trade. There have been frequent complaints as to the difficulty of obtaining adequate shipping accommodation at points along the Northern. It is hoped that the change will result in the removal of this grievance.

Can any of your Toronto readers give any information regarding what has been done by the inspection committee of the lumber branch of the Board of Trade ?

NOTES.

—Messrs. Train & Son of Burk's Falls, Ont., are about to introduce the Electric light and run their mills night and day.

—John Forsyth, Pakenham, Ont., will commence to cut about the middle of April, and expects to cut about 400,000 or 500,000 feet.

—W. S. Ramsay & Co., of Sutton, Ont., write that their saw mill and sash and door factory are in full swing and have been so all winter, they having large orders on hand.

—A fire took place on the morning of Feb. 26th in James Shearer's lumber yard. The saw-mill was burned and loss to the amount of $14,000 was sustained ; covered by insurance.

—Messrs. J. S. Ainslie & Bros., Comber, Ont., manufactured 2,000,000 staves in their works last summer, nearly all of which were shipped to English markets. They employed about 60 hands.

—It is understood that G. A. Grier & Co., the big lumber firm of Ottawa, have sold their concern, limits, mills, etc., to Pierce & Co., of London, England, the price named being in the vicinity of a million and a quarter of dollars.

—The Chatham Wagon Company, of Chatham, Ont., have acquired a large tract of heavily timbered land near Thamesville, Ont., the timber upon which will be utilized for the purposes of their business.

—Reports from the vicinity of Doaktown, N. B., state that the weather has been cold and the winter a very favorable one for all kinds of work. The output of logs will be very good as the shoal snow enables lumbermen to gather up scattering logs which could not be got in deeper snow.

Many fatal and destructive accidents would be prevented if those employing steam power in manufacturing took adequate precautions to see that their machinery was always in good order. The Boiler Inspection and Insurance Company of Canada, the card of which appears in another column, is an institution which should commend itself to all manufacturers.

—It is expected that a post office will be opened at the station at Hepworth, Ont. It will be a great accommodation to lumbermen. Lumbering operations were never so brisk before as they are at this point this year. It is estimated that the output of lumber will total 7,000,000 feet, and this will be supplemented by the usual immense quantities of timber, poles, ties and tan bark. Hepworth is said to down any inland station in Ontario in its output of forest products.

—It is estimated that Michigan railways used last year three and three-quarters millions of ties, amounting to 131,250,000 feet, and that they used lumber for piling, bridges, etc., to the extent of one-third the forgoing amount ; and further, that at least one and one-half millions ties were sent out from the State. This heavy lumber consumption by the railroads should incline the railroad ear to the suggestion of the forestry convention held at Grand Rapids recently.

North Onslow, Ont.—Mr. John O'Donnell has a gang of men at work cutting logs at Wilson's Lake. The timber is being hauled to Mr. P. Madden's mills.

Martinville, Que.—Messrs. Cass Bros. are getting in a lot of saw logs. They are doing a large lumbering business this season.

THE WILLIAM HAMILTON MFG. COMPANY OF PETERBOROUGH.

In this issue of THE CANADA LUMBERNAN we would call special attention to the establishment of The Wm. Hamilton Manufacturing Co., of Peterboro', Ont. This company are entirely engaged in the manufacture of the highest class of saw mill machinery, also engines and boilers for saw mills. They have now been established in the above line over 30 years and their main study has been and is to have, besides their own improvements and patents, all the latest improved machinery in the market that will be profitable to the manufacturer of lumber.

They were the first to introduce the manufacture of band mills in Canada and have spared neither time nor expense to have the best machine of the kind. Their first Band Mill has one column and as a proof of its merits we are shown a letter from J. M. Dollar, Esq., of the Ontario Lumber Company, Toronto, Ont. who has one of these mills, from which we quote an extract as follows :

Wm. Hamilton Mfg. Co.

Gentlemen :—The band saw still continues to run well, there is no mistake about it. We have no trouble with it in any way. The make of the lumber is perfect, and it will cut large or small, sound, rotten, rough or any kind of logs. It is a pleasure to look at it. I don't know that we have the best band saw in the world, but none of the Americans that come around ever saw any better, so they say. Yours truly,

J. M. DOLLAR.
Manager Ontario Lumber Co.

They are also building a double column Band Saw Mill, patented by D. K. Allington, of East Saginaw, Mich., a cut of which can be seen on page 16 of this issue. Some of the specialties of this mill is the Double Column. By this device it gives a long shaft for the top wheel which takes away all side vibration. This top shaft is also bolted to the lower wheel shaft which keeps the top wheel from overrunning the lower wheel in entering the cut and preventing the breaking of the saw. Another very important feature is the roller guides. These are placed for the saw to run over at about ¾" past the line of the top and bottom wheel when cutting ; when gigging back these rollers move back and let the saw back from the log in place of throwing the log back on the carriage to clear the saw, also leaving the saw slack when not working and tightening it up when entering the cut. The top roller guide is moved up and down by a rack and pinion to suit the different sized logs to be cut, and the saw running over the rollers requires nothing in front of the roller between it and the log on carriage, thus avoiding all friction as on the other guides. This mill, all well fitted with heavy steel shafts and heavy iron lower wheel, weighs 24,000 lbs.

We would recommend any who are in want of band saw mills to give this Company a call. They have also a full assortment of patterns and have built a great many of the most improved heavy iron frame oscillating gang mills. We give a cut of the latest design of a small compensating balance gang which is patented by Wm. M. Wilkins, of the Stearns Mfg. Co., of Erie, Pa., for which they are the sole agents and manufacturers in Canada. It is taking the lead in the United States and Canada, requiring no heavy foundation but can be placed in themill as easily as a circular.

LETTERS FROM CORRESPONDENTS.

What the Millmen are Doing Throughout the Country. Outlook for the Season's Operations.

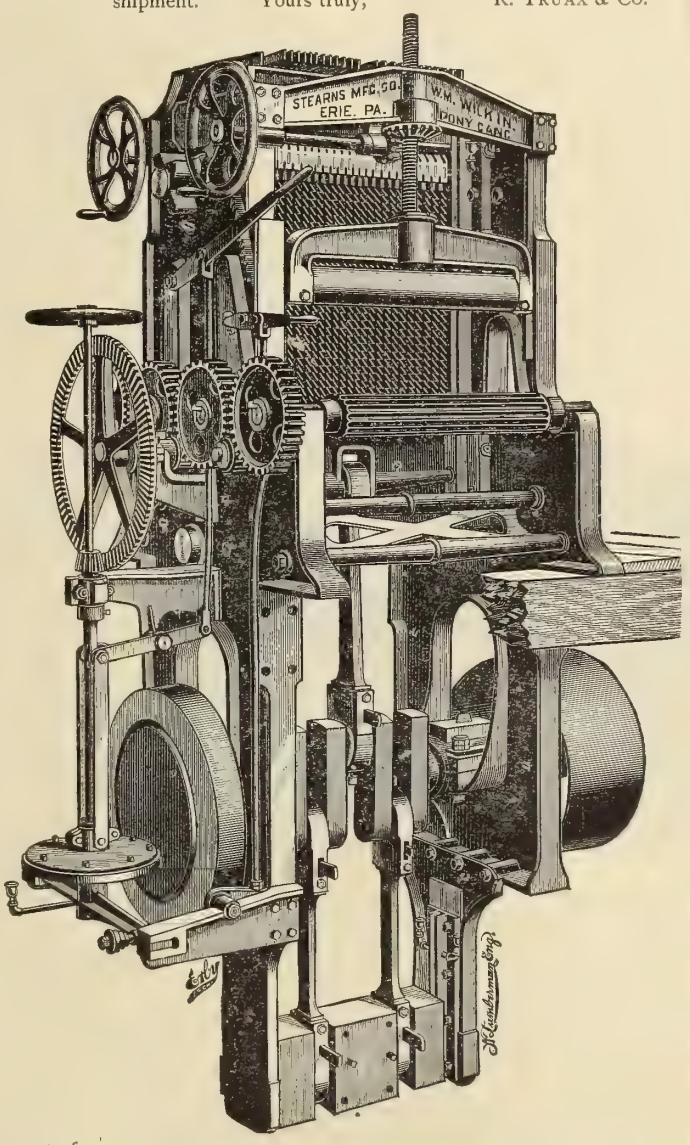
EASTMAN, Que., Feb. 27th.—Our cut of logs this winter will be about 4,000,000 ft., spruce and hemlock. Will commence sawing about April 1st. Prospects for coming season are good for fair prices on account of light log cut last winter. There is likely to be a shortage of logs in this vicinity this winter on account of heavy fall of snow. We will get out this winter 350 ft. of birch logs for clothes pins.

Yours truly, ELDRIDGE, PHELPS & Co.

WIARTON, Ont,. Feb. 18.—As this section of the country depends largely upon its timber, your correspondent being anxious to ascertain the probable output, interviewed the sawmill owners and timber dealers who make their headquarters here and secured the following figures as the result of their operations last year. Square timber, cedar, 2,100,000 feet valued at $178,500 ; ties, 775,000 feet valued at $175,000 ; paving, 400,000 pieces valued at $32,000 ; telegraph poles, 30,000 valued at $30,000 ; tanbark, 4,000 cords, $16,000 ; shingles, 3,000,000 valued at $5,400. As this comprises a comparatively small area, it will be seen that the timber industry is a very important one on the peninsula. This winter has been a very favorable one for shanting, and it is almost certain that the cut for the present year will be greater than last. Yours truly, LUMBER.

GORDON, Ont., Feb. 20.—The probable output of logs in the counties of Essex and Kent for the present season's cut is as follows :—In hardwood, to be manufactured into lumber at the different mills, I think between 25 and 30 million feet, including oak, ash, maple, sycamore, cottonwood and hickory. There is probably 45 to 50 million feet of elm logs put out in these two counties, being for export and home manufacture. I think there is a larger stock of logs put out this year than at any one time during the past ten years. Prices are fair, in some instances inclining downwards, while in others, a little higher, but of about same average as last year's prices. Business is good with a fair demand ; seemingly a good many orders are already placed. THOMAS OUELLETTE.

WALKERTON, Ont., Feb. 24.—In this locality a very large amount of timber is being got out this season. This is caused, to some extent, by the shortage in last year's crops. So far, our stock of logs, consisting principally of maple, beech, birch, basswood, ash, hemlock, cedar, rock and soft elm, is very much larger than any previous year. We have also a large stock of logs, posts, ties and telegraph poles on the bank of the river Saugeen, fifty miles from our mill. When this is brought down we will have one of the largest stocks ever cut in this locality. We are at present running our mill night and day, having disposed of a large amount of hardwood for early shipment. Yours truly, R. TRUAX & Co.



FENELON FALLS, Ont, Feb. 20.—We cannot give you a detailed statement of cut till about the 15th of March. At present we have about two million feet of bill timber fit for bridges and all other capacity of bill timber ; also four million feet of merchantable lumber. We will also have a quantity of spruce and hemlock timber. Our timber mill will commence operations on the opening of navigation. We will also be manufacturing a large quantity of shingles and lath.

JOHN THOMSON & Co.

MONTREAL, Feb. 22.—I am getting out the present winter (which is a very favorable one for logging) say from five to six million feet of pine logs, with a little spruce. Our operations are confined to the River Rouge, a tributary of the Ottawa on the Quebec side, where good pine, as in many other places, is getting scarce. We make all the deals we can for the English or Quebec market, where most of our manufacturers have sold their next season's cut at good prices. The local market for common and cull lumber is good.

Yours truly, J. K. WARD.

ALGOMA MILLS, Feb. 18.—We are getting loaded cars for the C.P.R. Company. At Sudbury, we expect to run till the 1st of April, H. F. Coburn supplying logs for us. Will probably take out about [illegible] for this season. We have five or six camps on C. P. R. limits at Algoma, taking out logs for the Company's mill there. Will probably take out seven or eight million feet at that point. The former operations here are confined to us this winter. A few miles down the Algoma Branch, Perrin is taking out logs and board pine. Further down the Spanish River Co. and the Boswell Co. are operating ; Messrs. Cook Bros. are working on the French River ; the Blind River Co. have another near Algoma Mills and on the Mississaga River. Messrs. Kloks have a big gang in Wells township, up on the Soo extension at Wahnipitae on the main line. The Lumby Co. and the Georgian Bay Co. are carrying on extensive operations. Cannot of course give you any idea of what each of these shanties are doing, but give you their names that you may get reports from them. Yours truly, H. P. McLAREN.

OTTAWA, Feb. 8.—With reference to last season's cut I may say on the whole the season's output of lumber for my mill was very satisfactory—about 5,000,000 feet—the greater part of which was sold for about the price of lumber of the same description the previous year. Shingles, of which I cut about 3,000,000, were slow of sale, the market being overstocked in this locality, our stock now being about 2,000,000 still on hand. I am now engaged putting on to the ice about 7,000,000 feet of logs and long timber for dimension purposes, and should the snow not inconvenience operations, expect to put out about 9,000,000 feet. This is more than I can cut in one season with the mill in its present shape, but am obliged to cut as much as possible owing to the fires of last September having killed the timber on portions of my limits, all of which burnt timber I expect will be cut this winter. My limits are in the County of Hastings, on the York branch of the Madawaska River. Yours truly, WM. MASON.

GODERICH, Ont., Feb. 17.—I enclose one dollar in payment of the LUMBERMAN for 1888. Please change the address to Joseph Williams. There is a wonderful improvement in the LUMBERMAN of late. It is a real lumberman's paper now, and I consider very little, if anything, behind the best of the American publications. Yours truly, JOS. WILLIAMS.

TORONTO Feb., 25th.—During my absence last week in western Ontario selling lumber your valuable journal was received. I enclose my cheque for $1 ; kindly place my name on your list of subscription for one year. The stocks in the western retail yards are very light. Dealers are more cheerful than a month ago. They anticipate a good trade for the coming season, and are placing their orders quite liberal. During my trip of five days I sold 40 cars. This is not bad for the time of year. The G. T. R. have reduced the freight from Sarnia to Petrolia to 3½ cents per 100 pounds. The old rate was 5 cents. This will have the effect of reducing shipments from Gravenhurst to Petrolia unless better rates can be had than now exist, viz., 15 cents per 100 pounds. The stocks at Sarnia are not large. If the spring opens early very little lumber will be there at the opening of navigation. The mills on the line of the M. C. R. R. are well stocked with hardwood logs, and I learn the cut is mostly sold at fair prices to go to the States. There are several new mils building on this line, and if the duty is removed off lumber there would be a perfect "boom" among the hardwood men. There is very little of last season's cut remaining at the mills. Manufacturers handling seasoned lumber experience difficulty in supplying their wants, and have to resort to artificial drying.

Yours truly, DRUMMER.

EAU CLAIRE, Ont., Feb. 28th.—There are three rafts of square and waney timber being taken out on the Amable Du Fond River this year, viz : Wm. Mackey, Booth & Hale and John Mackay, all fine rafts, Booth & Hale being of No. 3 (Wilkes township) sold at Ontario Government limit sale on 15th Dec. last. There is one saw mill at Eau Claire, a two-circular mill with fine water power, owned by Wm. Mackey, which was not run last season, although he had 3 to 4 million feet of logs at his mill ; and it is not known whether it will be run this summer or not. There is a one circular mill a little east of Eau Claire on the line of the C. P. R., owned by John Mackay. He is taking his supply of logs (3 to 4 million feet) from a township down the Amable du Fond, and he intends to cut them at his mills this coming season. The drawing is well on in these parts ; the winter has been very favorable, the snow being about three feet deep. It is expected that Eau Claire will be a busy station next year as the parties who bought limits in Petewawa at the late Government sale are putting in supplies from Mattawa this year, and it is thought they will use Eau Claire next year on account of its being the nearest point to their operations.

Yours truly, OPERATOR.

THE STURTEVANT PATENT PROGRESSIVE LUMBER DRY-KILN.

The accompanying cuts very clearly represent the construction and method of operation of the kiln and the apparatus required for it. The designer and builder of the apparatus has been before the public for over a quarter of a century as a manufacturer of blowers and heating apparatus. His extended experience, and a careful consideration of the wants of his customers, has enabled him to present to them, not only an apparatus which is unequalled, but in connection with it the complete drawings for a first class dry-kiln of any given capacity.

The principle which he has adopted is undeniably the best and only one that can secure satisfactory results. Every one is perfectly well aware of the necessity of the circulation of the heated air coming in contact with the lumber in the process of drying. The great question always is how to secure such circulation most cheaply and satisfactorily. Of all methods of generating currents of air, the most expensive is that of causing a movement by heating the air and thereby changing its density.

Changes in the condition of the atmosphere produce reversed currents, or worse still, sometimes prevent currents altogether, rendering for days such an apparatus ineffectual.

The action must be positive and this condition can only be secured by the use of a Fan for impelling the air. The objection has often been raised that it costs too much to run a Fan, but in connection with a heater it in reality costs nothing, for a heater must necessarily be used in connection with a kiln, and the exhaust from the engine can be entirely utilized in the heat. It is well known that exhaust steam has only three per cent. less heat in it than live steam at 70 lbs. Hence the exhaust from the engine can be utilized in the heater in place of three per cent. less live steam. Actually the engine cylinder is but an enlargement of the steam pipe on its way to the heater.

The first patent on B. F. Sturtevant's Steam Hot Blast Apparatus was issued about twenty years ago. Since that time the apparatus has been greatly improved both in efficiency and construction. The fact that over 5000 of the Sturtevant apparatus have been sold is sufficient evidence that he knows what the trade requires, and that he has succeeded in supplying it.

The apparatus here represented consists of a fan and heater placed side by side, making a very compact arrangement and occupying but little floor space.

The fan is known as the steel plate, and is the latest and most approved pattern, designed especially for handling large volumes of air with the expenditure of a minimum amount of power. Fans above fifteen feet in height are usually constructed with half brick and half steel housings and provided with horizontal steam engines. The advantage of a direct connected engine are evident ; it does away with bolts and pulleys, is independent of any other source of power, and can be run at any speed desired day and night.

The engines are directly connected to the Fans and are built in a superior manner and will show the best attainable economy. They are especially designed for this work. It must not be supposed that blowing engines are not, when properly adapted to their work, superior to the ordinary run of mill engines in point of strength and workmanship. They must be the heaviest, strongest and fastest engines that can be made. They must be made to stand twenty-four hours' work, six days in the week, frequently in the midst of dirt, and neglected by the engineer. They must be made to run without getting out of order at any speed, and, if possible, live longer and on harder fare than any other engines. Direct connected, or independent engines, either upright or horizontal, are furnished as the requirements of the case demand. The sizes vary from three to one hundred-horse power.

The heaters are made of the heaviest lap-welded wrought iron pipe on improved patent sectional bases. These sectional bases vary in length, and the height and floor space of the heaters can be proportioned to any situation. The heaters are arranged for perfect circulation and drainage, and every square foot of heating surface is utilized. They are designed with special reference to the use of exhaust as well as of live steam. Each heater section is tested with 150 pounds hydraulic pressure and one hundred pounds steam pressure. The heaters are furnished with substantial wrought iron foundation, and are encased in a jacket of steel plate.

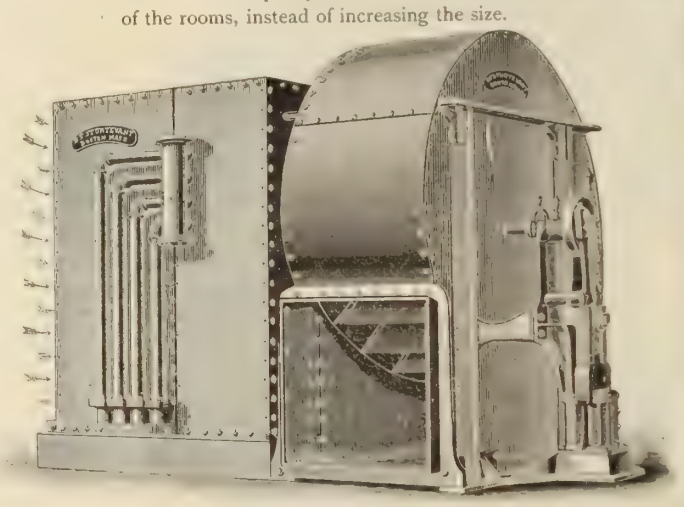
From careful experiment it has been demonstrated that a given quantity of pipe in one of the Sturtevant heaters will impart four to six times more heat units to a given quantity of air than will an equal amount of pipe arranged in the ordinary form. Single heaters vary in size from 300 to 20,000 lineal feet, and in design and style are proportioned to the situation and work to be performed.

The Sturtevant kilns are arranged on either of two plans, the apartment or the full length kiln. In the former rooms of any desired number are constructed to suit some particular size of lumber to be dried. Whether the lumber is piled lengthwise or crosswise of the apartment, the apparatus is so arranged that the air passes through the lumber lengthwise of the piling sticks, and dries it uniformly throughout. By this arrangement the lumber in any apartment may be seasoned to any extent, independently of that contained in another apartment, or the heat may be tempered to different degrees in the different rooms by the manipulation of dampers in the ducts and ventilators. The apartment plan offers advantages where limited quantities of different kinds and thicknessess of lumber are to be seasoned.

The "Sturtevant Progressive Lumber Dry-kiln" which is illustrated herewith is, however, the most popular form where large quantities are to be dried. This style may of course be constructed of various sizes, but the "Sturtevant Standard" is designed to meet the average conditions.

The Sturtevant Standard Kiln of this type is 85 feet long, 17 feet wide and 9 feet high, and will contain twelve cars, each car holding about 4000 feet of lumber. Two additional cars are required for each kiln for the loading and unloading platforms. The holding capacity of a Standard kiln is about 50,000 feet, and the daily drying capacity is about 8,000 to 12,000 feet, depending upon the nature and condition of the lumber. The lumber loaded upon cars, is run into the kiln on trucks, two or more cars each day, then slowly passes through against a constant current of air. In this manner the lumber is subjected to an even hot air draught, gradually increasing in intensity as the cars gradually advance to the hot end of the kiln. The difference in temperature between the two ends of the kiln varies from 70 to 100 degrees. The kiln should be provided with curtains at the top, bottom and sides, so that the hot air shall be forced through the lumber. The piling sticks for 1-inch lumber should be ⅞-inch thick, and the lumber carefully piled on the car. In the kiln 17 feet wide, three rows of tracks are used, thus giving the lumber three independent supports.

Additional capacity is best secured by increasing the number of the rooms, instead of increasing the size.



The cuts show the apparatus located in a small room adjacent to the kiln, and it is advisable to locate the fan as near the dry room as possible. Where it is necessary, the hot air can be carried through several hundred feet of pipe when it is well protected. It is immeterial whether the hot blast is admitted at the top or bottom of the dry-kiln, although it is usually admitted at the bottom. The vantilation is always at the bottom.

Green and air dried lumber, dense and porous lumber, lumber of different thicknesses, all require different treatment ; for instance, Southern Yellow Pine, when cut green from the log, will stand a very high temperature—say 200 degrees F.—and, in fact, this high temperature is necessary, together with the rapid circulation of a large volume of air, in order to neutralize the asidity of the pitch, which causes the lumber to blue and discolor. The treatment of oak, walnut and hickory, and dense lumber of this nature, calls for a large amount of air at a lower temperature ; otherwise the lumber would dry too rapidly upon the outside, the pores close, and the lumber becomes honeycombed and checked. Again, air dried oak and walnut calls for the use of the return duct or its equivalent, the sweating process, in order to open the pores and soften he outside of the timber, so that the moisture can work its way out to the surface. The Sturtevant process meets the requirements of every case ; as by the use of the steam Fan, a greater or less quantity of air can be admitted into the dry room, and the temperature can be perfectly regulated.

The apparatus may be applied with advantage to ordinary dry-kilns where steam pipes are used in the bottom, in which case smaller heaters are required. In dry-kilns thus heated without forced circulation, the application of a fan has increased the capacity 50 per cent. It is even more important to have perfect circulation, which only a fan can give, than a faultless heating apparatus ; for the best heating apparatus, without such circulation, may give the poorest results. The want of circulation in ordinary dry-kilns causes the lumber to blue and discolor.

Attention has already been called to the fact that the fans can be driven either by a belt or by a direct connected engine. Important advantages are gained by the use of the steam fan, enabling the temperature and volume of air to be controlled at all times, and causing the drying operation to be continuous. By the use of a steam fan, the temperature can be raised gradually and maintained at a uniform safe degree, until the process of seasoning is complete. Sudden and marked changes of temperature in the kiln are fruitful sources of warping, checking, case-hardening, etc. If the drying apparatus is operated but twelve hours in the twenty-four, and the kiln is allowed to cool down in the night, then the time of drying will be more than doubled, as several hours are lost in the morning in heating the kiln up to the temperature of the night before. The Sturtevant heaters are designed with special reference to using exhaust steam in the day time from the engine and live steam at night.

Experiment shows that the air does not become saturated with moisture and rendered incapable of further use in passing through the lumber once ; but that it may be passed over the lumber many times before becoming saturated. The effect of the return duct is not only to increase the temperature of the air ; but its relative humidity is changed so continuously and gradually, that warping, checking and case-hardening are entirely prevented, a result which is practically impossible with other systems of drying. This is a result which other processes have endeavored to effect by means of a steam jet which is introduced into the dry room in the early stages of drying. In rare instances, where the lumber to be seasoned is air dried and does not contain a great amount of moisture to effect the sweating and opening of pores, the steaming room is recommended.

The apparatus is especially designed for utilizing the exhaust steam from the main engine, and where it may be desirable, live steam can be used in the heater at night. The exhaust steam from the engine which drives the fan is also utilized in the heater. Of course it is well understood that there is no cheaper artificial medium for drying lumber than exhaust steam.

All kinds and thicknesses of lumber cannot be dried at the same time ; but as each require different treatment, it follows that different periods of time are required. One inch air dried lumber (by air dried is meant lumber that has stood out from three to six months) can be seasoned in from 36 to 60 hours, while perfectly green inch lumber calls for from three to six days and lumber of different thickness in like proportion.

One of the greatest advantages which the Sturtevant system offers is freedom from fire risk. The steam pipes are encased in a steel jacket, and placed in an apartment distinct from the dry room, and do not come in contact with any wood work whatever. No pipe whatever is used in the dry room. Parties who are using this kiln are getting a less rate of insurance upon the kiln than upon the mill itself. The ordinary dry-kilns with steam pipe in the bottom are fire traps ; and, where it is possible to insure them at all, they are considered a very hazardous risk. Annoyance from steam pipes leaking and freezing is also obviated.

This process offers, not only the most efficient lumber dryer, but the most essential feature of combining cheapness of first cost with low running expense. It also affords the still further advantage of being portable ; and, like any other machine in the mill, can be moved from point to point with no other expense than the erection of a new building.

This house is prepared to fit our complete dry-kilns of all descriptions, furnishing the engines, boilers, entire heating apparatus, rails, trucks, complete working drawing for building the kiln, in fact everything pertaining to the perfect drying of lumber. Parties are envited to send to B. F. Sturtevant, Boston, Mass., for the "Illustrated Catalogue of B. F. Sturtevant's Steam Hot Blast Drying and Heating Apparatus," which contains full descriptions of the apparatus and method of application.

—Baltic timber is likely to be scarce this season, and sellers are reluctant to quote prices until the maket has become somewhat more settled, while, on the other hand, buyers eagerly contract for all parcels offered them at a slight increase on last springs prices.

—The lumber firm of Allison, Cousland & Hamilton of Glasgow has ceased to exist, Mr. Robert Hamilton having retired from it for the purpose of carrying on business under the style of Robert Hamilton & Co., while Messrs Allison and Cousland contines in business togather under the name of Allison, Cousland & Co.

LUMBERMEN IN THE LEGISLATURE.

How the Industry is Represented in the Ontario House.

Ever since the organization of the Ontario Legislature, the lumber interest has been well and ably represented in its membership, as is only reasonable in the case of so important an industry and one from which so large a share of the public revenue is derived. Latterly questions affecting the trade have not been so prominent as during the earlier years of Confederation, and the more recent struggle over the Rivers and Streams bill, but though the lumbermen of the present House may be less conspicuously brought under the public attention than formerly, they are none the less an important and useful factor in legislation.

The member most extensively engaged in the lumber trade is Mr. Erskine H. Bronson, of the firm of Bronson & Weston. Mr. Bronson is a new member of the House, having been first returned for Ottawa at the general election of 1886. He is an American by birth but has been a resident in Ottawa for many years. His father H. T. Bronson in the year 1853 manufactured the first lumber cut in Ottawa for the American market, and since that period the Bronsons have been continuously engaged in the business. Mr. E. H. Bronson has been actively identified with the industry for about twenty years. The firm own extensive mills at the Chaudiere, and are among the largest limit-holders in the country. They operate on about half a dozen of the tributaries of the Ottawa River, and their total output amounts to about 55,000,000 feet per year. Mr. Bronson has always taken an active part in public affairs, having been a member of the Ottawa city council for seven years and occupied a seat at the School Board for twice that period. He contested Carleton for the Commons in 1882, but was unsuccessful. His return as a supporter of the Mowat government for Ottawa, a constituency previously supposed to be a forlorn hope, was one of the most remarkable features of the contest of '86. Mr. Bronsons long municipal and business experience make him a valuable acquisition to the House. He expresses himself satisfied with the present timber policy of the administration. He is in favor of unrestricted free trade as between Canada and the United States, but opposed to Commercial Union, that is any arrangement which would give the Americans power to regulate our tariff as against other nations. Mr. Bronson is a member of the special committee asked for by Mr. Meredith's motion respecting timber preservation and mineral development. He occupies a seat at the end of the first row of government benches.

Immediately next to Mr. Bronson sits Mr. Thomas Murray, of North Renfrew. Mr. Murray is a veteran politician on the Liberal side, and a representative Irish-Canadian. He was first returned to the Provincial legislature in 1869, since which he has fought several hard contests with varying success in both Dominion and local elections. He has represented North Renfrew almost constantly since '79. Mr. Murray is a member of the firm of T. & W. Murray, whose headquarters are at Pembroke. In addition to mercantile business they are largely interested in lumbering, owning and operating limits on Black River, on the Northern side of the Ottawa. They purchased at the late government timber sale berth No. 1, in Biggar township, one of the most valuable sold, and intend to operate there next season. Mr. Murray has been engaged in lumbering more or less during the last twenty years, and has a thorough practical acquaintance with the industry in all its phases. Last session he introduced the bill for the better regulation of mixed drives, which became law and has proved a useful measure.

Another legislator and lumberman of long standing on the government side of the House is Mr. Robert Adam Lyon, of East Algoma, a Scotchman by birth but a resident in Canada since boyhood. Mr. Lyon resides at Michael's Bay, on the south side of Manitoulin Island. He is manager of the Michael's Bay Lumber Co., which has from $100,000 to $150,000 invested in lumbering on Manitoulin. They ship a large amount of cedar to Chicago in addition to manufacturing pine lumber for the Canadian market. The annual output of lumber is from 2,000,000 to 3,000,000 feet of sawn pine, 200,000 ties, 200,000 block paving posts and 10,000 telegraph poles. Mr. Lyon was first returned for Algoma in '78, and since the constituency was divided he has represented the Eastern riding. Before the extension of the railway system Mr. Lyon was obliged annually to make a journey of 300 miles on snow-shoes, in order to reach the nearest point of railroad connection which would bring him to Toronto, and regularly undertook his long tramp every winter for eight years. Mr. Lyon states that the supply of timber at Michael's Bay is nearly exhausted, owing more, however, to the ravages of fire than any other cause. His view is that the soundest economy which could be pursued by the government would be to sell the timber as rapidly as possible, invest the money and let the lumbermen take measures to protect their property from fire. In case this is not done he favors stricter means for protecting the forests from destruction by bush fires.

Mr. James Clancy, of West Kent, occupies a seat about midway down the front row of the opposite benches. He has been operating in Kent since 1879, in getting out hardwood timber for the American and Quebec markets, but the supply in that section is now practically exhausted. Oak and walnut were lately shipped in large quantities from Kent, but little hardwood timber of a merchantable character remains except elm and hickory. Mr. Clancy's other interests now occupy most of his attention.

Mr. James Rayside who represents Glengarry, and, as it is almost superfluous to add, is a Scotch-Canadian, is an extensive sawmill proprietor and lumber operator. He was until lately a member of the firm of McArthur & Rayside, who owned a mill at Lancaster, in addition one at Coteau Station, at the junction of the Canada Atlantic and Grand Trunk. On the dissolution of the company one year ago, Mr. Rayside retained the Coteau mill. The output is from 2,000,000 to 3,000,000 feet, principally basswood and ash. Mr. Rayside also supplies the mills up the line of Canada Atlantic.

There are few if any members of the Provincial Legislature who have had a wider or more varied knowledge of public and commercial affairs than Col. Alpheus F. Wood, of North Hastings. He sits well up in the second row on the Conservative side. Col. Wood was for many years engaged in lumbering, and owned a saw mill in Elzevir, Hastings county. He was reeve of Madoc for 19 years, and warden of the county of Hastings for a term of ten years, in addition to holding other responsible positions. Col. Wood is a brotner of Hon. S. Casey Wood, formerly provincial treasurer. He is president of the recently organized Hastings Lumber Manufacturing Co., the headquarters of which is at Madoc. In addition to purchasing logs and manufacturing lumber, the company buys lumber manufactured by portable engines, which reach many localities that are not served by stationary sawmills. They will operate extensively in the Northern portion of the County of Hastings. Col. Wood regards the policy of the administration in regard to the timber as a mistaken one in some respects. He thinks that the House should be consulted before timber limits are disposed of, and regards the increased prices received at the recent timber sales as an evidence that greater caution in disposing of so valuable a source of revenue should be exercised. Even were the government in want of money, he considers that it might be good economy to borrow rather than to part with timber-cutting privileges likely to increase enormously in value before many years. Apart from this the most important change in the system, he thinks, would be the adoption of some system whereby the timber upon many thousands of acres which have been burned over might be saved. The lumber injured by fire in this manner is not sufficiently valuable to make it worth while for the lumbermen to pay full due upon it and float it to market. Col. Wood's opinion is that there should be some provision by which this partly damaged timber, not valuable to the licensee, should pass into the hands of the settler at a low figure, otherwise it will soon become absolutely worthless. Local saw mills should have greater facilities than at present. Col. Wood is a member of the Committee proposed by Mr. Meredith, to enquire into forest preservation and mineral development, and should the resolution carry his practical experience in lumbering operations will prove of invaluable service. Though not a brilliant speaker, he is undoubtedly one of the most useful members of the House, and whenever he speaks it is directly to the point and he is consequently always listened to attentively.

Orson J. Phelps, of Centre Simcoe, is the oldest lumberman in the Legislature, having been engaged in the industry for 35 years. Mr. Phelps is an American but came to Canada while quite young. He served as a volunteer in the rebellion of 1837. Mr. Phelps has filled numerous municipal offices, and in 1881 was warden of the County of Simcoe. He was first returned for the Legislature for West Simcoe in 1883, and was chosen for his present constituency at the last general election. He is a member of the lumbering firm of N. & O. J. Phelps, who some eighteen years ago purchased extensive timber limits and real estate in Simcoe county, and have since that time carried on an extensive business in lumber manufacturing. They have two mills, one at Phelptson, in the township of Flos, Simcoe county, and the other at Merritton, on the Welland Canal. Their output of lumber amounts to between 5,000,000 and 6,000,000 feet per year. In politics Mr. Phelps is a Liberal. He approves of the government's timber policy. He does not think it is possible to preserve the timber effectively from fire, holding that with the advance of settlement the danger must be an ever-increasing one, and that the best thing to be done is to realize on the timber as quickly as possible and let limit-holders take their chances. He is disposed, however, to favor a stringent law imposing a fine upon all campers who do not extinguish their fires. Mr. Phelps does not favor Commercial Union, regarding the scheme now advocated by Erastus Wiman as an impossible one. He would like to see reciprocity in natural products, but regards the prospect as visionary, because the Americans would never be disposed to grant it. Mr. Phelps expects shortly to retire from active lumbering operations, as the supply in the neighborhood of his Simcoe mill is about exha[illegible]

Mr. James Conmee, of West Algoma, who has been a member of the House since 1885, is extensively engaged in lumbering operations in that territory. He is an ardent Liberal and a ready, fluent speaker. Among others who are or have been lumbermen, though also engaged in other pursuits, are Mr. William Lees, of South Lanark, a farmer and mill-owner; Mr. Isaac James Gould, of North Ontario, who is also engaged in agriculture and milling; and Mr. John Fell, of East Victoria, who was for about sixteen years operating at Fenelon Falls, but gave up the business some two years since.

The Wood Trade in Germany.

According to a Berlin report an enormous trade was done during the year 1886 in wood for building purposes and in building material. Very large quantities of wood had been imported in 1885, before the raised customs duties came into force, and large additional importations of foreign wood added to the stock on hand. At the beginning of 1886 the prices were consequently low, but very soon all this changed, for never before has there been a year in which so many new buildings were constructed. An unexampled activity prevailed at Berlin, Hamburg, Kiel, Cologne, Munich, and numerous towns in Baden, &c., and the almost innumerable saw mills of Germany were so fully occupied that they could hardly supply the demand. Kiel alone imported no less than 104,000 cubic metres of wood, worth four million marks. At the close of the third quarter of the year nearly the whole of the immense stock had been used up. But wood was not only in demand for building purposes, a great deal was required for railway sleepers, and more particular for cask staves, on account of the exceptionally large production of spirits: the wood for these cask staves is imported from Hungary. In consequence of the unusual demand the sales of wood from the State forests yielded handsome results, the prices realised having exceeded the limits of the sale prices by 5 to 10 per cent. At the close of 1886 there was still the greatest activity prevailing, the saw mills being fully and uninterruptedly occupied. Many forests in the interior, hitherto inaccessible to trade, have been utilized by the making of good roads and by laying down temporary rails; saw mills have been constructed in the midst of forests, where the boards are now being prepared ready for use, all of which naturally saves time and money. It is quite expected that it will be found at the end of the year 1887 that it rivals its predecessors in the way of building operations, which, if piece only continues to reign, will subsequently take still grander proportions. The tile and cement factories of Germany display, of course, an equal amount of activity, and prices become gradually very remunerative. Of cement, Germany exported very considerable quantities in 1886, which, in consequence of the low sea freights, rose to no less than 3,659,915 double centners. America and the Indies are vast consumers of German cement. The lime and mortar works likewise did a very good business.—*The Chamber of Commerce Journal.*

Canadian Shipments.

The Ottawa district of Canada is by far the largest and most important shipping point for the lumber of the Dominion, and the following figures corroborate the statistics heretofore published as to the extent of Canadian shipments, and show that the exports to the United States for 1887 did not exceed the average for the past ten years, viz., 500,000,000 feet. The average value of the lumber shipped in 1887 was $13.17 at the ports of shipment, so far as the Ottawa district was concerned.

We are under obligations to the United States Consul at Ottawa for the following figures:

Total exports of sawed pine lumber to the United States from the Ottawa Valley district for the calander year of 1887 as declared through the following consulates:

	Feet.	Value.	All other wood products value.
Ottawa	183,847,633	$2,628,444.45	$155.45
Greenville	30,695,339	263,393.21	30,490
Prescott	9,497,863	116,513.23	4,192
Brockville	36,747,472	429,679.64	33,152
	260,788,307	$3,438,030.53	$223,299

Of the above 33,648,348 feet, value, $610,796, was exported in bond for re-exportation.

—Negotiations are said to be in progress by which the creditors of R. J. Stewart propose to buy out the lumber mills, limits, etc., of Grier & Co., of Ottawa, which are said to be worth in the neighborhood of one million dollars.

THE NEWS.

—J. R. Warrens has started a new shingle mill at Colden, Ont.

—Chattanooga Tenn. saw mills, cut 42,000,000 feet of lumber last year.

—In the district about Kinmount there are 3,000 men at work in the woods.

—About 170,000,000 feet of logs remain in the Menominee above the lower dam.

—Richard Nagle has 720 square miles of timber limits on the Kippewa in the market.

—Thirty inches of snow on the Kippewa interferes greatly with lumbering operations.

—Richard Bell, of Glenwilliams, Ont., fractured his leg when teaming logs in the bush lately.

—At the annual sale at the Nassau mills, Peterboro, over 1,000,000 feet of lumber was sold.

—Messrs. Gilmour & Co. are building a large sash, door and blind factory, at Trenton, Ont.

—Messrs. Mason & Morgan, Springbrook, Ont., have put in operation their new shingle mill.

—John Smith, of Marmoria, had his leg broken by a falling tree while chopping in a cedar swamp.

—Edward Beuoit, of Wallaceburg, Ont., has been killed by a falling branch when sawing down a tree.

—H. F. McLaughlin, of Arnprior, Ont., has bought a timber limit near Papineauville, Que., on which he will build a saw mill.

—Mr. J. C. Bedard, Hardwood Hill, near Sherbrooke, Que., has finished his new steam saw mill and put it in operation.

—Over 60,000,000 feet of lumber, 35,000,000 shingles, and 25,000,000 lath, were handled at St. Joseph, Mo., during 1887.

—Col. Talbot, the pioneer who cut the first tree where London, Canada, now stands, is 90 years of age, but still hale and hearty.

—Mr. Stearns' steam mill at Lake Megantic, where he had about 40 men employed taking out pulp wood, was recently burned.

—Mr. Raymond, Mitchell's Bay, Ont., will rebuild his lumber mill and also add machinery for the manufacture of staves.

—Messrs. Hamilton Bros., lumber merchants of Ottawa, are operating near Desert and have to send supplies by team 100 miles from Ottawa.

—Messrs. Wait & Spear have completed their siding on the C. P. R. near Wood Station, Ont. and are getting out ties, cedar posts and cordwood.

—Mr. James Drake, Selkirk, Man., is moving his saw mills from that town to Broken Head River, on Lake Winnipeg, and will manufacture oak lumber principally.

—Mr. W. H. Murray, Indiantown, N.B., is building an addition to his lumber mill, in which he will place machinery for the manufacture of staves and clapboards.

—The cut in the woods this winter on the upper Ottawa, will be large. In the camp of Louis Carisse alone 32,500 logs and 425 pieces of square timber were cut this winter.

—Messrs. N. L. Todd & Co., St. Margaret's Bay, N.B., have one of the largest and finest saw mills in the Province, having capacity to cut 8,000,000 feet of lumber a year.

—There are in California, Washington and Oregon 190 sawmills, employing over 3,000 men, without counting the crews of the many vessels engaged in freighting lumber.

—Mr. R. White, lumber merchant of Ottawa, has recently sold, on bank account, some $100,000 worth of timber, held by the Bank Nationale. It is understood that good prices were obtained.

—Last year, 1887, the Flint and Pere Marguette hauled 215,291,134 feet of logs, the Detroit, Bay City and Alpena an amount nearly as great, and the Mackinac Division of the Michigan Central hauled 148,000,000 feet.

—Messrs Bronson, Weston & Co., lumber merchants of Ottawa, have disposed of 5,000,000 feet of lumber to the Export Lumber Co., of Montreal, for shipment to South America, for which upwards of $75,000 was realized.

—During 1887 there was received at the Port of New York the enormous quantity of 220,599,289 feet of Southern Yellow Pine. This is an increase of nearly thirty per cent. over 1886, or, to be exact, 66,060,469 feet and an increase over 1885 of 91,409,854 feet. The greater part of this lumber went into consumption in this city and its immediate vicinity.

—The largest cut on the Saginaw River was in 1882, when the mills cut 1,012,000,000 feet. The estimated cut for 1887 is 700,000,000, which is the smallest cut since 1878, and the probabillities are that it will never be increased.

—The tariff of rates to be charged by the Rouge Boom Co. for 1888 has been fixed by the Privy Council as follows:—Pine logs, 5 cents per piece; spruce logs, 2 cents; round timber, 5 cents; square timber, 10 cents; railway ties, 1 cent.

—Mr. Wm. Sutton, of Walkerton, Ont., is the owner of an extensive saw mill plant located at Cowichan, Vancouver Island, B.C., which has a capacity to cut from 15,000,000 to 20,000,000 feet of lumber a year, and which has been idle for about two years.

Some heavy transactions have recently taken place in the Quebec timber market, Messrs. McArthur Bros., W. & J. Sharples & Dobell, Beckett & Co., being the principal purchasers to the extent of about $7,000,000. Very little spruce remains in the hands of manufacturers.

—The Americans are waking up to the necessity of preserving what is left of their forests. Congressman White, of New York, has introduced a bill containing stringent provisions for the protection of the public forests, and also for setting aside timber land to be reserved as perpetual forests.

—Mr Yates Ferguson, of Almonte, has a curiosity in the shape of a limb of an ironwood tree, on which two twigs, on opposite sides, having grown out and upward a distance of about twenty inches when they decided to enter the tree at points directly opposite to each other, forming a loop on either sides.

—While two men named Narcisse Fournier and Joseph Leclaire were engaged falling trees in Gilmour & Co.'s limits, in the township of Bethune, the tree they were felling struck a dry one close by which caused part of it to fall in an opposite direction, instantly killing Fournier and badly injuring Leclaire.

—The repairs and improvements to the Saginaw river mills which are in progress or in contemplation at this time, presages activity in the manufacture of the pine product in the season of 1888. Besides improvements, very material additional capacity is announced as being introduced to some of the mills.

—The Ottawa Government has received valuable information from the director of a government survey on the Spellumchern River, B. C., concerning this new district. The soil is rich, game and fish plenty and the timber is reported as very large, much of it too large to handle, one hundred feet being the ordinary length of logs.

—A chestnut at the foot of Mount Ætna is believed to be the largest and the oldest tree in Europe. It is hollow and large enough to admit two carriages driving abreast to pass through it. The main trunk has a circumference of 212 feet. This grizzly giant is said to measure 92 feet in height. That certainly is a "regular old chestnut."

—Quite extensive lumber operations are being carried no for Messrs. A. L. Wright and A. J. Babang of Moncton, N. B., whose mill is at Little River. Charles McAnulty, who has leased the mill at Albert from Jardine & Co. of St. John, has already contracted with parties to put in about 1,000,000 of lumber for sawing next season.

—Reports from the Lake Superior region in the U.S., state that the depth of snow is proving a serious drawback to lumbering operations. Most of the camps near Bayfield, Wis., have been abandoned. Logging is very slow and expensive in the neighborhood of Marquette, Mich. Four feet of snow is reported at Ashland, Mich.

—The proportion of water held by different woods varies greatly. According to Scheubler and Hartig, freshly-cut horn-beam contains 18.6 per cent. of water; willow, 26 per cent; ash, 28.7 per cent; birch, 30.8 per cent; oak, 34.7 per cent; pine, 39.7 per cent; red beech, 39.7 per cent; larch, 48.6 per cent; and white poplar, 50.6 per cent.

—The finest collection of maple logs ever brought to Lucknow, Ont., may now be seen at Mitchell Bros. saw mill, and which are being manufactured into "rollers" 27 inches in length for shipment to the Old Country. Messrs. McDonald have also received a large consignment of very fine logs, both hard and soft wood, for the manufacture of lumber.

—As an evidence of the prosperous condition of Southern mill men and wood-workers generally, it is stated that 90 per cent. of the sales of saw mill and wood-working machinery in that section during the past year, have be on a cash basis. Five or six years ago nearly all such sales were made on credit. This state of affairs is taken as conclusive evidence that the Southern states are making profitable progress in the lumber and wood-working business, and at the same time as a result of purchasing improved machinery turning out a better class of lumber products than ever before.

—Messrs Jas. R. Donnel and H. C. Stabler have purchased the planing mill business formerly conducted by Messrs. Kincaid & McWilliams, Peterborough, and have taken possession. The new proprietors are both practical men of long experience in the business; they are also pushing, and we have no doubt that they will secure a fair share of the trade in their line.

—The consumption of lumber in Chicago is estimated to reach 600,000,000 per annum. The receipts of lumber in Chicago the past year reached 2,493,050,592 feet, which allowing for the local consumption would make the shipments exceed 1,800,000,000 feet. The receipts of lumber in Chicago the past year exceeded those of the preceding year by 137,744,210.

—Cypress lumber has entered more largely into consumption during the last five years than ever known before. This fact is partly owing to the advance in the prices of Northern timber and lumber, but more especially to the facts that the merits of cypress lumber are just beginning to be found out. A considerable advance in the price of this material is predicted.

—The cut of the Saginaw river mills in 1887 aggregating 779,661,265 feet pine and hardwood, considerably exceeds early estimates, and shows that while the capacity of the river has been reduced 100,000,000 feet in two years, there has been but a slight decrease in production. It was only 19,000,000 feet less than 1886, and exceeds the cut of 1885 about 51,000,000 feet.

—An appropriation of $200,000, made by the state of Minnesota for the payment of forestry improvements, has been exhausted, and a portion of the accounts will have to remain over unpaid for a year. The bounty is $3 for every acre of cultivated forest, the tax to meet it being one-tenth mill. During the past two years, over 13,000 acres of forest trees have been planted in Minnesota.

—A resolution was recently adopted by the United States senate, directing the Secretary of the Interior to report a plan of legislation for the disposition of the public timber lands so as to secure the preservation of the national forest lands at the headwaters of navigable rivers, and so make it a right of settlers, attainable by legal means, that they shall provide themselves with timber for building their homes.

—The contracts for clearing lands at Vancouver, which was the cause of so much trouble early last year on the account of the employment of Chinese, is only about one-third finished. There are altogether 400 acres to be cleared, and the cost of the same will total about $80,000. Contracter McDougall states that during the past month, owing to the cold and disagreeable weather, only nine days were put in by his force.

—Hon. M. Engelmaun, of Manistee Mich., president of the Manistee salt and lumber company, is dead. He was a self-made man and a prominent and public-spirited citizen. He began life by working in the woods, and after his first start in business met with serious reverses but finally overcome his adverse circumstances by his energy and determination, and realized a large fortune. He leaves a widow and seven children.

—Mr. Samuel Gray, Victoria, B.C., is the proprietor of a large establishment employed in the manufacture of sash, doors, mantels, mouldings, hand rails, newel posts, etc. He is the patentee and manufacturer of an improved self-supporting stairs, in which is embraced a stair, elevator, light shaft and ventilator, a unique contrivance for economizing room, and in the sale of which he is doing a prosperous business in Oregon and California.

—The Ottawa Auxiliary Bible Society are prosecuting mission work among the lumber shanties. Four colporteurs were appointed for the Ottawa district, J. L. McCullough to the Gatineau, A. Toshack to Desmoines and Black River, J. B. Terrnant to the Bonnechere and Petewawa, and A. Stewart to Madawaska and Mississippi. Four missionaries Messrs. McKechney, Somerville, Hewitt and Ellis were appointed to work in the Nipissing District.

—A continued improvement in the demand for American walnut is reported at London, Eng. The stock of logs is said to be somewhat light, but lumber is in good supply, and recent arrivals are said to have shown an improvement in manufacture, indicating that shippers are reaching a better understanding of the requirements of the trade. Choice planks and boards have gone off freely, and it is believed good stuff will find ready sale at full prices.

—Prospects for a good output of lumber on the Gatineau are not as good as was anticipated at the beginning of the season. There was too little snow in the early part of the winter and considerably too much latterly, so much so that work was much impeded. The lumbermen as it happened put unusally heavy gangs into the bush and by dint of large numbers will be able to make the cut sufficient to keep them sawing most of the summer, but they will not have any surplus logs.

—John Barclay, lumber dealer, Springfield, has assigned.

—G. A. Grier & Co., lumbermen of Ottawa, have sold out.

—Scrimgeour & Rennock, who have been operating a planing mill at Stratford, Ont., have assigned.

—The Ontario Lumbermen's Association lately raised the price of bill stuff on Georgian Bay from $9 to $10.

—American lumbermen are invading the leading lumber centres in Canada, purchasing stock for the American markets.

—Wm. Attig has disposed of his property near Milverton, Ont., and purchased the Pasmore & Whaley saw mill at that place. He will commence sawing about the 1st inst.

—Jos. Kidd & Sons, of Dublin, Ont., have failed to make a compromise with their creditors, and the stock was sold by the sherriff some days ago. Geo. Kidd talks of going to British Columbia.

—The firm of Humphries, Richardson & Humphries, who have run a planing mill at St. Marys, Ont., for a number of years, have decided to go out of the business on account of lack of patronage.

—The Young's Point, Ont, saw mills are running full time. Mr. C. Young has received the contract for supplying the material for the lock gates coffer dam and bulk-head.

—It is said that the cut of logs in the Kippawa district this winter will be unusually large, and that it is nearly all of the best class of timber. A great deal now depends on the water supply. If the thaw is gradual the logs may be expected to reach the mills in good shape.

—The lumber stock at Albany aggregated 90,602,000 feet, about 6,000,000 feet less than the quantity on hand a year ago.

—Messrs Kearns & Marshall, of Brockville, Ont., have disposed of their lumber business at that place to the Rathbun Co. Mr. Calquhoun, late of Gananoque, has been placed in charge.

—Messrs. Gilmour & Co. have a large force of men at work building an extensive wharf on the Gatineau river near Alonzo Wright's residence. Mr. Gilmour has invented a slide by which he can run his lumber from his mills to the new wharf and the river has been made navigable for steamers up to the wharf so that the new construction will very materially improve his shipping facilities.

—A general survey of lumbering operations in the Bonnechere Valley clearly indicates a very large cut—especially by the McLachlin Bros., the kings of the Bonnechere—and this amid the serious drawbacks of a scarcity of oats in the districts naturally supplying this valley; but the North-West has been drawn upon, and farmers who have not sold will find themselves considerably out.

—A sale has been made of five million feet of lumber by a Montreal firm at about $15 per thousand. The lumber is intended for shipment to South America. The price of lumber shows an upward tendency and a good export demand is expected in the spring. The cut this winter in the woods will probably be much larger than last year, and if the drive is successful there will be no scarcity of logs next summer and fall.

—Mr. J. Lambert, of Ottawa, has contracted with the following gentlemen for a supply of ash timber for a Montreal firm, its destination being Liverpool, England. Messrs. James Mulligan, Aylmer, 300 pieces; W. & R. Allen, 150 pieces; J. Fulford, Aylmer road, 70 pieces; Wm. McConnell, Aylmer road, 100 pieces; D. Irwin, Eardly, 100. This timber is to be all of A1 quality, and will be delivered at the nearest station along the line of the C. P. R. and P. P. J. railway.

—Michigan lumberers have been working this season under difficulties owing to the unfrozen condition of the swamps. In some cases they set to work and built corduroy roads along the swamps, and then "snowed" them by a free use of shovels and baskets, thus enabling them to transport their logs from the skidways to the banking grounds, and thereby relieving the skidways from their immense loads, under which they were pressed excessively, and then the work of skidding was proceeded with.

—Representative Rice of Minnesota, has introduced a bill amending the statue so as to admit into the United States free of duty the produce of the forests on the Rainy Lake River and the Lake of the Woods and their tributaries, owned by American citizens, and sawed in the province of Ontario and Manitoba by American citizens, the same being in part manufactured. He also introduced a bill constituting three collection districts in Minnesota, and providing for the appointment of a collector at St. Paul.

—The total shipments of lumber from Portland, Oregon, to the Argentine Republic and Uruguay for the year 1887, were 43,587,630 feet. Of this, 37,108,493 feet were spruce, 5,980,947 feet pine, and 498,190 feet of various kinds, mostly hardwood. The great bulk of this lumbdr, 40,740,552 feet, went to ports in Argentine Republic, mainly to Buenos Ayers, while to ports in Uruguay only 2,847,078 feet were exported. This lumber trade gives employment to 65 vessels, the largest single cargo being that of the ship Euphemia, 1,118,254 feet, in July last. The value of these shipments was about $700,000.

—A big lumber deal is pending at the Chaudiere. The creditors of Mr. R. J. Stewart, the well-known lumberman, with a view to hastening a settlement have made Mr. G. A. Grier, of the firm of Stewart & Grier, an offer for the purchase of Mr. Grier's interests. No arrangement has yet been reached. Mr. Grier, it is understood, offered to sell his interest for an advance of $100,000 on the market value of his interest. The market value of the former's mills and limits is understood to be nearly a million dollars.

—Messrs. J. C. Kidd and Duncan McLaren recently felled a giant oak on the farm of the late G. McLaren, lot No. 20, Beckwith, the extreme length of which was 103 ft.; from ground to first limb, 51 ft.; girth, two feet from ground, 11 ft.; girth, fifty feet from ground, 9 ft. It was purchased by the Canada Lumber Company, of Carleton Place, and will be used in repairs in their mills there. The company despatched their foreman with four men and two teams to cut and convey it into town. It is said that the tree cost the firm $50.

—The immense consumption of wood for railway ties and the growing scarcity of material has set inventors thinking as to the possibility of finding more durable substitute. The average length of service of a wooden cross tie is about six years. Some do not last even for one year. This requires a constant renewal and much work in changing, and it is estimated the railroads of the country spend at least $35,000,000 annually on wooden cross-ties. A Philadelphia mechanic of some ingenuity has invented a hollow iron tie, and if his claims prove correct there will be a revolution in the railroad cross-tie business, with a great saving to the companies.

—The annual meeting of the shareholders of the Midland and North Shore Lumber Company was held at Peterborough during the past month. There were present, Messrs. Geo. A. Cox, D. Ullyott, J. W. Fitzgerald and John Bertram. After reports of a satisfactory nature were read and approved, the following officers were elected:—President, Mr. Ullyott; Vice-President, Mr. Bertram; Sec.-Treas., Mr. Cox. The Company's mills are situated at Parry Harbor and do one of the largest lumbering business in Ontario. It is expected a line of the C. P. R. will be run to the mills form Claremont this summer, when the shipping facilities will be greatly increased.

—The record of casualties during 1887 compiled by the *Northwestern Lumberman*, comprises 341 deaths, and serious injuries, including the loss of one or more limbs, fractures of various kinds, and maiming in a variety of frightful ways, involving 215 persons—all in connection with operations in the woods, and the running of saw, shingle, planing and stave mills, and other wood-working establishments engaged in manufacturing raw material direct from the stump; also box and sash, door and blind factories. The aggregate—556 persons killed or maimed—is an appalling testimonial to the great danger incident to the various processes through which wood passes from the tree to its introduction as a finished commodity.

—The high hills of San Domingo are vast forests of mahogany. Some of the hills are 3,000 feet high, but there being no snow, owing to the tropical location, and not a railroad in the republic, they cannot get the mahogany down. So there it is, untold quantities of it, worth big money, but bringing nothing. From other islands of the West Indies a great deal of mahogany is exported at a big profit. Three-fourths of it goes to Europe, principally London, while the other fourth goes to New York. It is largely shipped in the log in sailing vessels. There isn't a single saw mill in all San Domingo. The lumber they do manage to get out is manufactured by hand, by the slow whip saw process.

—Logging operations are unusually brisk at Hepworth, Ont. this winter, and men and teams are very plentiful. The output here of lumber next season will amount to about seven million feet, composed principally of hemlock, also maple, beech, black ash, elm, cedar and pine. There is also a very large quantity of cedar ties, telegraph poles and cordwood coming out. In fact we know of no other little place in Ontario where there is as much business being done and so much money in circulation as there is here at present. The mills are running every day, and shipping of lumber is actively carried on during the whole winter. The quality shipped is principally hemlock, dimension stuff for builders' use in the early spring. There are three good saw mills in the village, and several more in the outlying neighborhood, as well as three or four shingle mills, all of which will be fully stocked this winter. The shingle mills manufacture a good brand of cedar shingles and some pine.

—There is increased interest in the timber districts of the Puget sound region, and Wisconsin and Michigan manufacturers are rapidly adding to their investments in fir and cedar timber. In a report to the Olympia board of trade with reference to building a log railroad from Budd's Inlet to Chehalis river, Mr. F. W. Brown, a civil engineer, states that the largest part of the country along the line, and tributary to it, is a dense forest of very valuable fir and cedar timber, the quantity of which it would be impossible to estimate, but it is safe to say that there is enough lumber within two miles of a line extending in the vicinity of the one proposed to equal 50,000,000 feet per mile for the whole road. Twenty trees per acre and 10,000 feet to the tree are not uncommon or hard to find in this immense forest; 200,000 feet per acre, or 1,536,000,000 in a distance of one mile along the road, and a tract twelve miles wide. This amount is, perhaps, the highest extreme, and not the average; but a safe average at 150,000,000 feet is not too high.

—The lumber committee of the [illegible] Buffalo, N. Y., have reported that the busi[illegible] while large, was not as much so a[illegible] of high lake freights. Building [illegible] efforts made to advance prices on lu[illegible] on lake freights had the effect of checking building enterprises, and while the business done compared favorably with that of the years previous, the margins were smaller and the profits correspondingly less. There was a slight decrease in the receipts of lumber as compared with 1886, but they would have been 25,000,000 feet more had there been ample carrying capacity and lower freights. The estimated amount on hand January 1st, 1888, was about 140,000,000 of stock, 20,000,000 feet less than was estimated on [illegible] In addition the amount of business done by r[illegible] was large and is constantly increasing in volume, and it is estimated that 125,000,000 feet of lumber was r[illegible]d at Buffalo by rail alone, and that 1,700 cars of lumber were shipped during the past year.

—The lumbering operations of M. Boyd & Co., says the Bobcaygeon *Independent*, are something astonishing this season, and the woods for miles around are moving with life, like a colony of ants. Over six hundred men are engaged in the ten shanties, each shanty having a cob-web of roads around it, and the cob-webs over lapping each other. So confusing was the labyrinth of roads to new comers, and so much time was wasted in teams getting lost that finger boards have been placed. So far, the weather has been all that could be wished and the work has gone on merrily. Drawing has been boss, and let me tell you that the drawing that is done nowadays, is nothing like the drawing that was done in the old days. With their cat teams, narrow sledges and narrow runners, three logs were a load. Now, they have powerful teams, broad sleighs and broad runners and the way they pile up the logs is a marvel. Why to give you an idea of a load, Chas. Reynolds boss of a shanty over the way here, has a team that walked away with 32 logs, that would make an average of 12 inches, and make fully ten standards. And the team were not feeling anyway extra well that day, or was it to say any such a banged fine day for drawing, either. Still the boys were satisfied with the draw, and are waiting to see it beaten, before they really show their oats.

—While passing through Trenton, Ontario, recently, a *Timberman* representative had his attention called to the Gilmour sawmilll located at the month of the Trent River, near the head of the Bay of Quinte. Being in company with one of the McLean Bros., of French river mills, with office at Owen Sound, a question in regard to the "big mill" referred to, elicited the information from that gentleman that the mill was a monster in size nad capacity. "You think," said Mr. McLean, "that you have big mills in the United States, but the best of them dwindle into comparative insignificance alongside of the Gilmour mill which has a capacity of 900,000 feet per day, with sixteen engines that furnish the motive power for the circulars, gangs and other paraphernalia of the establishment." He added, however, that "the mill, for some time past has not been run to anything near its full capacity, and that several mills at Ottawa turned out more lumber last season than the one alluded to. The Trent River, away back in ye olden time, thirty years ago, had several water power mills along its banks, most of which have gone tnto decay; and at the time referred to the mouth of the river, adjacent to where the Gilmour mill is now located, was the scene each spring of lively and exciting times, with the small army of French Canadians rafting the timber which was harvested on the Trent; and when the rafts were completed, with the requisite buildings on them for the accommodation of the men, they were floated past Belleville and Kingston enroute to their destination at Quebec. A large proportion of the timber, however, harvested on the Trent in the form of sawlogs in these latter days is converted into lumber at the "big mill."—*Chicago Timberman.*

—Waterloo, Que., complains of a short supply of cordwood.

—Lumbermen in the Eastern townships are beginning to complain of too much snow in the woods.

—The various lumber firms at Fishers river, in the Northwest, are getting out logs in large quantities.

—Lumbermen in the vicinity of Nickesport, Ont., are very busy, and expect to do a large amount of work this winter.

—Joseph Gagnon, from Piopolis, is getting out two million feet for the Nantais Mill. Archibald is getting out a million feet for Major McAuley.

—The Minister of Customs has decided that teams when going from Canada to work in the lumber woods in Maine or Michigan cannot be remitted into Canada free of duty.

—Hess Bros., of Listowel, Ont., the well-known furniture manufacturers, are about erecting a new factory, 110x60 feet, four stories high, in order to keep pace with their largely increasing trade.

—The firm of G. A. Dougherty & Sons, planing mill, etc., Leamington, Ont., has dissolved, Mr. G. A. Dougherty retiring. Mr. Sam Fuller enters the firm and the style is now Dougherty & Fuller.

—Reports from Lake Megantic states that lumbering is going on briskly, but notwithstanding a good demand, no more is paid in log than last year, although men get from three to four dollars a month more, and are scarce at that.

—Wyle's new saw mill at Midland was destroyed by fire on the 23rd Feb. There is little doubt but that it is a case of incendiarism. The loss will amount to something over $8,000. He was insured in the British American to the extent of $4,000.

Messrs. Bryant, Powis & Bryant, the well known and reliable firm of timber dealers of London, England, are now represented in the Dominion by Messrs. Chas. G. Davies & Co., of Quebec.

—A project is on foot at St. John, N. B., to construct a canal around the Grand Falls for the passage of logs down the river, thereby preventing the heavy loss to lumbermen resulting from the hanging up annually of large quantities of logs at the falls.

—Parry Sound lumber operators report five camps in full blast this winter to every one in operation during the past two winters; although a large number of men were hired in Toronto for the camp, the demand was not satisfied. Good wages were offered.

—The workmen at Messrs J. R. Booth & Co's saw mill have finished the work of blasting out the roadway underneath the large saw mill as well as the foundation for the new lath mill. Several thousand toise of splendid building stone have been taken out, and will be used in the construction of the new mill and the repairing of the old ones.

The manufacture of Terra Cotta Lumber is an industry that can be worked to great advantage in connection with lumber mills. It is composed of a mixture of clay and sawdust and burned in kilns after the manner of brick, the sawdust furnishing the fuel in the process, burns out leaving a porous ware that can be worked with tools, retains nails equal to wood, is light in weight, and fireproof; cheap as pine and eminently adapted for even ordinary house building, and can be used advantageously both in new construction and in repairing, not only as an economical building material but as a safeguard against fire. The Dominion Terra Cotta Co., whose headquarters are at Deseronto control the patents for Canada and have arranged witn the Rathbun Co. who have erected pioneer works which are now in active operation.

The international meeting of commissioners to suggest methods of adjustment of our trade relations with Canada has called forth some protests from some parties, as they are opposed to making any concessions whatever. Why there should be any objections is something approaching a mystery. If we had nothing to sell Canada, that might be a fair foundation upon which to ground an objection, but we have as much to sell Canada as that country has to sell us. Every nation that has had an exchange of commerce with other nations has profited thereby, and largely, too. Advantages are generally mutual. Germany and France possess many ships and are doing a large shipping trade. Their citizens, it may be noted, have been permitted to buy their ships in England, or where they pleased. Both the sellers and purchasers of vessels are gainers. An interchange of commodities between the United States and Canada can but result favorably to both countries. The competition they give in pine is more than balanced by what they want in some of our products. We do not propose to enter upon the discussion of free trade and the removal of the revenue tax on lumber, but while it might cause a temporary loss to a few lumber dealers in the North and Northwest, there is a probability that it would be an advantage to some of our people.—*American Exchange.*

Judicious Advertising.

A lumber dealer at Marshalltown, Iowa, says the *N. W. Lumberman*, strikes a key-note, when he mildly upbraids the manufacturers for failing to advertise in representative trade journals in a consistent and persistent manner. There is method in advertising just as there is in selling lumber. The most persistent advertisers in various lines of business adopt a plan of presenting their business that is unique, catchy and profitable. Effective advertising is an intelligent way of informing the buying public that such and such articles are for sale at such a location. Applying this to the lumber business, we find a firm in upper Michigan making a specialty of thick uppers, another in Wisconsin devoting especial attention to wide pine, common and selects, and another, say at Manistee, doing a heavy business in strips. All these firms may be willing advertisers, all representing themselves merely as "manufacturers and wholesale lumber dealers." The yard dealers, who up to this time, is always on the alert for bargains or specialties, and in looking over advertising pages he finds plenty of firms represented, but not one in a dozen indicate by the make-up of the advertisement that any attention has been paid to it since its initial issue. Yard dealers, and buyers generally, desire to know exactly what manufacturers have to offer and the latter can inform thousands of such in an inexpensive and intelligent manner, by a judicious use of printer's ink and a few direct statements. Such a course would make advertising even more valuable than at present. The middle man now secures a profit that might go elsewhere if manufacturers advertised judiciously. It is the business of the middle man to hunt up stocks at the mills and orders of the yard dealers, and by an acquaintance at both ends of the route, the shipper loses a profit, and the dealer pays more for his lumber than he need to. Scientific advertising would make a vast difference in the lumber trade, and lead to better results to all concerned.

Timber Measurement In Quebec.

Mr. J. B. Charleson, recently appointed overseer of the timber operations on the Upper and Lower Ottawa by the Mercier Government, has, in conjunction with Mr. J. McKay, of the Crown Lands Department, recently returned from Toronto where they were collecting information from the Ontario Government as to the method of collecting timber dues. Up to a month ago the Dominion Government collected timber dues in the Ottawa valley, and Mr. Charleson thus explains his new duties: "The Quebec Government," he said, "formerly collected stumpage dues upon two sizes of logs. Those seventeen inches and upwards were taxed twenty-two cents. Logs under maximum were rated ateleven cents. In future the stumpage will be collected by board measure. The new rate being $1.30 per thousand feet. The Quebec Government is simply assimilating their system with that of Ontario. In each shanty the logs will be measured, the lumbermen being obliged to submit sworn statements regarding the quantity, size and length of logs. On this basis the average size of the logs will be estimated and thus also the amount of dues determined by reducing it to board measure."

Meeting of Ontario Lumbermen's Association.

The first annual meeting of the lumbermen's association of Ontario, which was held in the council chamber of the Board of Trade, Toronto, the early part of February, was attended by a fairly large number of members from different parts of Ontario. The chair was occupied by Mr. A. H. Campbell, of Toronto, and the press were not admitted.

After the regular business of the meeting, which was not given to the press, had been transacted, the following resolution was moved by Mr. John Charlton, M. P., and seconded by Mr. Charles Beck and carried:

"That the Lumbermen's Association of Ontario appreciates the great importance to the lumbering interests as well as to the agricultural, mining, fishing and other interests of the Dominion, of obtaining free access to our natural market, the United States, for the products of Canada and that we cordially endorse and sustain the movement for obtaining free commercial intercourse between the United States and Canada by means of Commercial Union or unrestricted reciprocity to be secured by treaty arrangement that will duly guard and protect the interests of the great producing class of the country."

It was also decided to raise the price of common bill stuff on the Georgian Bay to $10 per thousand feet at the mills.

The following gentlemen were appointed on Executive Board:

M. M. Boyd, Bobcaygeon; J. M. Irwin, Peterboro'; D. Gilmour, Trenton; A. H. Campbell, Toronto; James McLaren, Buckingham; John Waldie, Toronto; John Charlton, M. P., Lyndoch; J. L. Burton, Barrie; E. H. Bronson, M. P. P., Ottawa; W. C. Caldwell, Lanark; H. H. Cook, Toronto; N. Dyment, Barrie.

A. H. Campbell was re-elected president, and Mr. J. B. Millar, of Parry Sound, was re-elected secretary-treasurer.

Material Wasted.

There are many industries for which we have abundant material, which cannot flourish, or perhaps be established at all, in our limited market. One of these is the cutting of veneers for furniture. We do not know that there is a veneering factory in all Canada and are pretty certain that there is not one in this district. At all events most of our veneers are imported—some even from Europe.

Now the Western Peninsula is full of the best material for this purpose. Black walnut stumps, for example, in the Lake Erie counties will neither rot nor burn, but would be worth many times the present cost of destroying them if there was anyone ready to slice them into veneers. Stumps, roots and knots of cherry, butternut, oak, black birch, chestnut and many other woods—the very portions that are good for nothing else—make the best of veneering.

Across the border there are many large furniture shops which we could supply more cheaply than anyone else, while making handsome profits out of what is now waste material. Free trade in veneering would put hundreds of thousands of dollars in the pockets of our farmers and manufacturers.—*London Advertiser.*

Albany Favors Free Lumber.

It is apparently the opinion of the Albany dealers that to abolish the duty on lumber would not have any marked effect either on wages or on the price of lumber. The *Argus* of that city interviewed twenty out of twenty-six dealers in the District. Of the number ten were in favor of the repeal of the tariff on lumber. Four dealers opposed the abolition of the tax but only one of the number expressed the opinion that a low rate of wages would result from the introduction of free lumber.

EXCHANGE ECHOES.

Chicago Timberman.

Senator Wilson, of Iowa, seems to have made a "fist" of it by attacking the railroads running through Canada into the United States, by suggesting the closing of our roads from delivering to or receiving freight from them. What will Minnesota and Wisconsin say to this, after laboring many years to secure an outlet via the "Soo" for their lumber and flour on rates equal to those from Chicago and Saginaw, to New York and New England, and then have such an outrageous proposition passed as has been made to the Senate Inter-State Commerce Committee, and thus wipe out the untold benefit the "Soo" route will give to the northwest. Every shipper of lumber can be thankful that such a road as the Grand Trunk is in existence. It has done more to develop and cheapen lumber transportation than all the other trunk lines combined. There is but one conclusion to be drawn from the Senator's remarks, and that is that the gentleman is not posted as to the wants of the northwest and the American people in general, or is lending his influence to the roads in opposition to the "Soo" route.

Southern Lumberman.

The Canadian lumbermen who accidently get into conversation with reporters, or even with people interested in lumber in the United States, claim that the removal of the export duty would be of very little advantage to them, and still it is well known that they are greatly in favor of this reduction. There is undoubtedly some truth in the statement which they make, that every year it is more expensive to deliver the product, as the sources of supply are receding from the present lines of transportation. But two dollars per thousand is something of a bonus, and a well conducted lumbering force can remove logs and lumber some distance for this sum. Where there are large tracts, a logging railroad can be built and worked to excellent advantage. All this, of course, is on the assumption that the removal of the duty will not depreciate the price of lumber. The lumbermen of the United States naturally fear that the prices will go down. The Canadians just as naturally hope that the removal of the duty will accrue so much to his advantage. While both sides are ventilating their ideas, it yet remains to be seen whether the tariff-tinkers at Washington will bring lumber into the question. Of course a lot of articles will be put on the free list, but it seems as though some might be selected that would be more reasonable and beneficial to this country than to invite a general free competition in the manufacture of lumber. If other things can be made equal, so that our manufacturers here can produce as cheaply as our Canadian friends, it would give a different color to the matter. At present lumbermen can be fed and clothed at a less cost in Canada than here. The luxuries—which even lumbermen claim they must have—are much cheaper there, especially for chewers, smokers and drinkers. Lumber is a commodity of little consideration, however, among congressmen. From lack of thought and interest it may not receive the consideration to which it is entitled. The question simply is: Who will be benefitted by a removal of the duty? Legislation should be in favor of ourselves every time. If it were a question of annexation it might be different, but while the Canadian lumberman has the benefit of cheaper living than our own people, why should we give him more at a great risk of hurting ourselves?

The need of insurance against death and accident especially on the part of those whose occupation is of a hazardous character is now generally recognized. There are no better companies in the field than the Manufacturers' Life and the Manufacturers' Accident. They have done an enormous business and gained the confidence of the public. A special feature of the Manufacturers' Accident Insurance Co. is that it issues policies covering the employer's liability for accidents sustained by their workmen.

TRADE REVIEW.

Toronto, Ont.

TORONTO, Mar. 2nd, 1888.

CAR OR CARGO LOTS.

1¼ and thicker clear picks, American inspection	$34 00@35 00
1¼ and thicker, three uppers, American inspection	40 00
1¼ and thicker, pickings, American inspection	30 00
1X10 & 12 dressing and better	20 00 22 00
1X10 & 12 mill run	15 00 16 00
1X10 & 12 dressing	14 00 16 00
1X10 & 12 common	12 00 13 00
1X10 & 12 spruce culls	10 00 11 00
1X10 & 12 maple culls	9 00
1 inch clear and picks	24 00 26 00
1 inch dressing and better	18 00 20 00
1 inch siding mill run	13 00 15 00
1 inch siding common	12 00 13 00
1 inch siding ship culls	10 00 11 00
1 inch siding mill culls	8 00 9 00
Cull scantling	8 00 9 00
1¼ and thicker cutting up plank	22 00 25 00
1 inch strips 4in to 8in mill run	14 00 15 00
1 inch strips, common	11 00 12 00
1¼ inch flooring	14 00
1½ inch flooring	14 00 15 00
XXX shingles, sawn	2 40 2 50
XX shingles, sawn	1 40 1 50
Lath, Sawn	1 80

YARD QUOTATIONS.

Mill cull boards & scantling	$10 00	Dressing stocks	14 00@15 00
Shipping cull boards, promiscuous widths	12 00	Picks Am. inspection	30 00
" stocks	13 00	Three uppers, Am. inspect.	40 00
		B. M.	
Scantling & joist, up to 16 ft	13 00	1½-in. flooring, dres'd	25 00 30 00
" " 18 ft	14 00	1½ " " rough	14 00 15 00
" " 20 ft	15 00	1¼ " " dres'd	23 00 25 00
" " 22 ft	16 00	" " undres'd	14 00
" " 24 ft	17 00	" " dres'd	16 00 20 00
" " 26 ft	18 00	" " undres'd	12 00 14 00
" " 28 ft	19 00	Beaded sheeting, dressed	18 00 20 00
" " 30 ft	20 00		
" " 32 ft	21 00	Clapboarding, dres'd	12 50
" " 34 ft		XXX sawn shingles	
	22 50@22 50	per M	2 75 2 90
" " 36 ft	24 00	Sawn Lath	2 25
" " 38 ft	27 00	Red oak	20 00 25 00
" 40 to 44 ft	30 00	White "	25 00 30 00
Cutting up planks 1¼ and thicker dry	25 00 26 00	Basswood, No. 1 & 2	18 00 20 00
" board	18 00 20 00	Cherry, No. 1 & 2	50 00 60 00
		White ash, 1 & 2	25 00 30 00
		Black ash, 1 & 2	20 00 25 00

Montreal, Que.

MONTREAL, Mar. 3rd, 1888.

Pine, 1st qual'y ₱ M	$38 00 40 00	Basswood, run of log	
Pine, 2nd " "	28 00 30 00	culls out per M	$18 00 20 00
Pine, shipping culls ₱ M	14 00 16 00	Oak, per M	40 00 50 00
Pine, 4th quality deals ₱ M	10 00 12 00	Walnut, per M	60 00 100 00
Pine, mill culls, ₱ M	8 00 10 00	Cherry, per M	80 00 100 00
Spruce, per M	10 00 13 00	Butternut, per M	35 00 40 00
Hemlock, per M	9 00 10 00	Butternut, per M	35 00 40 00
Ash, run of log culls out per M	20 00 25 00	Birch, per M	20 00 25 00
		Hard Maple, per M	25 00 30 00
		Lath, per M	1 50 00 00
		Shingles, 1st, per M	2 00 3 00
		Shingles, 2nd, per M	1 00 2 00

Ottawa, Ont.

OTTAWA, Mar. 3rd, 1888.

	Dimensions, Inches.	Per M.
Mill culls	10 x 1	$8.00
"	12 1	
"	12 1½	
"	12 2	
" selected 16 ft. long, above dimensions		8.50 to 9.00
Cull strips, 1 in. thick, 5 to 7 wide		7.00 to 8.00
Mill cut outs	12 x 1	4.00 to 5.00
"	11 1½	
"	12 2	
Scantling	2 4	12.00
"	3 4	
" culls	2 4	7.00
" "	3 4	
Laths		1.25
Stock shorts, 12 x 1		10.00
1 inch siding outs, 1½, 1½, 2		15.00
" outs from shorts, 1¼, 1½, 2		6.50 to 7.00
Outs from stocks	12 x 1	10.00 to 12.00
" "	12 1¼	
" "	12 1½	
Shingles, X		1.25
" XX		2.00
" XXX		3.00
" cedar, No. 1		2.00 to 2.75
" cedar, culls		1.25
Difference in planed lumber, in waste and planing		5.00
Ditto, on average good stock		20.00 to 25.00

Burlington, Vt.

BURLINGTON, Mar. 2nd, 1888.

Canada Pine Sidings—1x8 in. and up, 12 to 16 ft. d 2 or 4 s.

Select & shelving	$46 00	Finish	$38 00
Pickings	37 00	Dressing	28 00
Pickings & better	40 00@42 00	Common	20 00@21 00

Canada Pine Stocks—1x10 in, 12 to 16 ft., d 2 or 4 s.

Selects clear	55 00	Pickings & better	40 00
1st shelving	42 00	As run, common out	28 00@30 00
2nd	39 00	No. 1 barn boards	25 00
3rd	30 00	Common	21 00
Pickings	38 00		

Canada Pine Stock—1x12 in. 12 to 16 ft. d 2 or 4 s.

Selects clear	57 00	Pickings & better	44 00
1st shelving	47 00	As run, common out	33 00
2nd	41 00	No 1 barn boards	26 00
3rd	32 00	Common	21 00@22 00
Pickings	38 00		

Canada Pine Stock—14 in. 12 to 16 ft. d 2 or 4 s.

Pickings & better	45 00	3d shelving	33 00
As run, common out	33 00	Common	22 00

Canada Pine S. B'ds 1x8 in. & up, 11 ft. and under, d 2 s or r.

Pickings & better	33 00@35 00	Dressing & common, d 2 s or	
As run, common out	30 00	d 2 s & m	20 00@21 00
		Common	18 00@19 00

Canada Pine Sheathing, d. m. & b. 1," 4 to 7", 5" & up. cb ⅞".

1st quality, 12 to 16 ft	46 00	1st & 2nd quality, 9 to 11 ft.	33 00
2nd	37 00	7 & 8 ft.	34 00
3rd	27 00	3rd quality, 11 feet & under	22 00
4th (Common)	22 00	4th	18 00

Canada Cedar, Spruce 1 & 1½ in., 4 to 7 in. d 2 s & m.

Clear, 12 to 16 feet	32 00	No 2, 10 to 16 ft.	15 00@16 00
No 1	22 00		

Above prices delivered on a rate of $30 per car load.

Hamilton, Ont.

HAMILTON, Mar. 2nd, 1888.

Mill cull boards and scantlings	$ 9 00@10 00	Dressing stocks	$ 6 00 18 00
Shipping cull boards, promiscuous widths.	10 00 12 00	1¼ flooring, rough	16 00 18 00
Shipping cull stocks.	13 00	1½ flooring, rough	16 00 18 00
Scantling and joist up to 6 feet	13 00	1¼ flooring, dressed	25 00
do up to 18 feet	13 50	1 flooring, dressed	23 00
do up to 20 feet	14 00	Beaded Sheeting 1	28 00 30 00
do up to 22 feet	15 00	Picks, Am. inspection	40 00
do up to 24 feet	16 00	Three uppers Am. In.	45 00
do up to 26 feet	17 00	XXX sawn shingles.	2 60 2 70
do up to 28 feet	18 00	Sawn Lath	2 25
do up to 30 feet	20 00	Red Oak	25 00 28 00
Cutting up plank 1¼ and thicker, dry	20 00 25 00	White Oak.	25 00 30 00
Cutting up boards	20 00	Basswood No. 1. & 2.	18 00 20 00
		Cherry No. 1 & 2	50 00 60 00
		White Ash No. 1 & 2	25 00 30 00
		Black Ash, No. 1 & 2	20 00 25 00

St. John, N. B.

St. JOHN, Mar. 3rd, 1888.

Deals, Boards, Scantling, etc.

Spruce deals	$12 00	Spruce boards	12 00
Pine "	15 00	Pine "	12 00@50 00
Deal ends	6 00	Oak "	40 00
Scantling	10 00	Ash "	15 00@25 00
		Hemlock "	7 50

Shingles.

Spruce, extra	$3 50	" No. 1	1 25
" clear	3 00	Pine	1 25
" No. 1 extra	2 25		

Clapboards.

Pine, extra	50 00	Spruce, extra	25 00
" clears	45 00	" clears	23 00
" 2d clears	35 00	" No. 1	15 00
		" No. 2	10 00

Flooring, Dressed.

6 in., No. 1	12 00	4 in., No. 1	12 00
" No. 2	10 00	" No. 2	10 00

Miscellaneous.

Staves	3 00@ 4 50	Laths	1 80
Heading, 17 in. per pr.	04	Pickets	6 50@15 00
" 18 in. "	04½ 05½	Railway ties	15
" 22 in. "	04½ 06		

Detroit, Mich.

DETROIT, Mar. 2nd, 1888.

Uppers, Selects, Stocks, etc.

Uppers, 4-4	$45 00	Shop, 5-4, 6-4 & 8-4	$25 00
5x4, 6x4 & 8x4	45 00	Fine common, 4x4	31 00
3 & 4 in	50 00	5x4, 6x4 & 8x4	33 50
Selects, 4x4	38 00	Stocks, 1x12 & 1x10, No. 1	19 00
5x4, 6x4 & 8x4	40 00	1x12, & 1x10, No. 2	16 00
Shop, 4x4	22 00	1x12, & 1x10, No. 3	13 00

Flooring, Siding, Ceiling, etc.

Flooring, select common	22 00	Roofing, D & M	16 00
No. 1 common	18 00	Siding, clear	21 50
No. 1 fencing	16 50	A	20 50
Ceiling, select common	25 00	B	18 50
No. 1 common	22 00	C	13 50
No. 1 fencing	20 00		

Bill Stuff and Culls.

Bill stuff, ordinary sizes:		26 to 28 ft	14 00
12 to 16 ft	12 00	30 to 34 ft	16 00
18 to 20 ft	12 50	Ship culls	12 00
22 to 24 ft	13 00	Mill culls	10 00

Shingles and Lath.

Shingles, clear, 18 in. Ex	3 75	6 in. stocks clear, Ex	4 00
10 in. clear, 18 in.	3 00	5 in. stocks clear, Ex	4 80
6 in. clear, 18 in.	2 75	Lath	2 10

Add for surfacing one or two sides, $1.

Philadelphia, Pa.

PHILADELPHIA, Mar. 3rd, 1888.

White Pine.

Mich. uppers, 1 to 2 in., dry	$48 00@50 00	1¼ to 2 in. plank, barn quality	22 50@25 00
2½, 3 & 4 in	55 00	60 00	Common plank	20 00 22 00
Selects, 1¼ to 2 in.	42 50	45 00	⅞ box boards, wide	14 00 16 50
Selects, 1 in.	41 00	43 00	⅝ siding, selected	27 50 30 00
12 in. flooring quality	30 00	32 50	Culls, 12 in.	15 50 17 00
barn	19 00	23 00	Wide	15 00 16 00
Edge barn, all widths	18 00	20 00	Narrow	13 50
			No. 1 moulding	36 00 38 50

Cargo Lots.

Yellow pine edge bds	14 00@16 00	Scantling and plank	20 00 22 00
Heart face boards	19 00 21 00		

Hemlock Boards and Scantling.

Edge boards	10 50@11 50	Scantling, 2x3 & 2x4, 16 & 18 ft	12 00@13 00
12 in. stock	11 50 12 00	3x4, to 12, 12 to 20 ft.	11 00 11 50
Fencing, 6 in., 16 ft.	11 50 12 00		

Shingles and Posts.

Cypress shingles, 24 in. heart, d & b	13 00@18 00	Cedar shingles, 30 in. hand dressed	35 00 40 00
24 in. sap, d & b.	10 00 12 00	Chestnut posts, 9 ft.	32 00
		7 ft.	28 00

HARDWOOD.

Walnut.

Nos. 1 & 2, 1 in., good dry, Indiana	$87 50@ 95 00	Reject or common, 1 in., 1¼ and up	60 00 65 00
1¼ & up	92 50 100 00	Culls, 1 in.	35 00 37 50
Nos. 1 & 2, ⅝ in.	72 50 77 50	1¼ in. & up	35 00 40 00

Poplar.

Nos. 1 & 2, ⅝ in. good wide, Indiana	25 00@27 50	Nos. 1 & 2, 1¼ in. & up, good wide, Ind.	32 50 36 00
1 in.	28 00 32 50	Columns, 5x5 & up clear	35 00 35 00

Oak.

Nos. 1 & 2, 1 in., good western, straight	32 50@35 00	Nos. 1 & 2, 1¼ in. & up, good western, straight	35 00 37 50
quartered	49 00 50 00	quartered	52 50 55 00

Ash.

Nos. 1 & 2, 1 in., good western	35 00@40 00	Nos. 1 & 2, 1¼ in. & up, good western	32 50 42 50

Yellow Pine—Yard and Wholesale.

Sc'tlg, 2x4 to 12x14	22 00@23 00	Flooring, 1 in., Va.	17 00 19 00
Plank, 1¼ to 2 in.	23 00 27 50	1 & 1¼ in., Ga. &	
Fl'g, 1 & 1¼ in. No. 1	27 50 30 00	Fla. cargo run	22 00 24 00

Cherry.

Nos. 1 & 2, 1 in., good	62 50 70 00	Nos. 1 & 2, 1½ in. & up, good	65 00 75 00

Saginaw Valley

SAGINAW, Mar. 2nd, 1888.

CARGO LOTS.

Uppers	36 00@38 00	Norway	9 00 [illegible]
Common	[illegible]	[illegible]	[illegible]
Shipping [illegible]	[illegible]	[illegible]	[illegible]
Mill Culls	[illegible]	[illegible]	[illegible]

[illegible] CARGO LOTS

Dressing

Clear [illegible]	[illegible]	[illegible]	[illegible]
A	[illegible]	[illegible]	[illegible]
B	[illegible]	[illegible]	[illegible]

Flooring and Ceiling [illegible]

Flooring, clear & B	[illegible]	[illegible]	[illegible]
No. 1	[illegible]	[illegible]	[illegible]
No. 2	[illegible]	[illegible]	[illegible]
No. [illegible]	[illegible]	[illegible]	[illegible]
No. 4	[illegible]	[illegible]	[illegible]

Finishing Lumber [illegible]

Three uppers, 1 in	[illegible]	[illegible]	[illegible]
1¼ & 1½	[illegible]	[illegible]	[illegible]
Selects, 1 in.	[illegible]	[illegible]	[illegible]
1¼ & 2 in.	[illegible]	[illegible]	[illegible]
No. 3	[illegible]	[illegible]	[illegible]
Coffin boards	[illegible]	[illegible]	[illegible]

Joist, Scantling and Timber

12 to 18 feet	10 00	22 feet	[illegible]
20 feet	11 [illegible]	[illegible]	[illegible]
Plank and timber	12 [illegible]	[illegible]	[illegible]

Wide Select and Common [illegible]

C [illegible] No. 1 com'n 13 in. and up	28 [illegible]	[illegible]	[illegible]

Lath, Shingles and Pickets

Lath, No. 1	1 [illegible]	[illegible] XXX	[illegible]
No. 1	1 25	[illegible]	2 25 [illegible]
Shingles, river brands	[illegible]	[illegible]	[illegible]
XXX	3 40@ 3 50	[illegible]	[illegible]
Clear butts	2 40 2 50	[illegible]	[illegible]

New York City.

NEW YORK, Mar 3rd, 1888.

Black Walnut

⅝ in., all clear	$75 00@ 82 00	[illegible]	$[illegible] [illegible]
1 and 1¼ inches	92 00 97 00	Culls, [illegible]	[illegible] [illegible]
1½ and thicker	98 00 105 00	Counter tops, 18 in.	[illegible] [illegible]
Rejects	52 00 55 00	and over	110 00 [illegible]

Poplar, or White Wood.

⅝ in. 10 inches and over	22 00@24 00	1¼ to 2 inch	[illegible] [illegible]
¾ in. coffin boards	27 00 28 50	2½ and thicker	[illegible] [illegible]
1 inch, 10 inch and over	28 00 30 00	Common, 1 to 2 in. [illegible]	[illegible] [illegible]
1 inch, 8 in. and over	26 00 28 50	Saps, 1 in. [illegible]	[illegible] [illegible]
		Culls, all thickness	[illegible] [illegible]

Dressed Poplar.

½ inch panel	24 50@25 00	in. clg. 4 to 6 in.	[illegible] [illegible]
⅝ inch panel	27 00 28 00	½ in. clg. 4 to 6 in.	[illegible] [illegible]
¾ inch panel	29 00 30 00	⅝ in. clg. 4 to 6 in.	27 00 28 00
4, 5, 6 inch casing	30 00 31 00	¾ in. clg. 4 to 6 in.	29 00 30 00
7, 8, 9, 10 inch casing	32 00 33 00	⅞ in. clg. 4 to 6 in.	30 00 31 00

Ash.

1 inch, white	30 00@ 39 00	Strips, clear	[illegible] [illegible]
1¼ to 2 inch	38 00 40 00	Black ash, good	20 00 30 00
2½ to 4 inch	40 00 41 00	Black ash, culls	10 00 12 00

Oak.

1 inch plain sawed,	37 00@ 39 00	inches and over	48 00@ 51 00
1¼ to 2 inch	37 00 40 00	Thicker	51 00 53 00
Thicker	38 00 40 00	Strips under 6 in.	38 00 40 00
Quarter-sawed, white, all clear, 6-			

Cherry

⅝ in., white & clear	65 00@ 70 00	2½ and thicker	85 00@ 90 00
1 inch	75 00	80 00	Counter tops, 18 in.	[illegible] [illegible]
1 inch strips	40 00	42 00	and over	100 00 115 00
1¼ to 2 inch	80 00	83 00	Culls, all thickness	18 00 20 00

Miscellaneous.

Chestnut, clear	35 00@ 38 00	Redwood California plank	52 00@ 55 00
Chestnut common	20 00 23 00		
Basswood white	28 00 32 00	Hickory, old growth	80 00 90 00
Basswood common	20 00 23 00	Hickory, 2nd growth	70 00 80 00
Maple, clear	25 00 30 00	Elm	20 00 22 00
Birch, clear	33 00 36 00	Sycamore	24 00 27 00
Birch, 1s and 2s	20 00 30 00	Sycamore quartered	35 00 42 00
Cottonwood	20 00 21 00	Gum	39 00 41 00
Redwood, California boards	47 00 50 00	Butternut	45 00 50 00

Buffalo and Tonawanda, N. Y.

TONAWANDA, Mar. 2nd, 1888.

Norway Pine—Rough.

No. 1, 1 & 1¼ in.	19 00@20 00	Stocks No. 1, 1 & 1¼ in	21 00
No. 2, 1 & 1¼ in.	15 00 15 50	No. 2, 1 & 1¼ in.	17 00
No. 3, 1 & 1¼ in.	11 50 12 00	No. 3, 1 & 1¼ in.	12 00
		Scantling 2x4 to 2x12 12 to 16 ft	13 00
		Timber, 4x6 to 12x12 12 to	20 00

White Pine—Rough.

Uppers, 1 in.	$44 00@46 00	Shelving, No. 1, 13 in.	
1¼, 1½ and 2 in.	44 00 47 00	and up	31 00
2½, 3 and 4 in.	55 00 60 00	No. 2, 13 in. & up	22 00 26 00
Selects, 1 in.	39 00 40 00	Fine common, 1 in.	32 00
1¼, 1½ and 2 in.	39 00 40 00	1¼, 1½ and 2 in.	32 00 35 00
2½, 3 and 4 in.	45 00 50 00	Common, 1 in.	16 00 18 00
Cuts, No. 1, 1 in.	25 00 28 00	1¼ and 1½ in.	17 00 20 00
1¼, 1½ and 2 in.	32 00 33 00	2 in.	20 00 22 00
2½, 3 and 4 in.	37 00 40 00	Coffin boards	17 50
No. 2, 1 in.	15 00 17 00	Box, 1 in.	12 00
1¼, 1½ and 2 in.	21 00 22 00	1¼ in. & thicker	13 50
Moulding, 1 in.	28 00 32 00	A stocks, 1x10	26 00
1¼, 1½ and 2 in.	28 00 32 00	1x12	28 00
Siding strips, 1 in.	38 00	B stocks, 1x8 to 12	17 50
		C stocks, 1x8 to 12	13 50

Dressed Lumber.

	No. 1.	No. 2.	No. 3
Base and Casing under 6 inches	$33 00	$23 00	$19 00
Base and Casing, 6 inches	34 00	25 00	17 00
Base and Casing, 6, 7 and 8 inches	36 00	28 00	18 00
Flooring, 1 and 1¼ inches, 2½ to 5 in. wide	30 00	20 00	15 00
Ceiling, ⅞ in., 2½ to 5 inches wide	33 00	23 00	16 00
Ceiling, ⅝ in., 2½ to 5 inches wide	28 00	22 00	14 00
Ceiling, ½ in., 2½ to 5 inches wide	24 00	18 00	13 00
Philadelphia Fencing	30 00	30 00	21 00
Bevel Siding, 6 inches	25 00	21 00	11 00
Bevel Siding, 5 inches	23 50	21 00	17 00
Bevel Siding, 6 inches	23 00	19 00	14 00
Novelty Siding, 6 inches and over	40 00	25 00	15 00

Shingles and Lath.

Shingles, 18 in. XXX	3 85@ 3 90	Lath, pine No. 1	2 10 2 15
XX	2 85 2 90	No. 2	1 70
X	1 25	Norway	1 60
Shingles, 16 in. XXX	3 00	Hemlock	1 00
XX	2 10		
X	90		

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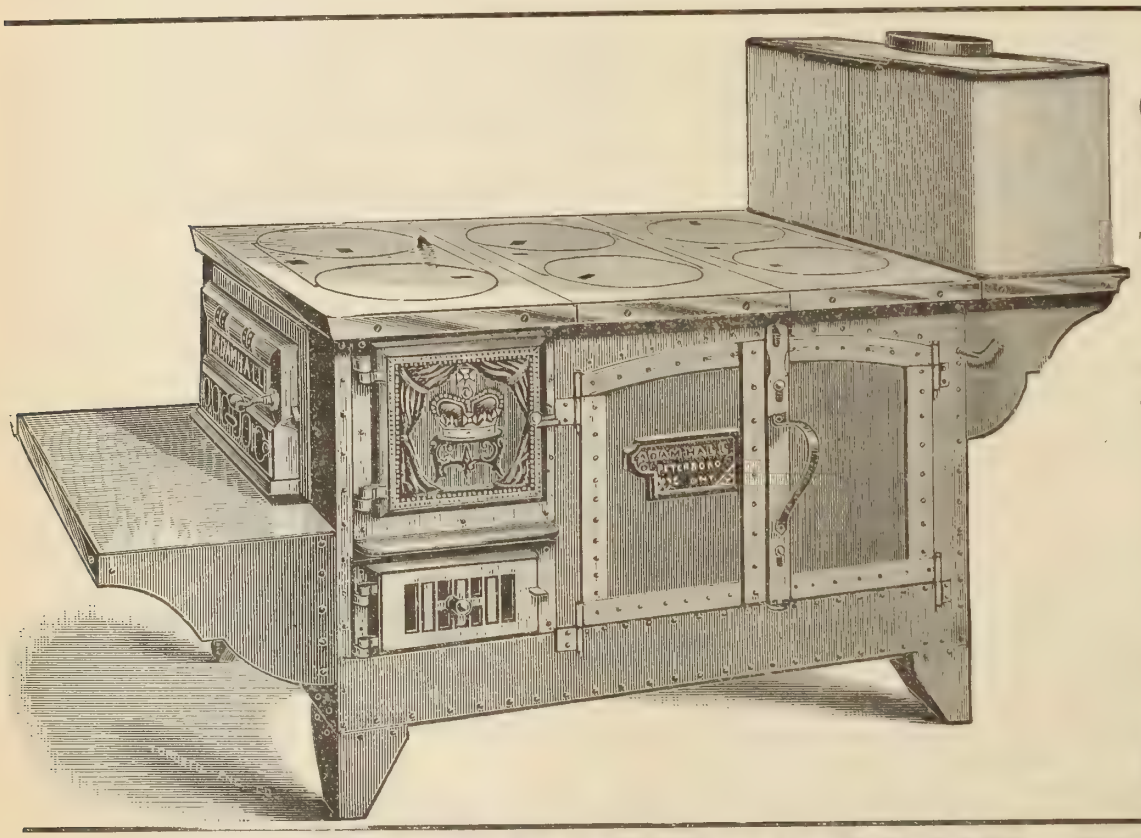

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Adam Hall, Peterboro'.

TAPER PIKE POLES

Peevey Stocks and Cant Hook Handles.

The Pike Pole handles are twelve and thirteen feet long ; made of the best Straight Rock Maple ; are turned in a machine made expressly for the purpose, and are 1⅜ inches in diameter for one-half their length, being then tapered to one inch at small end, and chucked to fit furrel. We are the only manufacturers in the world who have the system and machinery for turning out Taper Pike Poles successfully.

THEY SELL ON SIGHT AND GIVE THE BEST OF SATISFACTION.

Price of Pike Poles, Peevey Stocks and Cant Hook Handles, $25.00 per Hundred. Sample Pole sent for 25 cts.

The following are a few of the firms who have used these Poles for several seasons : D. Ullyott, Esq., J. M. Irwin, Esq., Geo. Hilliard, Esq., Peterborough ; Gilmour & Co., Trenton ; M. Brennan & Sons, Hamilton ; Gilmour & Co., Chelsea, Que.; M. Boyd & Co., Bobcaygeon ; Muskoka Mill & Lumber Co., Muskoka Mills ; The Rathbun Co., Deseronto ; Heath, Tait & Turnbull, Huntsville ; Cookshire Mill Co., Cookshire, Que.

Wm. Forsyth, Peterboro', Ont.

IMPORTANT NOTICE TO THE PUBLIC.

I am patentee and owner of Canada patent, No. 42,357—Improvement in Band Saw Mills—which covers a Band Mill with two columns. I am also patentee and owner of Canada patent, No. 42,377—Improvement in Band Saw Guides—which covers wheel guides for a Band Saw. I am informed that a Band Mill is being offered to mill men in the Dominion, containing two columns which is an infringement of the above patent. The public is hereby warned against purchasing such Band Mill, as I shall hold the purchaser responsible for the infringement of my said patents, and for all damages which I may have, or may hereafter sustain, on account of any unlawful use of said patents.

The WM. HAMILTON MANUFACTURING CO., Peterborough, Ont., is authorized to build and sell Band Mills under my patents.

[A TRUE COPY.]
FRANK W. WHEELER,
SHIP BUILDER,
Specifications and Estimates Furnished on application.

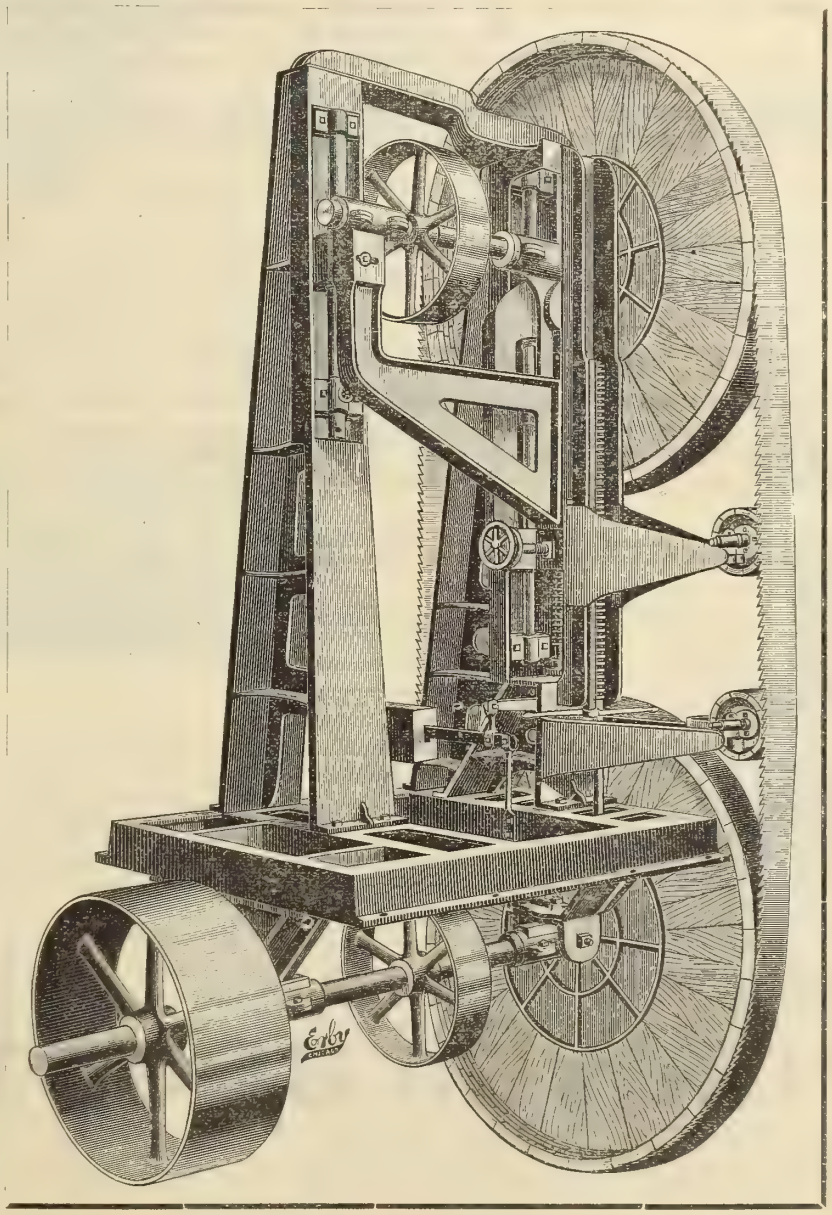
WEST BAY CITY, Mich., June 26th 1886.

Mr. D. K. Allington, East Saginaw, Mich.

I have been running your Pat. Band Saw Mill in my new ship yard mill for over one month, squaring up large and long hewn oak timber which has been hewn a sufficient time to be dry and hard on the surface, and sawing long plank from same kind of timber. The timber, or Keelson's squared, was laid up in a vessel, one on top of the other, and fitted as well as could be done by hand, it being square straight and out of wind. I have had a large amount of this plank and timber sawn, and have not yet found a bad cut. I have squared timber where the saw here and there barely cut the thickness of the saw kerf, yet the saw did not deviate the least from a straight line. From the nature of my work I cannot give any idea of the amount cut in a given time, but the speed of cut should be satistactory to any one. The most difficult part of my work is in sawing tamarac ship knees, yet the machine has given me entire satisfaction in this respect, sawing a root having a cut of from 2 to 4 feet, making in every case a true cut.

I do not believe that a saw has been put on the machine in good order, as I have not a sufficient number of saws to give time to dress them well and keep the mill running, yet there has not been one broken or disabled, in fact, a saw must be in bad order that will not run in a straight line when run over your guide wheels.

Yours, truly,
F. W. WHEELER.



[A TRUE COPY.]
F. W. WHEELER'S SHIP YARD.
WEST BAY CITY, Mich., June 25th, 1886.

Mr. D. K. Allington, East Saginaw, Mich.

DEAR SIR:—I have been engaged in running band saws for the past five years, and I never before found anything equal to the Band Mill built by you, that I am now filing for. I must say that it is almost impossible to make a bad line if the saw is in any kind of order. We are cutting hardwood, principally long oak, and on account of being short of saws we have run our saws for five hours and cut as fast as we could conveniently handle, without making any perceptible variation in the cut. I have run various kinds of mills, but never before saw anything to equal it. There has been quite a number of millmen examining it, and all give it up to be the best and truest cutting mill they ever saw.

Respectfully yours,
JOHN A. GREGG.

[A TRUE COPY.]
BAY CITY, Mich., Nov. 15th, 1887.

Mr. D. K. Allington, Saginaw, Mich.

DEAR SIR:—Having had considerable experience with Band Mills, I consider myself competent to judge the merits of the same. I started and run one of your Band Mills at Victoria Harbor, Ontario, which was manufactured by the Wm. Hamilton Manufacturing Co., of Peterborough, Ont. I also started and run your two Band Mills in William Peters' mill, at Bay City, Mich., and must confess they are superior to any Band Mill I ever seen, for quality and quantity of lumber produced.

Respectfully yours,
W. A. McCLENATHAN, Filer.

[A TRUE COPY.]
F. W. WHEELER'S SHIP YARD.
WEST BAY CITY, Mich., June 24th, 1886.

Mr. D. K. Allington, East Saginaw, Mich.

DEAR SIR:—I have been sawing on your Band Saw Mill for the last month, making plank from long square oak timber, partially seasoned, and being short of saws, do not have time to have them put in in the best of order, and have to run them five hours without changing, yet I have not broken a saw or made a bad cut, the machine running smoothly, and not having cause to stop for any reason but to change saws, and cutting as fast as other band saws I have run.

Yours truly,
THOMAS GRAHAM.

D. K. ALLINGTON,

MANUFACTURER OF IMPROVED BAND SAW MILLS

No. 24 Hoyt Block, East Saginaw, Mich., U. S.

B. F. STURTEVANT'S PATENT PROGRESSIVE LUMBER DRY KILN.

RELIABLE! RAPID! CHEAP!

GRANANTEED TO DRY

—IN—

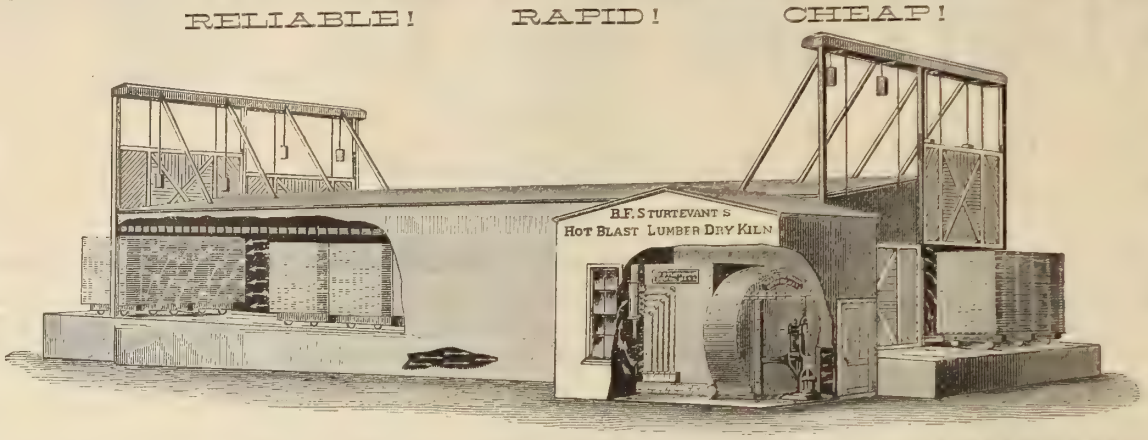
Best Manner Possible

ALL KINDS OF

HARD and SOFT WOOD LUMBER.

WRITE*FOR*CATALOGUE.

115 LIBERTY STREET, NEW YORK.



NO WARPING, CHECKING AND BLUEING

—WITH THE—

STURTEVANT

Patent Hot Blast

Steam Heating Apparatus.

31 N. CANAL STREET, CHICAGO.

B. F. STURTEVANT, Patentee and Sole Manufacturer, BOSTON, MASS., U. S.

BOWDEN & CO.

A. GOODBY, Manager.

Lubricating Oils.

Sole consignees of Southwick's Celebrated Cylinder, Engine and Machine Oils

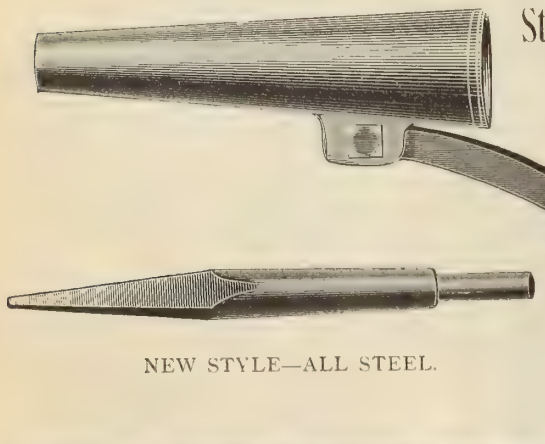
MANUFACTURERS OF HIGH GRADE OILS.

Millmen requiring Oils of uniform quality and high grade should write us. Sole makers of **Crown Lubricant and Crown Crank Pin Grease**, the greatest thing in existence for Shafting and Engines, cups supplied. Note our address :

BOWDEN & CO., 59 Adelaide Street, West, Toronto, Ont.

The ORONO CANT DOGS.

Strongst and Lightest in the Market.



NEW STYLE—ALL STEEL.

NEW STYLE--COMPLETE

Socket is in one piece and extends above hook, adding strength. Drop Forged Hook and Round Bill; easily disengaged. Pick, with shoulder. Selected Rock Maple Handle, specially bored.

OLD STYLE.
IRON BANDS,
STEEL HOOK.

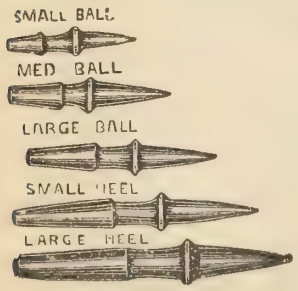
OLD STYLE--COMPLETE

Wrought Norway Iron Socket and Band. Steel Hook. Long Pick. Drop Forged Hook, Round Bill. Rock Maple Handle.

HANDLES

Selected Straight-Grained, Split and Turned Rock Maple Handles. Extra Fine Quality; 5, 5½ and 6 feet long.

LUMBER DRIVER'S BOOT CALKS



Made from the best Refined Tool Steel and forged. The method used in tempering leaves every one of the same temper, rendering them stronger and more durable than any other Calks.

Ask your dealer for our make, and see that our Labels are on the boxes.

SEND FOR PRICES.

T. McAvity & Sons, St. John, N.B.

DOMINION SAW WORKS!

JAS. ROBERTSON & CO.

253 to 267 King Street West,

Toronto, - - Ontario.

JAMES ROBERTSON

Dalhousie and William Streets,

Montreal, - - Que.

EVERY SAW FULLY WARRANTED.
Prices on Application.

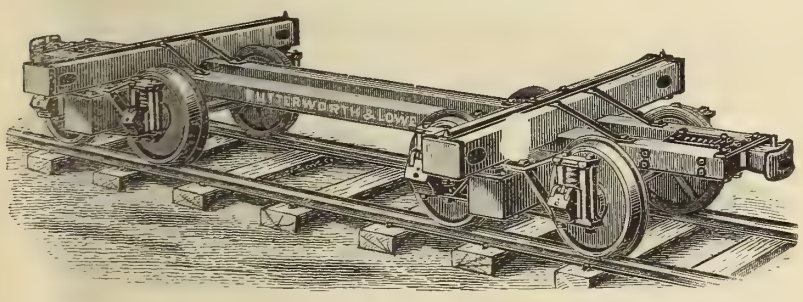
MANUFACTURERS OF SAWS

Circular, Shingle, Gang, Cross Cut, Concave, Mulay, Drag, Grooving.

Thurber's Royal ANTI-FRICTION BABBIT METAL.

IMPORTERS AND DEALERS IN

Band Saws, Emery Wheels Saw Sets,
Saw Swages, Rubber Belting, Iron Pipe,
Saw Gummers, Leather Belting, Files, &c.



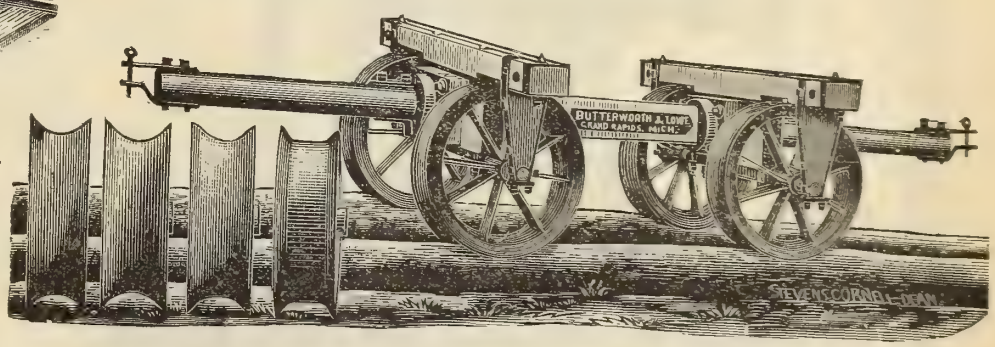
MANUFACTURERS OF

Logging Cars, Logging Trucks, Pole Road Cars, Wheels Chilled and Unchilled, Flat Faced and Concave, for every Description of Logging Road.

Send for Circulars and Mention this Paper.

BUTTERWORTH & LOWE,

Grand Rapids, Mich., U. S



THE WANZER LAMP!

PATENTED AT HOME AND ABROAD, 1886.

NO CHIMNEY — 50 CANDLE POWER — NO SMOKE!

Positively Non-Explosive! EVERY LAMP GUARANTEED. ***No Heat around the Oil Well.***

OUR LAMP is all we claim for it, being **positively non-explosive,** the oil being kept continually cool, consuming only half a pint of ordinary coal oil during six hours burning; using only an inch wick, and producing a fine clear **Fifty Candle Power Light.** No chimneys are required, but ordinary globes or shades may be adjusted to it. No smoke or offensive odor. Water can be heated in a few minutes. Tea or Coffee made, and Oysters cooked, etc., without obstructing the light. Reflectors of entirely new designs for both out-door and in-door use are furnished at low figures. Made in all styles—Table, Hanging, Library, attach to Chandeliers, Gas Fixtures, etc.

Agents Wanted where Territory has not Already been Taken.

R. M. WANZER & CO., Manufacturers, HAMILTON, ONT.

CHARLES ESPLIN,

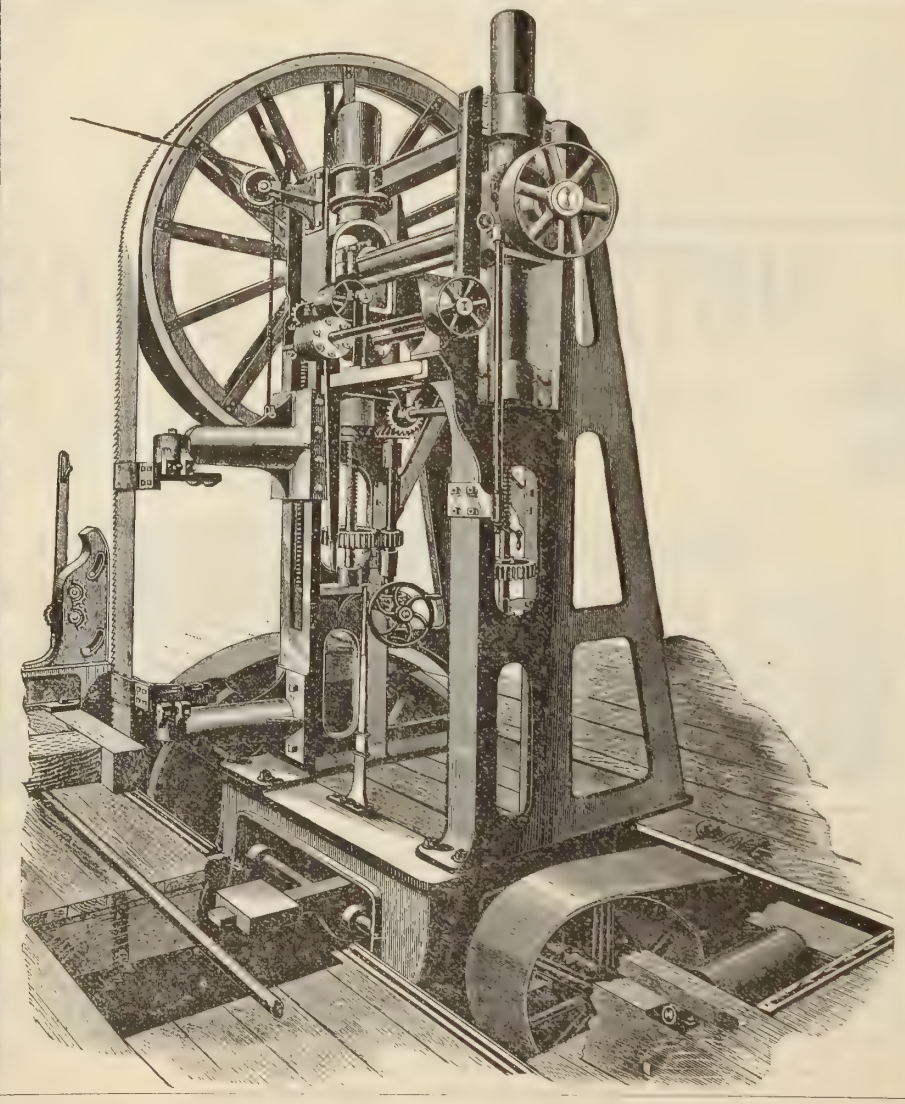
MILLWRIGHT * AND * MECHANICAL * ENGINEER,

Patentee and Builder of the

ESPLIN BAND SAW MILL

The Only Perfect Mill in Use.

THE following statement of Dimensions will give some idea of its proportions: Diameter of Wheels, 8 feet; diameter of lower and top Wheel Shafts, 5⅜ inches; length of Lower Shaft, 8 feet 6 inches; length of Top Wheel Shaft, 8 feet 4 inches; length of Bearings for Wheel Shafts, 18 inches; Weight of Mill alone, 22,000 Pounds.



ENDORSEMENTS

IN ABUNDANCE.

The Following is Only a Sample:

ASHLAND, Wis., Nov. 10th, 1886.

CHAS. ESPLIN, ESQ.,
Minneapolis, Minn., U. S. A.

DEAR SIR,—The band mill placed in our saw mill by you we consider the best and most complete band mill we know of. It has advantageous features which we have not seen in any other mill. The strength of all its parts is ample for every demand upon it. It is massive. The guide arms in their proportions and adjustments seem beyond improvement. The drive wheel by taking up the tension of the saw from below is a great advantage gained. The long distance between the bearings of the upper wheel shaft steadies the motion and the whole machine moves with ease and steadiness.

We have never seen lumber so perfectly manufactured as made by this band mill. The mechanic that planned it and the company that manufactured it deserves the congratulation and thanks of all manufacturers of lumber,

Very respectfully,
SUPERIOR LUMBER CO.

John H. Knight, Secretary-Treas.; D. A. Kennedy, Supt. and General Manager.

Address, CHAS. ESPLIN, care of Wm. Hamilton Mfg. Co., Peterborough, Ont.,

OR TO MY AMERICAN OFFICE:

623 Franklin Ave, Minneapolis, Minn.

REPRESENTATIVE TORONTO LUMBER FIRMS

TENNANT AND CO.

Wholesale Dealers in

LUMBER, LATH & SHINGLES

Dressing and Better Pine.

Also Hemlock in all sizes a Specialty.

OFFICE:
No. 9 VICTORIA STREET, TORONTO.

THOS. H. WILLMOTT. A. E. M. I.

WILLMOTT & McINTOSH,

Wholesale Dealers in

LUMBER

44 and 46 Front Street East,

TORONTO, - - ONTARIO.

Lumber Shipped to all Parts by Rail or Vessel.

Agents for the Celebrated LUFKIN BOARD AND LOG RULE.

Prompt Delivery in all Cases. CORRESPONDENCE SOLICITED.

ONTARIO LUMBER COMPANY

MANUFACTURERS AND DEALERS IN

LUMBER

LATH, SHINGLES.

HEAD OFFICE: Room H, Yonge Street Arcade.

MILLS AT Midland, French River and Gravenhurst.

TORONTO, ONT.

BILL STUFF CUT TO ORDER.

WM. LEAK & CO.,

WHOLESALE

PINE & HARDWOOD LUMBER

DUNDAS STREET,

TORONTO.

Lumber Shipped to all parts.

DONOGH & OLIVER,

Wholesale Dealers in

LUMBER

OFFICE:

Nos. 16 and 17 Imperial Bank Buildings,

WELLINGTON STREET EAST.

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SCOTT, SCOTT & CO.

Manufacturers of and Wholesale Dealers in

LATH AND SHINGLES LUMBER

MILLS AT MEDONTE, SIMCOE CO.

Office: Union Loan Buildings, 28 & 30 Toronto St.

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CHRISTIE, KERR & CO.

Manufacturers and Wholesale Dealers in

PINE AND LUMBER HARDWOOD

Office: 9 Victoria Street,

TORONTO, = = = ONTARIO.

McCRANEY, McCOOL & WILSON,

Manufacturers and Wholesale dealers in all kinds of

PINE and HARDWOOD LUMBER

LATH AND SHINGLES.

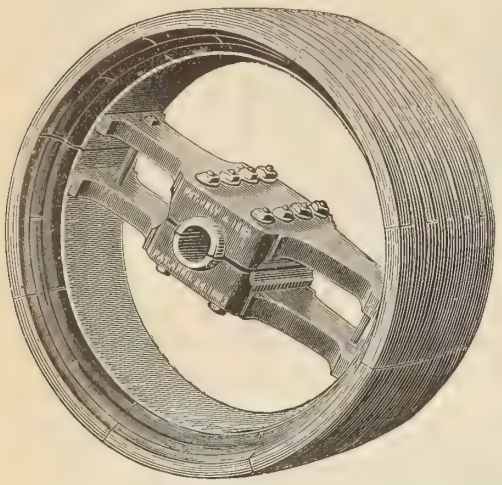
Ship Plank, Decking and Long Bill Stuff, a Specialty.

Mills at Burlington, Bronte and Huntsville.

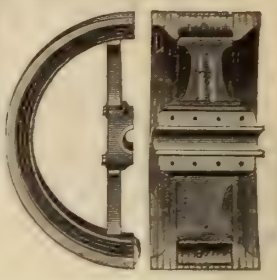
Head Office: 16 UNION BLOCK, corner Toronto and Adelaide Sts., Toronto.
Branch Office: 208 Wellington Street, Ottawa.

TORONTO and OTTAWA.

DODGE * PATENT * WOOD * SEPARABLE * OR * SPLIT * PULLEYS.



BEST BELT SURFACE, LIGHTEST, STRONGEST, BEST BALANCED AND MOST CONVENIENT PULLEY IN THE WORLD.



With our Patent Bushing System

Every pulley will fit 22 different sizes of shafting, and guaranteed to give from 30 to 60 per cent. more power from same belt and like tension than any iron or steel pulley. Every pulley a split pulley, 70 per cent. lighter than cast iron and 50 per cent. lighter than wrought iron or steel. Strong enough for any power required. Made in any size from nine inches to sixteen feet diameter.

As a material for pulleys wood is better than iron from the fact that it holds a belt much better. Most good mechanics are aware of this fact, but it may not be generally known how great is the difference, and for the benefit of our readers we give the result of two tests made and published by two of the most eminent mechanical authorities :—

Portion of Circumference embraced by Belt.	Rel. value of leather belt	
	On Wooden Pulleys.	On Iron Pulleys.
.20	1.80	1.42
.30	2.43	1.69
.40	3.26	2.02
.50	4.38	2.41
.60	5.88	2.87
.70	7.90	3.43

Morin.—Appleton's Encylopedia of Mechanical Arts.

Portion of Circumference embraced by Belt.	Rel. value of leather belt	
	On Wooden Pulleys.	On Iron Pulleys.
.20	1.90	1.40
.30	2.40	1.70
.40	3.30	2.00
.50	4.40	2.40
.60	5.90	2.90
.70	7.90	3.40

Haswell.—Engineers' and Mechanics' Pocket Book.

A Dodge Patent Wood Pulley is better than iron from the fact that it can be made very much lighter and thus save weight on the line shaft and bearings, thereby saving in expense from a saving in friction.

The advantages of the separable pulley are very apparent. By its use the necessity of taking down shafting already up for the purpose of putting on additional pulleys when needed, or to be changed, is avoided, thus saving time, trouble and expense, while their first cost is much less than any other pulley made not having these advantages.

The Compression Fastening whether used with keys in iron center or compression alone, keeps the pulley always in balance as the compression on the shaft and key is always towards the center.

The most perfect balanced iron pulley fastened with set screws or key, is invariably out of balance by being thrown from the centre, this fact is obvious to all mechanics.

The advantages of our mode of fastening over any other are : It is the only absolutely true fastening for a pulley. A pulley once properly balanced cannot be thrown out of balance in securing with this fastening. A pulley fastened with key or set screw in the ordinary way, cannot be screwed without lifting the pulley from the shaft at that point where the key or set screw is placed, thus throwing the pulley out of balance.

Manufacturers should carefully avoid any pulley with a set screw fastening for shaft ; also a key unless the pulley is compressed on it. The Dodge Patent Bushing system is a great convenience to manufacturers and also to agents who carry pulleys in stock, as with the aid of the patent bushings every pulley will fit 22 different sizes of shafts.

Haswell the acknowledged authority and most quoted by American mechanics, summarizes thus : The ratio is friction to pressure of leather belts, when worn over wooden pulleys is 47, over turned cast iron pulleys, 24, thus showing the average advantage of a wood pulley over iron to be 50 per cent.

We also manufacture GROOVED HARD WOOD PULLEYS FOR TRANSMITTING POWER BY MANILLA ROPES (tallow laid) by the Dodge Patent System of applying the ropes and taking care of the slack.

Illustrated catalogues of belt pulleys and the rope transmission system will be furnished on application to

The Dodge Wood Split Pulley Co., 89 Adelaide St. W., Toronto.

Notice to Contractors.

SEALED TENDERS, addressed to the undersigned, and endorsed "Tender for Post Office etc., Prescott, Ont.," will be received at this office until Thursday, 8th March, 1888, for the several works required in the erection of Post Office at Napanee, Ont.

Specifications and drawings can be seen at the Department of Public Works, Ottawa, and at the office of E. Jessup, Esq., Collector of Customs, Prescott, on and after Tuesday, 14th February, and tenders will not be considered unless made on form supplied and signed with the actual signatures of tenderers.

An accepted bank cheque payable to the order of the Minister of Public Works, equal to *five per cent. of amount of tender*, must accompany each tender. This cheque will be forfeited if the party decline the contract or fail to complete the work contracted for, and will be returned in case of non-acceptance of tender.

The Department does not bind itself to accept the lowest or any tender.

By order,
A. GOBEIL,
Secretary.

Department of Public Works, Ottawa, 8th Feb., 1888.

SEALED TENDERS, addressed to the undersigned, and endorsed, "Tender for Cobourg Work," will be received at this office until Thursday, the 13th March, for rebuilding a portion of the Western Pier at Cobourg, Ont., in accordance with a plan and specification to be seen at the Department of Public Works, Ottawa, and at the Office of the Town Trust, Cobourg.

Tenders will not be considered unless made on the form supplied and signed with the actual signatures of tenderers.

An accepted bank cheque payable to the order of the Minister of Public Works, equal to *five per cent. of amount of tender*, must accompany each tender. This cheque will be forfeited if the party decline the contract or fail to complete the work contracted for, and will be returned in case of non-acceptance of tender.

The Department does not bind itself to accept the lowest or any tender.

By order,
A. GOBEIL
Secretary.

Department of Public Works, Ottawa, 16th February, 1888.

SCRIBNER'S LUMBER AND LOG BOOK

Over One Million Sold.

MOST complete book of its kind ever published. Gives measurement of all kinds of Lumber, Logs, Planks, Scantling; cubical contents of square and round Timber ; hints to lumber dealers ; wood measure ; speed of circular saws ; care of saws ; cord-wood tables : felling trees ; growth of trees ; land measure ; wages, rent, board, interest, stave and heading bolts, etc. Standard book throughout the United States and Canada. Get the new illustrated edition of 1882. Ask your book-seller for it. Sent post-paid for 35 cents.

G. W. FISHER, Box 238, Rochester, N.Y.,
or A. G. MORTIMER, Peterboro', Ont.

NEW WATER JACKETED CUPOLA FURNACE.

B. W. KEIM'S New Water Jacketed Cupola produces superior castings with a saving of a labourer and ten per cent. of a saving in metal and fuel. It is especially adapted for the use of stove, brass and iron founders, also for the treatment of phosphor-bronze, copper and bell metal. It is so constructed that by the addition of 1½ per cent. of aluminum a steel casting can be produced. It requires little, if any, repairs, and the bottom need not be dropped for months. Estimates furnished for portable reduction works for the smelting of gold, silver, lead or copper ore. Assaying and analyzing promptly attended to by the best of chemists. Your correspondence is solicited. Send for illustrated catalogue.

WANTED.—Reliable parties to introduce the Hartsfeld Automatic continuous and improved economical Coke and Charcoal Ovens of any capacity.

Also, lately improved portable reduction works and prospecting hand-power diamond bit rock drill that will bring up a solid core 500 feet. Extraordinary inducements.

THE HARTSFELD FURNACE CO.'Y, LTD.

Cincinnati, Ohio, U. S.

TO MILL OWNERS, MANUFACTURERS

AND ALL WHO ARE USING

LEATHER * BELTING

IF YOU WANT BELTING

Which will Run Straight on the Pulleys,
Which is Thoroughly Well Stretched,
Which will not Tear at the Lace Holes,
Which will give Complete Satisfaction,

— SEND TO —

F. E. DIXON & CO.

MANUFACTURERS OF

PATENT LAP-JOINT STAR RIVET * LEATHER * BELTING *

70 King Street East, Toronto.

Sole Agents in Canada for the

CELEBRATED PHŒNIX OIL

The Only Perfect Belt Dressing.

All our Belting is sold at the Canadian price list. Please compare before purchasing. Send for Discounts and our Pamphlet on Belting.

WINTER SAWING.

W. R. THISTLE & CO.

Having started their Winter Saw Mill at Chalk River, for supplying DIMENSION TIMBER in White and Red Pine; CAR LUMBER, SPILES, and THIN LUMBER, solicit orders.

And in connection with their large stock of Building Material at their Pembroke mills are enabled to quote prices and fill orders to the satisfaction of purchasers.

Address,
W. R. THISTLE & CO.,
Ottawa Office: Pembroke, Ont.
25 Sparks Street.

MUSKOKA MILL & LUMBER CO.

Manufacturers and Wholesale Dealers in

LUMBER

Manning Arcade, King St. West,

TORONTO, - - - ONTARIO.

IRON AND STEEL RAILS.

A QUANTITY OF SECOND-HAND RAILS, 30 and 40 lbs. to the yard, for sale Cheap. In good order for re-laying.

JOHN J. GARTSHORE,
49 Front Street West, Toronto.

$3,000,000

OF NEW BUSINESS

Received in the last Six Months by

THE

MANUFACTURERS

Life Insurance Company.

Incorporated by Special Act of the Dominion Parliament.

AUTHORIZED CAPITAL & OTHER ASSETS
OVER $2,000,000.

Head Office, - - 38 King Street East, TORONTO, ONTARIO.

PRESIDENT:—RT. HON. SIR JOHN A. MACDONALD, P.C., G.C.B.

VICE-PRESIDENTS:—GEORGE GOODERHAM, ESQ., President of the Bank of Toronto; WILLIAM BELL, ESQ., Manufacturer, Guelph.

A FEW MORE GENERAL AGENTS WANTED.

J. B. CARLILE,
Managing Director.

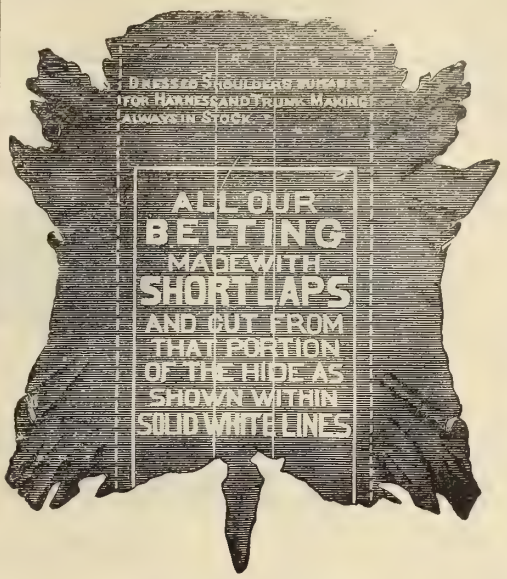
MESSRS. WILSON & MORRISON,
Managers Eastern Ontario, Peterborough.

Cotton and Rubber

BELTING.

ALL SIZES KEPT IN STOCK.

ORDERS * PROMPTLY * FILLED.



ROBIN & SADLER

LEATHER MANUFACTURERS OF

BELTING

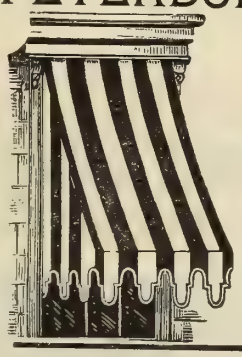
LACE LEATHER

Send for Price Lists and Discounts.

2518, 2520 and 2522 Notre Dame St.
MONTREAL.

129 Bay Street,
TORONTO.

PETERBOROUGH TENT AND AWNING FACTORY.



J. J. TURNER, Proprietor,

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THE CANADA LUMBERMAN

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1888.

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Specifications and drawings can be seen at the Department of Public Works, Ottawa, on and after Thursday, 16th February, and tenders will not be considered unless made on the form supplied and signed with the actual signatures of the tenderers.

An accepted bank cheque payable to the order of the Minister of Public Works, equal to *five per cent. of amount of tender*, must accompany each tender. This cheque will be forfeited if the party decline the contract or fail to complete the work contracted for, and will be returned in case of non-acceptance of tender.

The Department does not bind itself to accept the lowest or any tender.

By order,
A. GOBEIL.
Secretary.

Department of Public Works, Ottawa, 8th Feb., 1888.

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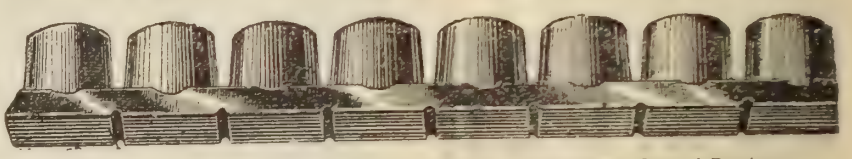

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THE CANADA LUMBERMAN.

VOLUME VIII.
NUMBER 4.

PETERBOROUGH, ONT., APRIL, 1888.

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THE CANADA LUMBERMAN

PUBLISHED MONTHLY BY

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One Copy six months, in Advance, - - - - - 50

Advertising Rates Furnished on Application.

THE CANADA LUMBERMAN is published in the interest of the lumber trade and of allied industries throughout the Dominion being the only representative in Canada of this foremost branch of the commerce of this country. It aims at giving full and timely information on all subjects touching these interests, discussing these topics editorially and inviting free discussion of them by others.

Especial pains are taken to secure the latest and most trustworthy market quotations from various points throughout the world, so as to afford to the trade in Canada information upon which it can rely in its operations.

Special correspondents in localities of importance present accurate report not only of prices and the condition of the market, but also of other matters specially interesting to our readers. But correspondence is not only welcome but is invited from all who have any information to communicate or subjects to discuss relating to the trade or in any way effecting it. Even when we may not be able to agree with the writers we will give them a fair opportunity for free discussion as the best means of eliciting the truth. Any items of interest are particularly requested, for even if not of great importance individually, they contribute to a fund of information from which general results are obtained.

Advertisers will receive careful attention and liberal treatment. We need not point out that for many the CANADA LUMBERMAN with its special class of readers is not only an exceptionally good medium for securing publicity, but is indispensable for those who would bring themselves before the notice of that class. Special attention is directed to "WANTED" and "FOR SALE" advertisements which will be inserted in a conspicious position at the uniform price of ten cents per line for each insertion. Announcements of this character will be subject to a discount of 25 per cent. if ordered for three successive issues or longer.

Subscribers will find the small amount they pay for the CANADA LUMBERMAN quite insignificant as compared with its value to them. There is not an individual in the trade, or specially interested in it, who should not be on our list, thus obtaining the present benefit and aiding and encouraging us to render it even more complete.

THE measure introduced into the Ontario Legislature by Mr. Garson, M.P.P., a synopsis of which appeared in the last issue of THE LUMBERMAN, has, contrary to general expectation, become law. Owners of stationary boilers will not accept the new situation with very good grace, as it is calculated to entail not only aditional expense but in its details no little amount of trouble. As has already been stated in these columns the principle of the measure is sound and just, but in working out its details we trust that every care will be taken to render it as little oppressive as possible in its bearing upon the important interests with which it deals.

THE resolutions at present before Congress touching upon the question of Commercial Union are so numerous that an additional one or two would evidently have no perceptible effect. The latest on record eminated from the brain of Congressman Hill, who has introduced a joint resolution which provides that when it shall be duly certified to the President that the Government of the Dominion of Canada has declared a desire to establish Commercial Union with the United States, having a uniform revenue system, the like internal taxes to be collected, and the like import duties to be imposed on articles brought into either country from other nations, and no duties upon trade between the United States and Canada, he shall appoint three commissioners to meet those who may be likewise designated to represent the Government of Canada to prepare a plan for the assimilation of the import duties and internal revenue taxes of the two countries, and an equitable division of receipts in a commercial union, and that the said commissioners shall report to the President, who shall lay the report before Congress. From the present feeling, both in Congress and the Dominion Parliament, it does not require much foresight to predict utter defeat to one and all measures of this nature. Nothing, we think, would benefit the lumber trade or Canada so much as the passage of a C. U. measure, but to look for such a thing under the existing state of affairs, will prove a forlorn hope indeed.

CONGRESS seems to be in no hurry to make any decision on the tariff of the United States. It looks indeed almost probable that no action will be taken this year. The fact is that both parties, and the various loose fish, are so busy watching each other, endeavouring to trip each other, and guarding against any advantage being gained over them in regard to the coming Presidental contest, that they are afraid to move and remain almost at a dead-lock. If, however, the matter stands over till next year, it is at least certain that some means will then be adopted for cutting down the public revenue now so large as to be embarrassing. There is every indication that one change for this purpose will be the removal of the duties on lumber.

THE weather, as usual, has a great deal to answer for so far as the success or failure of the log crop is concerned. Last year there was altogether too much snow in the winter but abundance of water in the spring to float the logs. This year the supply of snow has been moderate, with the result that an enormous cut has been made; but now comes reports from every direction of insufficient water for floating. This state of affairs is calculated to cause disaster, especially to the large operators. It is said that the lumbermen of the Ottawa district are beginning to feel very uneasy with regard to the log supply, as it is feared that there will not be sufficient water in the tributaries to float them onto the Ottawa River. There is said to be over 400,000,000 feet of logs now cut.

WE have already given particulars as to the trade of the British West Indian Islands. The French dependencies Guadaloupe and Martinique import among other goods from the United States, boards to the value of $74,835, scantling $3,273, shingles $2,495, shooks $164,519, staves and headings $30,840, hogsheads and barrels $2,404, furniture $4,160, and other articles of wood $1,081. It will be seen that there is a trade with these islands, which, if not very extensive, is worth looking after by our friends in the lower Provinces. Very possibly a portion of it is the produce of our own forests, and at least it is facilitated by the United States importing from Canada, while the export to more remunerative markets. Why should not Canadian lumbermen deal directly with these customers and obtain the consequent advantage?

ONE of the suggestions made several times in the recent debate on the forests of Ontario is worthy of further consideration, for it is calculated to obviate much friction and save much property from destruction. It is that forest and agricultural lands should be defined and set apart. By this means settlers would not be lured into establishing themselves on land which is seldom well adapted for agriculture, and at the same time the danger of forest conflagrations by the spread of their clearing fires would be removed. This is no new idea, indeed we have several times advocated in these columns its adoption as a general policy, and have shown that it has other important advantages in addition to those we have now mentioned. Now that it has been so fully discussed in the Legislature, it may receive the practical attention of the Department.

THE forests of Ontario, and indeed of all Canada, have had considerable attention attracted to them by the debate in the Ontario Legislature on Mr. Meredith's motion for a special committee. One question of which the various speakers differed very widely was the extension of the pine forests remaining in the Dominion as especially in Ontario. Some talked as if our timber were almost exhausted. No doubt the truth lies somewhere between these widely divergent points; but apart from the exaggerations of party orators, good judges interested in the question and anxious to arrive at the truth are almost as far apart in their calculations. It would obviously be useful to all parties concerned that the extent of our available forests, especially of pine, should be ascertained with approximate accuracy. The Ontario Administration, having defeated the proposal of the opposition for a roving commission over the whole range of the subject, might gracefully and usefully of its own initiative adopt some plan of what was termed "taking stock" of our forests.

THE LUMBERMAN is particularly pleased to reproduce the following article from the *Timber Trades Journal*, of London, Eng., which refers to another extension of that important and well-known Canadian firm, The Rathbun Co., of Deseronto.

"The well-known business of Messrs. Holland, McConnell & C[illegible] has been taken over by the Rathbun Company, of C[illegible] agents Messrs. Bryce, Junor & White, will in future [illegible] behalf at the old premises in Wharf Road. The Rathbun Company are well known throughout Canada and the United States for the extensive and successful nature of the lumber operations they carry on. Their mills and factories are [illegible] Ontario, a town of about 3,[illegible] engaged in or connected with the [illegible] pany. The Rathbun Company, repres[illegible] Messrs. Bryce, Junor & White, purp[illegible] doors, mouldings, &c., of the same cha[illegible] enjoyed the support of the English trade [illegible] Messrs. Holland, McConnell & Co. That [illegible] be fully maintained there can be no quest[illegible] Rathbun are proprietors of one of the largest [illegible] embracing, in addition to their saw-mills and [illegible] mill, flour mills, shipbuilding yards, &c., [illegible] control of two branch railways, one of wh[illegible] the Grand Trunk Railway of Canada. In additi[illegible] own, we understand, a considerable fleet of [illegible] sailing ships. We wish the new management of the Wharf Road business every success."

We feel sure that our readers will join us in wishing the Messrs. Rathbun as great a measure of success in England as they have enjoyed in Canada.

IN view of the existence of a movement to bring Newfoundland into the Canadian confederation, the following facts, gleaned from the "Stateman's Year Book," will be of interest:—The area of the island is 40,200 square miles; population in 1884, 193,623. The religions of the populations were in that year stated to be as follows: Roman Catholics, 75,254; Church of England, 69,000; Methodists, 18,787; Presbyterians, 1,495; other denominations, 1,470. The public schools aided by the government numbered in 1884, 402, with an attendance of 27,322 pupils. The revenue of the island in 1886 amounted to $1,078,775, and the expenditure to $1,736,105. Of the revenue $948,680 were derived from customs duties. In the same year the value of the exports was $4,833,735, and the imports, $6,020,035. The principal exports were fish, value, $3,763,336; cod and seal oil, value, $524,000; sealskins, value, $272,658; copper ore, $246,100. The principal imports: Flour, $1,495,976; woollens, cottons, etc., $824,246; salt pork, $321,692; butter, $245,667; molasses, $306,568; salt, $175,010; tea, $154,049; coal, $188,494; leather and leather goods, $504,087; spirits, $112,996. Of the exports of 1886 the value of those sent to Great Britian was $1,205,303; British West Indies, $234,150, Canada, $189,484; Portugal, $1,221,872; Brazil, $129,935; Spain, $381,667; the United States, $284,107. Of the imports, $1,911,000 in value was reccived from Great Britain; from Canada, $1,937,605; from the United States $1,672,810. The Government of the island is administrated by an Executive council of seven members; the Legislative council consists of fifteen members, and the Legislative assembly of thirty-six members.

THE serious drawback to the lumber trade in Toronto last summer, caused by the long strike of the carpenters and others, seems likely to be repeated in Hamilton this spring. The only difference is that in Toronto the building mechanics struck work of their own accord, in the hope that the master builders would accede to their demands for more pay. In Hamilton, on the other hand, it is a fight between the Builders' Exchange and union men, the former having published an ukase discharging all of the latter class. The edict of the builders does not, it seems, apply to buildings in course of construction, which have to be completed in a given time, contractors for which will be permitted to keep union men at work until their work is completed. The trouble seems to have arisen through the bricklayers and others raising the cry against the employment of non-union men in certain quarries. The carpenters and joiners seem to have come in for a share of the blame, but claim they had nothing whatever to do with it. On the whole it looks as if the present trouble had arisen out of nothing, and some of the builders are not in favor of the line of action adopted, and think there was no necessity for so

much ill-feeling being stirred up, to say nothing of the serious results which might follow from a protracted conflict between the employers and the men. Next to those actively engaged in building operations, none feel the effects of a disturbance such as this more than the lumber trade. The lumber dealers of Hamilton depend almost entirely on the local demand, and should building operations cease they will be seriously effected thereby.

[Since the above was in type we learn that the prospects are favorable for a speedy termination of the lock-out referred to, and that in all probability work will proceed as usual.]

To successfully conduct a trade journal such as THE LUMBERMAN, one of the most urgent needs is the hearty co-operation of its readers. We have received so many flattering letters of appreciation from our subscribers of late that we would appear, indeed, ungrateful if we did not make proper acknowledgement of the same. In this regard a publisher is placed in much the same position as a public servant, feeling grateful at all times for any word of encouragement which he may receive from those to whom he looks for support. The steady strides of advancement made by this journal during the past year will be continued indefinitely, and we hope that not only will we receive an equal consideration from the trade as in the past, but that each individual reader will lend a hand in furnishing information on all important subjects affecting the lumber interests. There is no reason why this paper should not be placed in the hands of every man interested in Canada's greatest natural product, and in order to accomplish this we have a request to make to all our present readers. It is that every man receiving this paper send to this office the names of friends and acquaintances in their section who are in any way interested in lumber, in order that we may address them sample copies, with a view to secure them as regular subscribers. When this is being done we would also ask that a few words at least be added regarding the season's operations. Those who are unacquainted with the paper are always invited to send for specimen copies, free, and in other respects we are ready to extend to every one the opportunity of becoming acquainted with the paper before investing in it. We hope that before our next issue our friends will demonstrate, as above, their appreciation and interest in the CANADA LUMBERMAN.

RECENT LEGISLATION.

The session of 1888 of the Ontario Legislature has been drawn to a close, and among the Bills which passed the House, of interest to the lumber trade, not previously referred to in these columns we find the following :

"An Act to authorize the appointment of Fire Guardians, and for the better prevention of bush fires."

The provisions of the Act empower the council of a township municipality at its first meeting in each and every year, to appoint by by-law a sufficent number of resident householders to carry out the provisions of the Act, the person so appointed to be known as "fire guardians," their term of office being for one year. It is stipulated that no person shall hereafter set out or set fire to any brush heap or combustible material in any field, clearance or place where the same would be likely to spread, between the first of June and the first of October, without having obtained leave in writing from the fire guardian appointed by the council resident to the place where the brush heap or other combustible material is situated. It shall be the duty of the fire guardian on being requested to grant leave to set out fire, to examine the place at which it is intended to set out the fire, and the adjoining lands, timber and other property thereon, and to consider the state of the wind and weather at the time of such request, with power to refuse any such request if the time and location are not favorable.

The council of any township municipality may in and by the by-law make provision (1) for the payment to the fire guardians for his service ; (2) for supplying the appliances necessary for extinguishing a fire ; (3) as to the duties of the fire guardians appointed and all other residents in case a bush fire calculated to cause damage or loss of property has been started in or is approaching the municipality ; (4) as to the rules and regulations (not contrary to law) which shall guide the guardians and residents, the distance from which parties may be required to attend any fire, the means, appliances and material to be used in extinguishing or preventing the spread of a fire, and as to all the matters within the scope of their authority which the council may think advisable, and their experience and the position of the municipality may suggest, as being conducive to the carrying out of the intention of the Act and the by-laws passed thereunder ; (5) the penalty to be imposed upon fire guardians and others refusing to perform or neglecting their duties under this Act or the by-law or contravening any provision thereof.

Any person setting out fire without leave and permission shall be subject to a penalty of not exceeding $100 for each offence, which penalty may be sued for and recovered on information of any resident ratepayer in the municipality before a police magistrate or two justices of the peace sitting together, or by action in the Division Court held in the division in which the fire was set out.

The plaintiff or complainant shall be entitled to one moiety of the penalty, and the other moiety shall be paid over to the treasurer of the municipality, except costs, all of which shall go to the plaintiff, if ordered to be paid by the judge ; and in case the defendant be ordered to pay the plaintiff's cost, and the same cannot on execution be recovered by the plaintiff, the treasurer of the municipality shall pay the plaintiff's costs, unless the judge who tries the case otherwise orders.

LONDON BOARD OF TRADE.

The February Board of Trade returns are still better reading than those of January, for though the imports have not increased so much, the exports show particularly well. January's imports were 3¾ millions better than in the same month of 1887, and February's were £1,018,782 in advance of those twelve months ago. The only decreases are in duty-free articles of food and drink, and in oils. The decrease in January in "raw material for sundry industries" was turned in February into a gain of £345,000, and for the two months the growth in the two categories into which raw materials are divided is £1,393,132. Metals show an increase in the two months of 1¾ millions, and the total increase in all departments for the first two months is the gratifying one of £4,774,348. The exports for February have increased, as compared with last year, £1,737,290, as against an improvement in January of £774,936, the two months thus showing £2,512,226 better than the indentical period of 1887. The only falling off is in chemicals—not an acceptable sign in view of Baron Liebig's dictum, quoted by Lord Beaconsfield, that the chemical industry is the best barometer of the state of trade. Still, over the two months there is a gain of £72,000. In January there was a falling off in the exports of textiles ; but that was more than made good last month, and the two months together show a growth under the head of £115,636. The re-exports of foreign and colonial produce show a shrinkage in February as in January. The returns on the whole are most welcome and satisfactory.

Turning to our particular line of business, the statistics show that the importation of hewn timber was larger during February, 1888, by 12,071 loads than in the corresponding month last year, or an additional official computed value of about £31,000. This increase must be mainly credited to Sweden, Norway and Germany. The increase for the two months amounts to 21,330 loads. Sawn wood also shows an increase for the month of February of about 5,000 loads, the figures being 40,281 loads as compared with 35,248 loads for last year, or an increase in value of about £9,000. The increase also in this item is in goods from Sweden and Norway, which have supplied about 8,000 loads more than last year at a similar date. Taking the total for the two months, however, there is a decrease of about 2,000 loads against the present year. The most prominent feature in the returns is the large increase in both hewn and sawn goods from Sweden and Norway, the supplies from which have been largely in excess of those of each of the previous years, as will be seen by the figures which we print in another column.

Staves and mahogany are not included in the figures given above, but are separately treated in the returns. The importation of the former for the past month almost doubles that of 1887 for the same period ; and the official value is reckoned at £34,339. For the two months the income for the present year is 2,336 loads. In mahogany the quantities are for the year 1,651 tons, as compared with 4,239 tons for February, 1887, a decrease of 2,588 tons. This stands in the return of estimated value at £14,018, as contrasted with £33,233. For the two months the quantities are 4,826 tons, as compared with 9,149 tons for 1887 for the same period, a decrease of 4,323 tons.—*Timber.*

THE LUMBERMAN'S PERILS.

The most exciting and dangerous period of the lumberman's always perilous life in the woods is now approaching—that is, the "breaking in" of log piles heaped or ranked at the summits and on the faces of the long rollways that border the streams in the lumber woods. These rollways extend from the tops of high and abrupt banks to the water's edge. There are two ways of piling the logs at the rollways—one by laying them in regular ranks or tiers, and the other by throwing or dropping them in jumbled heaps on the ground. In the regular piles, tier on tier, the logs are started in a body down the rollway, and they usually go down in one great heap clear into the water. In the other way the logs are dumped from the trails and lie in a ragged, promiscuous jumble from top to bottom of the rollway. The key log or logs may be at the bottom of the pile, in the water, or half way up the hill. There are always such configurations of the pile that there are many openings like great pitfalls here and there. At some of these piles the rollways are selected at places in the creek where the banks are high on either side. Then high dams are thrown across below with flood-gates. By these dams the water can be thrown back, manipulation of the gates raised and lowered among the tightly massed logs so that it lifts them and generally releases the jam.

But even where these dams are in use there are frequently piles so obstinate that nothing but the skillful work of the lumberman on the key logs will break them down. It seems utterly incredible that men could be found so daring as to make their way out along these icy, jagged and twisted piles, with 2,000 waiting logs above them, held, probably by the obstinate keying of a single log, and ready to thunder down upon them the instant that that log is moved a half-inch from its position. But the occasion is only needed to produce such men by the score, no matter how great the danger may be.

The woodsman makes his way nimbly but with caution over the protruding logs and across the treacherous pitfalls, frequently disappearing entirely beneath some lifted group of immense timbers, as he tries to locate the log or logs that prevents the great pile from breaking or completing its lightning-like plunge into the stream below. The log that makes all the trouble may be near the bottom, which, of course, increases the peril. The woodsman's quick eye is not long in demonstrating how the key may be most advantageously removed, and he at once proceeds to accomplish his task. One or two blows of his axe may be sufficient to remove an obstruction that has defied the many tons of pressure from above. It may require an hour's chopping and prying, and it may take a day's hard work to break the jam.

When the key is broken, however, is the time that the driver must use all of his nimbleness, nerve and skill to escape from the rush of pitching, tossing and thundering logs that he has started. He leaps here and there, and jumps from log to log in his flight, with the avalanche of timber pressing close behind him. In releasing one jam, last season, five men were caught in the break and killed. The fatality that accompanies the "breaking in" of log piles in different regions would startle the public if made a special item in reports of vital statistics. The rush of a pile of logs down a steep rollway, unobstructed, is as exciting a scene, in itself, as any one could wish to see. A hundred logs, rolling, tumbling and roaring into a stream will dash the water 50 feet in the air, and leave the bottom of the stream as bare as the shore until the water falls back again in foam and spray.

PERSONAL.

We regret to hear that Mr. Robt. Hurdman, of the lumbering firm of Hurdman & Co., Ottawa, while driving to his office about a fortnight ago, was run into by a runaway horse and badly injured. His many friends will regret to learn of his misfortune and wish him a speedy recovery.

Mr. Thos. Ouellette, of Gordon, Ont., a large manufacturer in hardwood lumber, was among the callers at THE LUMBERMAN office during the past month. He reports business good and an unusual large output of logs in his vicinity.

Mr. James McLaren, of the Canada Lumber Company, of Carleton Place, has left for Oregon to close a two million dollar timber deal in which he and other lumbermen are interested.

It is rumored that Mr. W. G. Perley, M. P., of Ottawa, may be called to the Senate. Mr. Perley is well known as not only a very successful and shrewd business man and one of the largest lumberers in the country, but has of late shown himself to be a very valuable addition to the parliament of the country. Should the administration see fit to bestow upon him the honor above referred to, his many friends and admirers—THE LUMBERMAN included—will not be sparing in their congratulations.

Mr. H. H. Cook, M.P., president of the Ontario Lumber Co., who was recently unseated as member for East Simcoe on the grounds of bribery by one individual purporting to be his agent, has again taken his seat in the House. He will appeal the decision in the supreme Court which will open after the present session of parliament. This is another instance where one man suffers for another man's wrong doing. There is a screw loose in the act respecting bribery and corruption in parliament which should receive more serious consideration.

Mr. Nathaniel Shaw, an old and highly respected citizen of Peterborough passed to his last account during the past month. Deceased was seventy years of age, and was one of the oldest millwrights and saw millers in the country. It is said that as a millright he had no superior in this section of the province and among the buildings, the elevators at Midland and Port Hope, as well as nearly all the large saw mills in this vicinity, bear testimony to his skill. He has a son and a daughter living. *Requiescat in pace.*

The Opening Season.

Our advices indicate that at most lumber centres in the West the Spring trade has already begun, although of course, business has nowhere been very active. The stormy weather which has prevailed during the past week will necessarily have an unfavorable effect on all kinds of business, but the people need lumber and if the present conditions are unfavorable to distribution, the delay resulting can be of short duration, and will serve to make the reopening of the spring season more marked.

But while the output is generally cheerful it must be admitted that at some points, especially in the Eastern and Middle States, business is somewhat duller than it was in the preceding year and there are besides doubts in some quarters as to the extent of the demand for lumber in building, some members of the trade being inclined to believe that in many places building will not be done on so extensive a scale as it was last spring in the same localities.

The strike of the locomotive engineers and the pending agitation of the tariff question, are two other unfavorable features of the times. But it seems clear that the settlement of the strike will not be long delayed, and it is well known that no material revision of the tariff can possibly be effected in the present year.

It is besides obvious that the business of the country is in a sound condition, and that all the signs of the times, excepting those referred to in the preceding paragraphs, are distinctly favorable. We, therefore, feel no hesitation in predicting a good if not an exceptionally busy spring season.—*Saw Mill Gazette.*

How to Use Glue.

For glue to be properly effective, it requires to penetrate the pores of the wood; and the more a body of glue penetrates the wood the more substantial the joints will remain. Glues that takes the longest to dry are preferred to those that dry quickly, the slow-drying being always the strongest, other things being equal. For general use, no method gives such good result as the following: Break the glue up small, put it in an iron kettle, cover the glue with water, and allow it to soak twelve hours; after soaking, boil until done. Then pour it into an air-tight box, leave the cover off until cold, then cover up tight. As glue is required, cut out a portion and melt in the usual way. Expose no more of the made glue to the atmosphere for any length than is necessary, as the atmosphere is very destructive to made glue. Never heat made glue in a pot that is subject to the direct heat of the fire or of a lamp. All such methods of heating glue can not be condemned in terms too severe. Do not use thick glue for joints or veneering. In all cases work it well into the wood, in a similar manner to what painters do with paint. Glue both surfaces to your work, except in case of veneering. Never glue upon hot wood as the hot wood will absorb all the water in the glue too suddenly, and leave only a very little residue.

Another New Lumber Company.

A party of American lumbermen are heavily interested in timber lands in the vicinity of Alberta, in the northwest territory. The company includes well known lumbermen of Eau Claire, Minneapolis, and other cities in Wisconsin and Minnesota, the corporation with which they are identified being known as the Eau Claire and Bow River Lumber company. It is understood to be part of the present plan of these gentlemen to make their lumber available by building a line of railroad from some point on the Canadian Pacific to Alaska. How it would have made the eyes of some of our forefathers stick out to think of traveling by rail from Alaska to the City of Mexico. The prospect of this being possible is not so remote as it might seem to be, thanks largely to the enterprise of citizens of the United States, who find their own land all too small for their ceaseless enterprise. In the case of the railroad line to Alaska the primary object is to open up the timber which has been acquired by the great lumbering company. Contrary too, to the commonly accepted supposition there are no climatic barriers to the enterprise. Mr. P. A. Prince, the general manager of the Eau Claire and Bow River Lumber conpany, in writing to friends in Eau Claire, Wis., from Calgary says: We are having splendid weather. During February the thermometer in the shade registered 46 and 50 degrees below zero. No snow at all. Calves and colts are roaming about on the long ranches feeding themselves from the long grass which reaches up to their knees." And while men in the northwestern states are planning to push a railroad into Alaska men in the south are planning to extend the line from the City of Mexico into South America. With the prospect that some day railroad communication will be established from Alaska to Cape Horn even the brilliant fiction of Jules Verne loses some of its luster.—*Mississippi Valley Lumberman.*

Lumbermen to Take Action.

The Chicago *Evening News* says:—One of the most important moves that has yet been taken in connection with the railway strike at present paralysing trade in Chicago was decided upon the secret session by the Lumberman's Association to-day. This is nothing less than to take legal proceedings against every railroad connecting with the Burlington to compel them to have out their lumber and transmit it over their respective lines.

Toronto Letter.

TORONTO, March 28.—The stormy weather of this stormy month has retarded building operations greatly. In the western part of the city numerous cellars have been started only to be stopped after a few day's work had been spent. The demand for lumber in this quarter is good, any amount can be sold but not much cash forthcoming. A large quantity of land is being disposed of to parties upon easy terms of payment with little or no money down. Almost every one of these so-called purchasers proceed to interview the dealers, asking for terms the most unreasonable. If the dealers are not careful the history of supplying lumber to such a class over the Don a few years ago will be repeated.

If the land owners would undertake, when advancing money, to retain an amount to cover material and labor it would make the average lumber dealer's life worth living.

Prices are slowly but surely advancing and likely to do so during the early part of the season. Hemlock is in good demand for scantling and joists.

Getting it in Free of Duty.

It is claimed that certain lumbermen doing business along the line dividing Maine and New Brunswick have fraudulently evaded the duty on the manufactured product shipped into the United States, the revelations having been made by operators in the Kennebec valley and other parts of Maine. A meeting was held by the Kennebec Log Driving Company, at which decided measures were urged for preventing fraud. As explained by a prominent Maine lumberman, the scheme which has been successfully operated is substantially as follows: The lumbermen will cut about one-tenth of their logs in Maine, to take advantage of the law which permits driving Maine logs into New Brunswick waters, and returning the lumber to the United States, free of duty after being sawed in New Brunswick; but the other nine-tenths of the output is lumber sawed in Canada, from Canadian logs, and the small operations in Maine furnish a cloak by which the irregularity is concealed, for all the lumber is represented as sawed from Maine logs. Thus the Kennebec lumbermen claim to have had a taste of free lumber effects, in advance, and they do not like it. They say the fraudulent competition has seriously injured them, especially in the New York and Boston markets.—*Northwestern Lumberman.*

Cleaning Greasy Machinery.

For cleaning greasy machinery, says the *Milling Engineer*, nothing can be found that is more useful than steam. A steam hose attached to the boiler can be made to do better work in a few minutes than any one is able to do in hours of close application. The principal advantages of steam are, that it will penetrate where an instrument will not enter, and where anything else would be ineffectual to accomplish the desired result. Journal boxes with oil cellars will get filthy in time, and are difficult to clean in the ordinary way; but if they can be removed, or are in a favorable place, so that steam can be used, it is veritable play-work to rid them of any adhering substance. What is especially satisfactory in the use of steam, is that it does not add to the filth. Water and oil spread the foul matter, and thus make more work. It matters not how journal boxes are kept clean, everybody will admit that they should not be allowed to get dirty. They are sure to heat and give trouble, if not cleaned and cared for. Often the oil tanks are never emptied and the residuum removed, and as the pumps draw the oil from the bottom, the machinery is being daily lubricated with impure oil. The oil tank should have a thorough cleaning before new oil is again pumped into it. This is easy enough if the oil is removed, the tank inverted and the steam nozzle applied to the mouth of the tank. This method of cleaning beats dipping the filth out with waste. So many opportunities will present themselves when steam will be a valued help in cleaning machinery, if one happens to think of it.

WE are in receipt of a very neat and instructive circular relating to B. F. Sturtevants "Monogram" Blowers and Exhausting Fans. The Blowers are made expressly for blowing forge and boiler fires, puddling furnaces, &c., for which business they have been extensively introduced. The Exhausting Fans on the other hand are employed for removing dust from polishing and buffing wheels of all descriptions, smoke from forges, gasses from rooms, &c. We are informed that copies may be obtained of B. F. Sturtevant, Boston, Mass., by asking for circular number 34.

TRADE QUOTATIONS.

Goderich, Ont.

GODERICH, APR. 1st, 1888.

PRICES IN CAR [illegible]

1 inch Mill Culls	$5 00@ 8 50
1x6-8-10 & 12, common	12 00
1x6-8-10 & 12, dressing	16 00
1x14, and wider, common	12 00
1x14, " " dressing	16 00
1¼ dressing	16 00
1½ "	16 00
1¼ Norway pine flooring	14 00
1½ " " "	14 00
1 inch clear and picks	26 00
1 inch clear and picks 4 to 8 inch	21 00
1¼ and 1½ clear and picks	35 00
Lath 1½x4 feet	1 85

Boston, Mass.

[illegible], MARCH 31st, 1888

Western Pine—Cargo or Car Load.

Uppers, 1 in	$48 00@50 00	No. 1 strips, 4 to 6 in	$41 00	[illegible]
1¼, 1½ & 2 in	50 00 52 00	No. 2	37 00	[illegible]
3 & 4 in	55 00 60 00	No. 3	25 00	[illegible]
Selects, 1 in	42 00 45 00	Cut ups, 1 to 2 in	26 00	[illegible]
1¼, 1½ & 2in	44 00 46 00	Coffin boards	22 00	[illegible]
3 & 4 in	48 00 52 00	No. 1 com. 10 & 12 in.	20 00	[illegible]
Moulding boards, 7 to		8 in	23 00	[illegible]
11 inch clear	37 00 41 00	No. 2 com. 10 & 12 in.	19 00	[illegible]
60 per cent clear	35 00 37 00	8 in	18 00	18 50
Fine common 1 inch	37 00 42 00	[illegible]	[illegible]	
1¼, 1½ & 2 inch	40 00 42 00	[illegible]	[illegible]	
Fine com., 3 & 4 in	40 00 50 00	[illegible]	[illegible]	
No 2, 1 in. Fine com.	29 00 30 00	[illegible]	[illegible]	
1¼, 1½ & 2 in	31 00 33 00			

Eastern Pine—Cargo or Car Load.

Nos. 1, 2 & 3	40 00@43 00	Sap, 2nd clear	30 00@32 00
4	28 00 30 00	Heart extra	50 00 [illegible]
5	23 00 26 00	Heart clear	[illegible]
Ship'g bds & coarse	16 00	Bevel siding 6 inch,	
Refuse	12 00	clear	21 00 23 00
West'rn pine clapbds		No. 1	20 00 21 00
4 ft. sap extra	43 00 45 00	No. 2	19 00 20 00
Clapboards, 4 ft., sap			
clear	40 00 42 00		

Spruce—by Cargo.

Scantling and plank,		Clear floor boards	18 00@18 00
random cargoes	13 00@13 50	No. 2	16 00 16 00
Yard orders, ordinary sizes	14 00 15 00	Coarse, rough	9 00 12 00
Yard orders, extra		Hemlock bds., rough	10 00 11 00
sizes	15 00 16 00	" " dressed	12 00 12 00
Frames, to order,		Clapbds., extra, 4 ft.	28 00 30 00
small sizes	14 00 14 50	Clear, 4 ft.	26 00 28 00
Frames, to order ex-		Second clear	20 00 22 00
tra sizes	15 00 15 50	No. 1	12 00 15 00

Lath.

Spruce	[illegible] 2 00

Shingles.

Spruce	1 40@1 50	Cedar, sawed, extra	3 30@3 00
Pine, 18 in. extra	4 50 4 75	Clear	3 00 3 15
Pine, clear butts	3 50 3 70	Extra, No. 1	2 00 2 [illegible]
		Cypress, No. 1, 18 in.	5 25

Oswego, N. Y.

OSWEGO, Mar. 30th, 1888.

Pine.

1¼, 1½, 2 and thicker uppers	$40 00@43 00
" " " pickings	30 00 33 00
" " " No. 1 cutting up	22 00 26 00
" " " cuttings up pickings and uppers as run	30 00 35 00
1 inch selected sidings	25 00 30 00
1¼ " " "	30 00 35 00
1 & 1½ box or No. 2 culls	11 00 12 00
1 & 1¼ sidings No. 1 dressing and better	17 00 25 00
1x10 & 12x12 to 16 feet dressing and better	17 00 25 00
" " " shipping culls	14 00 17 00
" " " No. 2 "	11 00 12 00
1 & 1¼ in. strips 4 to 7 wide selected	20 00 30 00
" " " dressings	16 00 17 00
" " " box	9 00 12 00

Brown Ash.

1 1¼ 1½ 2 & 3 in. 1st & 2nd quality	17 00 21 00
" " " culls	9 00 11 00

Basswood.

1 & 1¼ 1st & 2nd quality	20 00 21 00
" culls	9 00 12 00

Shingles.

XXX 18 inch pine standard thickness to 2¼	$4 25
XX " " " " "	3 25
X " " " " "	1 10
XXX " cedar " " "	3 40
XX " " " " "	2 25
XXX 16 pine " " "	3 20
XX " " " " "	2 20

Lath.

No. 1 1⅜, 1½	2 00 2 10
" 2 "	1 25 1 50

(*Continued On Page Nine.*)

George Henry Corliss, the inventor of the Corliss engine, died rather suddenly at his residence in Providence, R. I., on the 21st of February. He was born at Easton, Washington county, N. Y., on June 2nd, 1817.

NOTES.

—Men are being picked up for the drives in all directions.

—Halm's planing and saw mill, New Hamburg, Ont., has been burned; loss, $15,000; insurance $5,000.

—Messrs. Leishman & Son, of Bracebridge, have taken out 2,000,000 feet of logs during the season, being 800,000 more than last year.

—At Mr Tait's lumber shanties up the Bird Tail (Man.) there are now 45,000 logs on the ice and 5,000 logs on the skids ready to be drawn to the river.

—A young man named A. Charlton, while working in Jones' mill, Wiarton, had both his legs cut off and was otherwise mangled by a circular saw. He died in a few minutes.

—Mr. James McKinnon, of Arnprior, who is jobbing for Mr. Alex. Fraser of Westmeath, is said to have, with eight teams, put 18,000 logs on the ice in seven weeks, drawing them two and a-half miles from the place they were cut.

—It is predicted that work will be brisk in Arnprior, Ont., this coming season in consequence of the immense extension now building to Messrs. McLachlin's mill. The mills are to be run to their fullest capacity night and day throughout the season.

—The sash door and blind factory operated by Richard Woodland, Ottawa, Ont., was totally destroyed by fire last month. The loss is estimated at between $3,000 and $3,500, with an insurance on the building of $4,000 and on the stock $2,000.

—A new saw mill will probably be erected where the Manitoba and Northwestern crosses Shirt Tail creek, four miles from Birtle, Man. There is a mill at present at Birtle, but the lumber has to be hauled a mile up a steep grade to the railway station.

—James McBride, who has been lumbering in McLean, has cleared out leaving his workmen without their wages and the storekeepers in great grief. Jammy drew $900 a few days ago from Mr. Mickle, which he has taken with him as a nest egg for some other locality.

—John Shaw, of Forest, is having put in his Brigden planing mill, under the supervision of his son, R. G. Shaw, a new 25-horse power engine, and 36-horse power steel boiler, also a heading machine. Mr. Shaw says he is bound to have his mill second to none in Western Ontario.

—The Dominion Government has passed an Order-in-Council placing $40,000 in the estimates for the construction of an iron bridge to replace the present Suspension bridge across the Ottawa river below the Chaudiere falls. This is something the lumbermen have been wanting for some time.

—Messrs. W. P. Christie & Co. are taking out 6,000,000 feet of logs to be cut in Severn mill; and 12,000,000 feet for Christie, Kerr, & Co. from Oakley township, which will be partly cut at the Severn, but the greater part will go by the Black River via Longford to the company's mill at Bradford.

—Through inadvertence the cut of the Sturtevant Patent Progressive Lumber Dry Kiln was omitted in the description of the same in the March issue. The cut which should have appeared and which clearly shows the arrangement of the Sturtevant Steam Hot Blast Apparatus, may be found on page 13 of this issue.

—Exemption from taxation for ten years has been granted to the Longford Lumber Company, of Longford, by the town of Orillia. The company will erect a large establishment for the manufacture of woodenware, such as tubs, pails, etc. The outlay will be about $40,000, and the industry will furnish employment for thirty or forty hands.

—John Shaw, of Forest and S. Fraser, of Amherstburg, still keep up their reputation of being among the largest lumber dealers in Western Ontario, having recently closed a purchase of 12,000,000 feet of lumber and 5,000,000 pieces of lath, for this season's delivery at Goderich, Point Edward, Courtright, Windsor, Amherstburg and Kingsville.

—Mr. Burns, M.P., for Gloucester, who has returned from Europe, states that while in England he organized a syndicate with a capital of $255,000 to operate 7,000 square miles of timber limits on the lower St. Lawrence. He also brought to the notice of several capitalists a railway scheme which will give an air line from Montreal to Shippegan harbor.

—Mr. Elias Thompson, of Peterborough, is taking out a quantity of large timber from "Maher's place," near Keene, and shipping it over the Grand Junction to Halifax, where it will be used for spar and boom timber. Some of the sticks sent have been commended as the best ever seen in Halifax. Each stick extends over three flat cars in shipping, and requires two teams to draw it to the station. Already a number of sticks have been sent, and more are being shipped almost every day.

—Logging operations in the neighborhood of Sackville, N. B. are being vigorously prosecuted. J. L. Black, of that town, will get out logs enough to make 6,000,000 superficial feet of lumber; Black & Robertson will get out about 14,000 logs; J. M. Hicks, 12,000; Harvey Copp, 6,000; Eastabrook & Cook, 6,000; G. W. Towse, 2,000; and A. W. Ogden about 20,000.

—The lumber market in the North-west is said to be very active. According to the *Northwestern Lumberman*, Eastern lumber buyers are thick as bees in Wisconsin. They have begun to slide into the State by the Canada-Soo route, and drop down into the stomach of supply by the way of Rhinelander in a way that astonishes the natives and their Western customers. They propose to take out lumber by the Soo route, and thus sharply compete with Western buyers. Eastern men are also purchasing more lumber then heretofore on Green Bay and the north shore, and a Manistee report states that the same class of buyers are at that point, and are picking up so much bulk stock that the supply of dry lumber on the dock is likely to be exhausted before the opening of navigation.

—Mr. A. F. Wood, M.P.P., in a recent speech in the Legislature upon our timber and mineral resources, gave some interesting statistics regarding the timber output of this province. He said:—"First, the Belleville District, which includes the Counties of Victoria, Peterborough, Hastings, Addington, Renfrew, and Frontenac. From this District, since Confederation, the government have received dues on 15,948,000 sawlogs, and about 6,000,000 square feet of timber—equalling nearly 4,000,000,000—four thousand millions of feet—of sawed lumber. In the whole Province, the output since Confederation of pine sawlogs and pine timber has been about 55 millions of sawlogs, and 146 million of square timber, equalling 132,000,000,000—one hundred and thirty-two billions—feet of sawed lumber."

—The Miramichi *Advance* says:—The announcement that Mr. Burns, M.P., has organized a Lumber Company, or syndicate, with a capital of a quarter of a million to operate in the Province of Quebec, is an additional indication that lumber operators are at a disadvantage in this province. Mr. Burns is a new Brunswicker and, doubtless, would prefer to encourage operations within his own province, other considerations being equal. He would do so, moreover, because he has large interests at stake in New Brunswick, which must be benefitted, by the promotion of any great business enterprise, but he is forced by disadvantages attending lumber operations here to direct his attention, his own capital and that of those associated with him in this big undertaking, to a province where the lumber industry is not so heavily handicapped as it is in his own. There can be little doubt that if the New Brunswick government were as liberal in its policy towards lumbermen as is that of Quebec, we would have fewer idle mills, retain many of our people who are now forced to leave us from want of employment and, at the same time, realize the benefits of capital seeking investment in enterprises such as that promoted by Mr. Burns.

—A reporter of a Nova Scotia paper interviewd Capt. Aaron Grant, who is superintending the construction of the big raft referred to in our last issue. The loss of the big raft last fall, which attracted world-wide attention, has not discouraged the owner, J. T. Leary, of New York. He is having another mammoth raft built larger than the first, which he expects to launch next June. This is to be followed by a third timber raft. The raft now under construction will be about 540 feet long—60 feet longer and about four feet wider and deeper than the first. It will contain about 40,000 logs, from 30 to 70 feet long. To give an idea of the quantity of the logs we may say that it would take 90 or 100 vessels of 150 tons each to carry the logs that go into the raft. About 150 men and 50 double teams are at work and they put on from 350 to 400 logs a day. The shape of the raft will be similar to the first one, with the exception of improved ends which will be timbered out like the bow and stern of a vessel, and the outside will be much smoother. The raft is about quarter-built. The frame of the raft is made of spruce and hardwood, mostly spruce, and is placed on the ways. When the raft is half-built the main chain or backbone will be put on the centre; and when completed, the chains will be put around the raft, about ten feet apart, hauled taut and shackled into the large chain or backbone. Before launching, the frame will be removed. The logs are placed on the raft by means of an elevated railway, which runs over the bow to the stern of the raft. The present height of the railway is about 50 feet. The cars are moved by means of an endless chain worked by a stationary engine. Captain Grant says that Mr. Leary was at the raft week before last, and expressed himself as being well satisfied with the progress made. The sight is described as one well worth seeing, and it will probably have many visitors before the day of launching.

—Judgment was given in the Court of Appeal on March 27th, in the case of Oliver Latour, against Allen Grant. Both are well-known lumber dealers. They owned timber limits adjoining each other in the Temiscamingue district, and Latour, claiming that Grant had felled timber on his property, seized a large raft valued at several thousand dollars which Grant was having towed to Ottawa. The seizure was set aside by the Superior Court for want of proof, and this decision was confirmed in appeal.

—The market for lumber in Montreal has been fairly active, and firm prices had at the yards and from the mills. At the latter values are firmer, and with the roads in good condition there will be augmented sales and advanced values. It is expected that considering the quantity of logs which was left over last year, the output this year will be greater, and though this may be the case, there can be no question that higher prices will be in order. Some car loads have recently changed hands and owners are as firm as they can be.

—Small dealers in lumber just now say they are unable to purchase supplies at reasonable rates. Prices, they claim, have advanced fifteen per cent. all round during the past eight months. All last year's cut, as well as the prospective season's cut has been disposed of by Ottawa firms to outsiders. The big purchasers who are thus cornering the local dealers are said to be New York firms, Dobell, of Quebec, and the Export Lumber Company. Lumbermen are consequently enjoying prosperity. In one line (3 inch deals) prices have risen from $7.00 to $9.50 per thousand.

AMERICAN NOTES.

—It is probable that the Muskegon saw mills will run only during the day time this season.

—The March inventory of stock at Chicago shows a round total of 500,000,000 feet, including the southern section, which is an increase over last year of about 40,000,000 feet. It is what may be called an average stock.

—According to late reports from the English market, the supply of American black walnut, both manufactured and in the log, is rather in excess of the present demand, and it is said that shippers would simply be consulting their own interest if they would moderate the shipments of stock thence, and give consumption time to overtake the late rather liberal receipts.

—The Saginaw *Courier* says that the lumbering industry of Michigan is not only the largest in point of productive value of any in the State, but it exceeds in magnitude the lumbering industry of any other State in the Union. It is not an unreasonable estimate to place the number of persons employed in the lumbering industry of the State last year at 50,000, whose wages aggregated over $15,000,000, with an invested capital of over $60,000,000. The total product of the State last year was 4,162,317,778 feet of lumber, and 2,677,855,750 shingles, the estimated value of which was $65,043,825.50.

AMONG THE MANUFACTURERS.

Messrs. Robin & Sadler, manufacturers of leather belting, Toronto and Montreal, are making some pertinent suggestions to users of such belting, in which they set forth that they tan their own leather especially for the purpose of manufacturing it into belting; that because of the excellence of their belting they have increased their trade in it three-fold within the last few years, and that they sell their belting according to a list that is 25 to 30 per cent. lower than the list that some sell by. Regarding the popularity of this belting, which is based upon its intrinsic merits, they say they have customers to whom they have sold from $3,000 to $40,000 worth, one Canadian manufacturing firm alone having bought for their mill last year belting to the value of $10,000. We refer to their card for further information.

—The Canadian Rubber Company, corner of Front and Yonge Streets, Toronto, of which Mr. J. H. Walker is manager, are calling the attention of the trade to the special lines of rubber goods manufactured by them. Among these are included patent pressed double strip belting; engine, hydrant, suction, steam, brewers' and fire hose; valves, car springs, steam packing, wringer rolls, carriage cloths, blankets, stopples, rubber shoes and boots, tweed and gossamer clothing, garden hose etc.

—Denny, Mott & Dickson, of London, in their circular under date March 2nd, speaking of Canadian timber, say: "Most of the coming season's importation has now been arranged for. The enchanced prices of Yellow Pine and Oak have been firmly maintained by the shippers, with the result that most of the shipments will be for the East Coast and Clyde; this market having seen its way to take very little at the high figures conceded by buyers at outports."

THE NEWS.

—R. Ralston, Kallarney, Manitoba, has failed.

—Lumber camps are breaking up in all directions.

—Parry Sound will have three new mills next summer.

—S. Edwards, saw miller, Fordwich, Ont., has assigned.

—Timber lands are being rapidly bought up in the Southern States.

—Lumbering operations are brisk in the Parry Sound district.

—Young's shingle mill, at Lakefield, Ont., has commenced operations.

—A large amount of cedar for paving is being shipped from Owen Sound.

—Large quantities of lumber is being shipped by vessel from Moodyville, B. C.

—D. B. McRae, of Meldrum Bay, Ont., has 30,000 saw logs on his dump already.

—Messrs. Brunette & Bros., Hereford, Que., will build a steam sawmill this spring.

—Holmes, Moore & Courtright, of Inwood, Ont., will build a saw mill near Glencoe.

—United States lumbermen say that lake freight rates which were so high last year must be reduced.

—The Rathbun Co's boats at Deseronto are being overhauled and prepared for the opening of navigation.

—The Rathbun Company have been making heavy shipments of lumber from their mill at Rossmore, Ont.

—The products of lumber in Eastern Michigan in 1887 shows an increase as compared with 1886 of 178,200,603 feet.

—Shingle machines in the Gibson shingle mill at Marysville, Mo., saw at the rate of 19,250 shingles each in nine and a half hours.

—A vessel has recently sailed from Moodyville, B. C., for Tientsin China, with a cargo consisting of 423,532 feet of lumber.

—Mr. George Butchart, of Port Moody, B. C. is making arrangements for the erection of a large steam lumber mill at or near that place.

—The Canada Lumber Cutting Machine Co., limited, has been incorporated with headquarters at Toronto, The capital stock is $35,000.

—Messrs David Henderson and J. L. Ainslee, Tilbury East, near Port Alma, Ont., are about erecting a new stave and heading mill.

—According to the *N.-W. Lumberman*, Chicago wholesale lumber dealers and commission men favor the free import of lumber from Canada.

—Messrs. W. H. Veysey & Son, of Waterboro', N. B., will build a mill this spring at the thoroughfare between Grand and North Lakes, in that province.

—Lumbering operations in some parts of Ontario are considerably obstructed by the deep snow in the woods which has reached the enormous depth of four feet.

—Leading Wisconsin lumbermen now estimate the shortage in the log crop for the season at only ten per cent. less than anticipated at the beginning of the season.

—The Owen Lumber Company, Sherbrooke, Que., have acquired a tract of 84,000 acres of land near that place, and will erect mills for the conversion of timber upon it into lumber.

—Messrs. Rhodes, Curry & Co., Amherst, N. S., are manufacturing a large lot of cherry and ash doors to fill an order for Newfoundland, and a lot of mahogany doors for London, Eng.

—Mr. Underwood's logging crew on Cain's river, (N. B.) recently cut a mammoth pine, which when cut made eight logs. The diameter of the stump was five feet. The contents are given as 3,238 sup. feet.

—Wells, of the saw mills at Palliser, B. C., in the moun tains, has opened a branch yard at Calgary, Alberta, with J. Deacon in charge. Calgary is coming to the front as quite a distributing point for lumber.

—A French Canadian named La Roche, of The Brook village, while driving a heavy load of railroad ties from a shanty to Casselman station, C. A. R. was violently thrown from the load, run over and instantly killed.

—The approaching season promises to be a bright one for builders in Ottawa. Buildings are going up on every hand, and it is estimated that no less than $500,000 in the aggregate will be expended. The demand for material is now very great, especially in building stone. A large number of expensive [illegible] are going up, and no less that five churches are to be [illegible], as well as several public halls belonging to different [illegible].

—Robert Conners and other large operators have projected a canal around Grand Falls, (N.B.,) for the passage of logs down the river. That it is needed is shown by the fact that 1,500,000 feet of last winter's cut is "hung up" there now.

—We are informed upon good authority says the Pembroke *Standard*, that Mr. E. B. Eddy, of Ottawa, has purchased the limits on the Dumoine river from Messrs. T. & W. Murray. The price paid for the limits is said to be $50,000 and about $16,000 extra for the plant and present output.

—The McDiarmid Manufacturing Co., Aylmer, Ont., late McDiarmid & Price, manufacturers of hubs, spokes, and bent goods for carriages, wagons and agricultural implements, are running their work to their fullest capacity, employing about thirty hands.

—On March 16th Hahn's planing and saw mill at New Hamberg, Ont., were totally destroyed by fire, having originated in the drying-room. The original value with machinery is estimated at $15,000. Insurance $5,000 as follows: Perth Mutual, $2,500; Economical, $2,000; Gore Mutual, $500.

—Negotiations are nearly completed for the sale to the Northwestern Lumber Company, of Eau Claire, Wis. The lumber, mills, and pine land of the Sterling Lumber Company, of Sterling, Clark county, Wis., consideration, $100,000. The Sterling Company is a branch of the Eau Claire Lumber Company.

—The new mills being erected by Messrs. J. R. Booth & Co. at the Chaudiere are rapidly nearing completion. The framework of the addition to the large saw mill is all up and the building will be completed and the machinery in by the first of April. The work of constructing the band saw mill has also been commenced.

—Mr. J. Black, M. P. P., Sackville, N. B., will get out logs enough this season to make six million superficial feet of lumber. Black & Cobertson will get out about 14,000 logs this year. S. M. Hicks will cut about 12,000; Harvey Copp, 6,000; Estabrooks & Cook, 6,000; G. W. Towse, about 2,000; A. & W. Ogden, about 20,000. David Wheaton and other Sackville lumbermen will get out about their usual cut this season.

—The Longford Lumber Company, Longford Mills, Ont., who have extensive mills at that place under the management of Mr. Wm. Thompson, will immediately erect a large establishment to be devoted to the manufacture of woodenware, such as tubs, pails, etc. The building and plant are estimated to cost $40,000, and from the beginning about thirty-five or forty hands will be employed. At a special meeting of the town council the company was granted exemption from taxation on the land and buildings for a term of ten years.

—About the first of March last the Manistee Salt and Lumber Company made an assignment to E. G. Filer with liabilities of $864,068.89 and assets footing up $2,099,786.96. The cause of the suspension of business was the death of the Hon. M. Engelmann, the president of the company, and though the remaining members were gentlemen possessing abilities, still the sudden taking away of the president, left the business in rather a precarious condition. Bills payable were accruing in alarming numbers, and to honestly meet the demands of the creditors the assignment was made.

Michigan leads all other states in the lumber industry, giving employment to fully fifty thousand persons, who received $15,000,000 in wages last year. The capital invested aggregates $60,000,000 and the product last year was: Lumber 4,162,317,778 feet, valued at $58,370,438; shingles, number, 2,677,855,750, valued at $6,673,387, making a total value of $65,043,825. Dec. 1 the stock of lumber on hand was 1,428,221,132 feet, and of shingles 195,218,000. A comparison with preceding years is as follows; 1887, 4,162,317,778 feet; 1885, 578,138,443 feet. These figures show an increase for 1887 over 1886 of 178,200,603 feet.

—It is learned, says the Victoria (B.C.) *Times*, that a powerful syndicate is being organized to purchase the property known as the Hastings Saw Mill concern at Vancouver. The property is a valuable one, as it embraces, in addition to the mill plant and buildings, a large extent of leased timber ground. The proposal is to replace the present machinery and buildings with new ones, erected specially for the purpose of carrying on an extensive shipping trade. Everything will be modern. There will be a double set of buildings and machinery, one of which will be devoted to the export trade and the other to the local and home market. It will be one of the largest concerns on the coast, giving employment to a considerable number of employees directly and indirectly, and be of great advantage to Vancouver.

—The amalgamation of the Grand Trunk and Northern and North-Western railways will result in Belleville becoming the point at which square timber will be rafted, which was formerly shipped by water from Hamilton, Toronto, Port Hope and other lake ports. The large pier built out into the bay by the Grand Junction Railway Company is being refitted, filled with stone, floored with plank, 300,000 feet of lumber being required, and tracked. It is alleged that rafting can be [illegible] more cheaply here than at lake port[illegible] igation tight binding is not neccessary

—Nearly as much lumber will be cut this season by St Croix operatives as during last winter. Messrs. T. H. Todd & Sons will cut about two-thirds as much as last year, they having a large stock of logs remaining over. The operations of Messrs. J. Murchie & Sons will include about 14,000,000 feet; those of Gates & Wentworth, about 10,000,000 feet. Messrs. C. F. Todd & Sons' cut will be about the same as last year; Messrs. H. F. Eaton & Sons will cut about 18,000,000 feet. The total cut will be about 55,000,000 feet as a[illegible] 60,000,000 last year. The winter. thus far. has been a [illegible] good one for logging operations.

—The Bronson & Weston Lumber Co's petition for incorporation has been presented to Parliament by Mr. W. G. Perley, M.P. The company desire to carry on in Canada, the United States and elsewhere, the business of lumberers, timber merchants and manufacturers of timber and lumber in all its branches, also of pulp, wood pulp, and other products from wood; and also the business of wharfingers, vessel owners, general merchants and dealers; and with power to acquire the business and property of the firm of Bronson & Weston. The persons asking the incorporation are E. H. Bronson, M. P. P., Ottawa, lumber merchant, Abijah Weston, Pointed Post, Steuben County, New York, lumber merchant, F. P. Bronson and W. G. Bronson, of Ottawa, lumber merchants.

—Mr. William Hurdman, jr., is reported as saying that the new mills at the Chaudiere are getting on well. By the 20th of April they will have the new mill, which is taking the place of the one burnt down and which is to be larger but of the same cutting capacity, ready to open. They will then put the full force on to complete the second mill, the foundation of which will be commenced in a few days. All the timber for this mill is ready and the machinery well forward. They expect to be ready to cut in this mill by the first week in May, and when their season's work come in they will be humming as merrily as any of their neighbors. Mr. Hurdman says that the season's cut has been good but that there will be trouble getting out the logs. A short time ago they had one fall of snow, at Kippewa, of thirteen inches, and at Mattawa there was no fall at all. After each fall this winter there has also been a heavy wind, which has caused heavy drifts, giving a good deal of trouble. In the new mill the firm have excavated an extra ten feet into the solid rock.

—An idea of the exports of lumber from the Pacific coast of British Columbia will be learned from the report for the month of January. Six ships arrived at Burrard inlet during the month, to load lumber for foreign ports. Five of these ships were at the Moodyville mill, and one at Hastings mill. Two ships were for Australia, one for Valparaiso, South America, and the three remaining for China. The clearances with lumber during the month numbered five ships. Three were from the Hastings mill, two bound for Australia, and one for South America; one from the Moodyville mill for Cornel, and one from the Chemainus mill. Hereafter the exports of lumber promises to be much larger. Through improvements to navigation at the mouth of the Frazer river, the Royal City and Brunette mills, situated some distance up the river, will now be reached, though heretofore inaccessible to large ocean crafts. Six vessels have just been chartered at San Francisco to load lumber at the Royal City mill, two for Australia and four for South America.

—The new Madawaska Improvement Company recently formed by the lumbermen of the Ottawa district has been incorporated. The officers are: President, J. R. Booth; secretary-treasurer, G. B. Green; directors, E. B. Eddy, W. G. Perley, M. P., E. H. Bronson, M. P. P., C. McLaughlin, W. B. Dickson, G. B. Pattee and R. H. Klock. The object of the new company is to get possession of all the works and improvements made by private parties and the Government on the Madawaska river, improve them and then continue the works by erecting a series of dams, slides, booms, etc., all along the course of the river as far up as timber is taken out, thus enabling the lumbering firms by paying a fee or toll to the company for allowing the logs to pass through their works, to get out their entire drive with very few men and without danger of having the logs hung up as they are some years in thousands. Negotiations are now going on between the company, the Government and private parties owning works on the river, to enable the Improvement Company to secure all improvements already made. As soon as spring opens the company will begin the work of extending their works by building a series of dams, slides, booms and piers. The work will probably last all this summer and a portion of next.

SAW MILL ENGINEERING.

There was a time when it was the popular impression among millwrights and engineers that anything was good enough for saw mill work; that a common "nigger" engine, with any kind of a whirligig upon it for a governor, was good enough; that any sort of a kettle, leaky or otherwise, was suitable; that the shafts had only to be strong enough not to bend too much under the heavy belt strains that were put upon them; that belts which would not be used for conveyors in a grist mill, would answer for transmission in a saw mill; that any kind of dope was good enough for lubrication; and that finally, any kind of a plug, who could feed the slabs, was good enough for an "engineer" (save the mark).

Now, public opinion on this subject is commencing to change, and to change for the better. The mere fact that fuel is not only plenty, but absolutely "a drug in the market," is no longer among the best saw mill proprietors, considered an excuse for such wastefulness in every department. I shall endeavor to give below some of the reasons which are influencing the most advanced proprietors in this change of opinion.

In the first place, as regards the engine properly speaking, the boiler should come first, but there is a reason why I should speak of the engine first: It is a well recognized fact that an automatic cut-off engine, particularly when the variations in load and in speed are frequent and considerable, is much more economical of steam than the ordinary trottler; that is when the power consumed exceeds 25-horse, at any rate.

"But suppose that fuel not only costs nothing, but the excess has to be cremated?" It makes no difference. It is cheaper to build or buy a crematory, than to pay for a boiler just for the purpose of getting rid of the waste. If you can get a small high-speed engine to consume high pressure steam with economy, you will need a smaller boiler than if you have some sort of a "steam chewer" back of your engine. It makes a difference whether you have to evaporate from 125 to 1,000 pounds of water per hour, or only from 60 to 480, which takes a smaller boiler. A smaller boiler costs less to commence with, and less freight to follow with, and to finish with, after it is set, will cost less than a larger one. No, I will not say to finish with; because it makes a difference whether you have to feed in enough fuel to evaporate 125 to 1,000 pounds of water, or only enough to evaporate 60 to 480. You will save upon a fireman's wages. Then come into the items of insurance, wear and tear, taxes, depreciation, repairs, etc. All these are greater for a boiler which has to make 125 to 1,000 pounds of steam per hour, than for one which has to supply only 60 to 480.

In the same way you may cipher up the steam pipes between the boiler and the automatic cut-off engine, using only 60 to 480 pounds of steam per hour, over those needed for the throttling engine needing 125 to 1,000.

When you get to the engine itself you have two advantages in buying the automatic; rotation speed being the same in both cases. You will save on boiler account, on piping from boiler, and in firemen's wages; but you will also have better regulations, and better governing means, better quality of lumber. It also means the saving of much annoyance in the mill.

We will suppose that you have six or eight gang saws, all of which are likely to be in the log at once; now with an engine which has a good range of governing, you can work right along and not stall anything; whereas with a throttling engine you will be apt to have trouble once in a while from belts slipping, and the engine refusing to do anything at all, until one or more of the gangs can be thrown off. The automatic engine will of course cost you a little more for the same power and same rotation speed, than the throttling engine; and this will of course run up your costs for interest, wear and tear, depreciation and taxes; but it will generally be more than made up in the saving on the boiler side of the mill.

As a general thing, you can get an automatic engine better built and capable of being driven at higher speed than one of the throttling type; and this means a big saving "all along the line," not only in the matter of fly-wheel weight required, but in shifting and belting. We will suppose that you have an automatic engine delivering 50-horse power at 250 turns; it will take a pulley of two-fifths the diameter (for a given belt width;) to put the power in the jack shaft, of that required for the engine running only 100 turns for the same horse-power. Or with a given belt speed it will take a belt only about two-fifths the width. There can be saving in pulleys, belts and shafting, all through the saw mill, by the adoption of high speed; because most of the machines require to be speeded much higher than the engine itself. Of course with narrower or lighter belt width, giving out their power by reason of higher speed rather than greater belt tension, there will be less pull upon the shafts, and less lubrication required. This means also less likelihood of hot bearings stopping the mill.

There will also be a less belting bill to pay, because there will be lighter belts to buy. Couplings, hangers, clutches, and all other appurtenances of the transmission will of course be lighter and cheaper, and will require less force of men to put them up and less strength of frame work to hold them.

There is this further advantage in having an automatic engine; you can at any time reduce or increase the amount of work done in the mill without seriously affecting the speed and general working of the engine. If you think that the boiler will stand a little more pressure, the engine will take it and be thankful. If the boiler gets a little weak and you want to ease up on the steam, the engine will simply reach out a little further with the cut-off. If you are burning slabs or any other kind of fuel giving greater variations in pressure, the automatic, being a better grade of machine, is apt to get better care, and for this reason alone will keep in better condition than the "nigger." Further, the "niggers" are generally delivered painted or unfinished, and consequently there will be poorer stock than must be put into a finely finished engine, where the grain of the metal shows.—*Wood and Iron, San Francisco.*

NEW WATERWAYS FOR MANITOBA.

The biggest scheme on hand for some time of interest to the lumbering industry, says a correspondent in the Mississippi Valley *Lumberman*, is the one now agitating the public here in connection with the improvement of our waterways. At intervals during the past five or six years efforts have been made to induce the Dominion government to undertake the work of improving navigation on our rivers and streams, but beyond taking out a few scow-loads of sand from the mouth of Red river, nothing has been done. The present phase of the question is a result of the agitation against railway monopoly. The Dominion government has intimated to certain of its leading local supporters that if Manitoba will submit for three years to railway monopoly and give up the attempt to build a road to the boundary, an appropriation will be made sufficient to carry out the river improvements demanded. With a little expenditure a vast stretch of navigation can be made tributary to Winnipeg. The Red river is now navigable to the boundary, a distance of 60 miles, but in the opposite direction down stream there are rapids, a few miles below the city, which effectually block navigation, except during a short time in the spring when the river is very high. It is estimated that a lock and dam, to cost only about $400,000, would overcome this difficulty and render the river navigable to Lake Winnipeg. This would open a vast stretch of inland navigation, with a coast line of about 5,000 miles, including the Red river to Lake Winnipeg, 350 miles long, a portion of the Nelson river and tributaries, the great Saskatchewan river and tributaries, and other minor rivers flowing into the lake. About 300 miles of lake navigation on Lakes Manitoba and Winnipegoosis could be added to its vast system of inland navigation by a little additional expenditure. When it is known that all this north country is more or less covered with timber, the interest to the lumber trade will be surmised. There are now half a dozen or more lumber firms opening on Lake Winnipeg. The lumber is now brought to Selkirk, the present head of Lake Winnipeg navigation, by boat, and there transferred to the Canadian Pacific railway branch line and brought on to the city. To bring lumber from Selkirk to the city, a distance of about 20 miles by rail, it costs as much as to freight it by boat the entire length of the lake. By making the proposed improvements in the Red river, it is estimated that the cost of rough lumber at Winnipeg would be reduced about $3 per 1,000. The country tributary to Lake Winnipeg is a valuable timber district, and the opening of direct water communication with the city would undoubtedly stimulate the lumbering industry on this lake. But the most valuable timber area in the Canadian Northwest is in the countries surrounding Lakes Manitoba and Winnipegoosis. This region has never yet been tapped, owing to its isolated position. Lakes Manitoba and Winnipegoosis are really a chain of many lakes of varying size, connected by narrows. These lakes stretch along in a line parallel with Lake Winnipeg for a distance of about 300 miles, and are separated from the latter lake by a ridge of land, varying from 15 to 60 miles in width. The country between is mostly wooded, but the most valuable timber district lie to the west of this chain of lakes, on the opposite side from Lake Winnipeg. This long chain of lakes is navigable the entire distance, with the exception of a couple of miles between Lakes Manitoba and Winnipegoosis proper, which could easily be overcome, the country between being of a low, swampy nature and usually flooded. The northern end of Lake Winnipegoosis reaches within about half a mile of Cedar lake, the latter being merely a widening out of the Saskatchewan river, the river being already navigable from Lake Winnipeg. This would complete the circuit, and render available the vast timber country west of the Lake Manitoba chain of water stretches. The resources of this timber region were referred to in a previous letter, but the country has not yet been sufficiently explored to give a very accurate approximation of its wealth. An engineer who spent two months in that country last summer, however, estimated the quantity of timber tributary to Lake Winnipegoosis at 500,000,000 feet. The timber is of larger size and said to be much superior to the districts now being worked on Lake Winnipeg. If these improvements to the waterways are carried out, a very valuable timber region will be open for development, and the lumbering industry will be given a fresh impetus.

The Duty on Lumber.

Mr. Arthur Hill, of Saginaw, in a recent interview with a reporter, expressed himself as follows regarding the tariff on lumber between the United States and Canada:

"As I understand it, Mr. Hotchkiss, and others who side with him, believe that if the Canadian export duty is abrogated that Canadian logs will naturally come to supply Saginaw mills with stock; but I think that it is a plain mathematical proposition that if the Canadian export duty on logs of $2 a thousand and the American import duty on lumber of $2 a thousand are removed at the same time, that the Saginaw mills will stand in the same relative condition as to securing logs to saw from Canada as they do to-day. The cost of towing and delivering logs to the Saginaw mills from the Georgian bay is $2 a thousand, and while Canadian labor costs less than ours, we will call the cost of sawing in Canada the same as here. The freight rate from the Georgian bay to Buffalo and the eastern market by water is substantially the same as from the Saginaw river. By rail it is less. If you call the rate from both points to Buffalo $2.50 a thousand, you will have these results: Canadian logs sawed on the Saginaw river:

Cost of delivering logs, per thousand, to mills	$2
Sawing	2
Freight to Buffalo	2 50
Export duty on logs	2
Lumber costs in Buffalo above cost of logs	$8 50

"Canadian logs sawed in Canada:

Sawing	$2
Freight to Buffalo	2 50
Import duty on lumber	2
Lumber costs in Buffalo above cost of logs	$6 50

"These figures conclusively show that under present conditions as to duties the Saginaw mills are at a disadvantage of $2 a thousand feet in handling Canadian logs, and since the imposition of the $2 export duty on logs, it is well known that they have ceased to be brought in. Now let us suppose that both the duties are removed as is supposed, and we have: Canadian logs in the Saginaw river:

Cost of delivering logs to mills	$2
Sawing	2
Freight to Buffalo	2 50
Lumber costs in Buffalo above cost of logs	$6 50

"Canadian logs sawed in Canada:

Cost of sawing	$2
Freight to Buffalo	2 50
Lumber costs in Buffalo above cost of logs	$4 50

"Under the new conditions, then, the advantage of the Canadian mill owners over Saginaw mill owners of $2 a thousand still remains, and the logs would therefore, then as now, be manufactured in Canada."

The irresistible conclusion is that there is still two sides to the tariff question.

In further conversation Mr. Hill said that in Canada at present the norway and coarse logs were not cut, the lumbermen not owning the land taking only the best timber. He believed that if the tariff duty were removed it would enable the Canadians to cut closer and go over limits for a second crop. That is one reason why he opposed free lumber.

The Proper Way to Dry Oak.

A large amount of oak is spoiled in drying. It is the nature of oak to crack, not only on the ends but on the surface. This can be guarded against and reduced by care and the expenditure of a trifling sum of money. First of all, the ends of the logs should be thoroughly painted. Ordinary roofing paint is best, and the addition of a handful of salt to the gallon will improve it. In piling, the stickers should not be over two inches wide and not over three feet apart, and placed directly over one another. This method will keep the lumber perfectly straight. The piles should be thoroughly covered and thus protected from rain, heavy dews and the sun's rays. Oak that is allowed to gather moisture and dry out repeatedly, will soon become checked and surface cracked, and as such can only be graded as culls. If stained or badly twisted, it goes into the lower grades, all of which is frequently due to slack and unbusinesslike way of preparing what might be good and desirable lumber for market. An expenditure of $5 for paint, would probably save $5,000 worth of valuable lumber.—*Northwestern Lumberman.*

TRADE REVIEW.

Toronto, Ont.

TORONTO, Mar. 2nd, 1888.

CAR OR CARGO LOTS.

1¼ and thicker clear picks, American inspection	$34 00@35 00
1¼ and thicker, three uppers, American inspection	40 00
1¼ and thicker, pickings, American inspection	30 00
1X10 & 12 dressing and better	20 00 22 00
1X10 & 12 mill run	15 00 16 00
1X10 & 12 dressing	14 00 16 00
1X10 & 12 common	12 00 13 00
1X10 & 12 spruce culls	10 00 11 00
1X10 & 12 mill culls	9 00
1 inch clear and picks	24 00 26 00
1 inch dressing and better	18 00 20 00
1 inch siding mill run	13 00 15 00
1 inch siding common	12 00 13 00
1 inch siding ship culls	10 00 11 00
1 inch siding mill culls	8 00 9 00
Cull scantling	8 00 9 00
1¼ and thicker cutting up plank	22 00 25 00
1 inch strips 4in to 8in mill run	14 00 15 00
1 inch strips, common	11 00 12 00
1¼ inch flooring	14 00
1½ inch flooring	14 00 15 00
XXX shingles, sawn	2 40 2 50
XX shingles, sawn	1 40 1 50
Lath, Sawn	1 80

YARD QUOTATIONS.

Mill cull boards & scantling	$10 00	Dressing stocks	14 00@15 00
Shipping cull boards, promiscuous widths	12 00	Picks Am. inspection	30 00
" stocks	13 00	Three uppers, Am. inspect.	40 00
Scantling & joist, up to 16 ft	13 00	B. M.	
" " 18 ft	14 00	1½-in. flooring, dres'd	25 00 30 00
" " 20 ft	15 00	1½ " " rough	14 00 15 00
" " 22 ft	16 00	1¼ " " dres'd	23 00 25 00
" " 24 ft	17 00	" " undres'd	14 00
" " 26 ft	18 00	" " dres'd	16 00 20 00
" " 28 ft	19 00	" " undres'd	12 00 14 00
" " 30 ft	20 00	Beaded sheeting, dressed	18 00 20 00
" " 32 ft	21 00	Clapboarding, dres'd	12 50
" " 34 ft		XXX sawn shingles per M	2 75 2 90
	22 50@22 50	Sawn Lath	2 25
" " 36 ft	24 00	Red oak	20 00 25 00
" " 38 ft	27 00	White "	25 00 30 00
" 40 to 44 ft	30 00	Basswood, No. 1 & 2	18 00 20 00
Cutting up planks 1¼ and thicker dry	25 00 26 00	Cherry, No. 1 & 2	50 00 60 00
" board	18 00 20 00	White ash, 1 & 2	25 00 30 00
		Black ash, 1 & 2	20 00 25 00

Montreal, Que.

MONTREAL, Mar. 3rd, 1888.

Pine, 1st qual'y ₱ M	$38 00 40 00	Basswood, run of log culls out per M	$18 00 20 00
Pine, 2nd " "	28 00 30 00	Oak, per M	40 00 50 00
Pine, shipping culls ₱ M	14 00 16 00	Walnut, per M	60 00 95 00
Pine, 4th quality deals ₱ M	10 00 12 00	Cherry, per M	80 00 100 00
Pine, mill culls, ₱ M	8 00 10 00	Butternut, per M	35 00 40 00
Spruce, per M	10 00 13 00	Birch, per M	15 00 25 00
Hemlock, per M	9 00 10 00	Hard Maple, per M	25 00 30 00
Ash, run of log culls out per M	20 00 25 00	Lath, per M	1 75 2 00
		Shingles, 1st, per M	2 00 3 00
		Shingles, 2nd, per M	1 25 2 00

Ottawa, Ont.

OTTAWA, Mar. 3rd, 1888.

Dimensions, Inches.	*Per M.*
Mill culls 10 x 1	
" 12 1	$8.00
" 12 1½	
" 12 2	
" selected 16 ft. long, above dimensions	8.50 to 9.00
Cull strips, 1 in. thick, 5 to 7 wide	7.00 to 8.00
Mill cut outs 12 x 1	
" 11 1½	4.00 to 5.00
" 12 2	
Scantling 2 4	
" 3 4	12.00
" culls 2 4	
" " 3 4	7.00
Laths	1.25
Stock shorts, 12 x 1	10.00
1 inch siding outs, 1¼, 1½, 2	15.00
" outs from shorts, 1¼, 1½, 2	6.50 to 7.00
Outs from stocks 12 x 1	
" " 12 1¼	10.00 to 12.00
" " 12 1½	
Shingles, X	1.25
" XX	2.00
" XXX	3.00
" cedar, No. 1	2.00 to 2.75
" cedar, culls	1.25
Difference in planed lumber, in waste and planing	5.00
Ditto, on average good stock	20.00 to 25.00

Burlington, Vt.

BURLINGTON, Mar. 2nd, 1888.

Canada Pine Sidings—1x8 in. and up, 12 to 16 ft. d 2 or 4 s.

Select & shelving	$46 00	Finish	$38 00
Pickings	37 00	Dressing	28 00
Pickings & better	40 00@42 00	Common	20 00@21 00

Canada Pine Stocks—1x10 in, 12 to 16 ft., d 2 or 4 s.

Selects (clear)	55 00	Pickings & better	40 00
1st shelving	42 00	As run, common out	28 00@30 00
2nd "	39 00	No. 1 barn boards	25 00
3rd "	30 00	Common	21 00
Pickings	38 00		

Canada Pine Stock—1x12 in. 12 to 16 ft. d 2 or 4 s.

Selects (clear)	57 00	Pickings & better	44 00
1st shelving	47 00	As run, common out	33 00
2nd "	41 00	No 1 barn boards	26 00
3rd "	32 00	Common	21 00@22 00
Pickings	38 00		

Canada Pine Stock—14 in. 12 to 16 ft. d 2 or 4 s.

Pickings & better	45 00	3d shelving	33 00
As run, common out	33 00	Common	22 00

Canada Pine S. B'd—1x8 in. & up, 11 ft. and under, d 2 s or r.

Pickings & better	33 00@35 00	Dressing & common, d 2 s or	
As run, common out	30 00	d 2 s & m	20 00@21 00
		Common	18 00@19 00

Canada Pine Sheathing, d. m. & b. 1," 4 to 7", 5" & up. cb 7/8".

1st quality	12 to 16 ft	1st & 2nd quality, 9 to 11 ft.	33 00
2d "		7 & 8 ft.	34 00
3d "		3rd quality, 11 feet & under	22 00
4th " and Common		4th "	18 00

Canada Quebec Spruce—1 & 1½ in., 4 to 7 in. d 2 s & m.

Clear	12 to 16 feet	No 2, 10 to 16 ft.	15 00@16 00
No 1			22 00

Above prices delivered on a rate of $30 per car load.

Hamilton, Ont.

HAMILTON, Mar. 2nd, 1888.

Mill cull boards and scantlings	$ 9 00@10 00	Dressing stocks	$ 6 00 12 00
Shipping cull boards, promiscuous widths	10 00 12 00	1¼ flooring, rough	16 00 18 00
Shipping cull stocks	13 00	1½ flooring, rough	16 00 18 00
Scantling and joist up to 6 feet	13 00	1¼ flooring, dressed	22 00
do up to 18 feet	13 50	1 flooring, dressed	20 00
do up to 20 feet	14 00	Beaded sheeting 1	25 00 30 00
do up to 22 feet	15 00	Picks, Am. inspection	30 00
do up to 24 feet	16 00	Three uppers, Am. In	40 00
do up to 26 feet	17 00	XXX sawn shingles	2 60 2 70
do up to 28 feet	18 00	Sawn Lath	2 25
do up to 30 feet	20 00	Red Oak	20 00 25 00
Cutting up plank 1¼ and thicker, dry	20 00 25 00	White Oak	25 00 30 00
Cutting up boards	20 00	Basswood No. 1 & 2	15 00 20 00
		Cherry No. 1 & 2	50 00 60 00
		White Ash No. 1 & 2	25 00 30 00
		Black Ash, No. 1 & 2	20 00 25 00

St. John, N. B.

ST. JOHN, Mar. 3rd, 1888.

Deals, Boards, Scnatlng, etc.

Spruce deals	$12 00	Spruce boards	12 00
Pine "	15 00	Pine "	12 00@50 00
Deal ends	6 00	Oak "	40 00
Scantling	10 00	Ash "	15 00@25 00
		Hemlock "	7 50

Shingles.

Spruce, extra	$3 50	" No. 1	1 25
" clear	3 00	Pine	1 25
" No. 1 extra	2 25		

Clapboards.

Pine, extra	50 00	Spruce, extra	25 00
" clears	45 00	" clears	23 00
" 2d clears	35 00	" " No. 1	15 00
		" " No. 2	10 00

Flooring, Dressed.

6 in., No. 1	12 00	4 in., No. 1	12 00
" No. 2	10 00	" No. 2	10 00

Miscellaneous.

Staves	3 00@ 4 50	Laths	1 80
Heading, 17 in. per pr.	04	Pickets	6 50@15 00
" 18 in. "	04½ 05½	Railway ties	15
" 22 in. "	04½ 06		

Detroit, Mich.

DETROIT, Mar. 2nd, 1888.

Uppers, Selects, Stocks, etc.

Uppers, 4-4	$45 00	Shop, 5-4, 6-4 & 8-4	$25 00
5x4, 6x4 & 8x4	45 00	Fine common, 4x4	31 00
3 & 4 in	50 00	5x4, 6x4 & 8x4	33 50
Selects, 4x4	38 00	Stocks, 1X12 & 1X10, No. 1	19 00
5x4, 6x4 & 8x4	40 00	1X12, & 1X10, No. 2	16 00
Shop, 4x4	22 00	1X12, & 1X10, No. 3	13 00

Flooring, Siding, Ceiling, etc.

Flooring, select common	22 00	Roofing, D & M	16 00
No. 1 common	18 00	Siding, clear	21 50
No. 1 fencing	16 50	A	20 50
Ceiling, select common	25 00	B	18 50
No. 1 common	22 00	C	13 50
No. 1 fencing	20 00		

Bill Stuff and Culls.

Bill stuff, ordinary sizes:		26 to 28 ft	14 00
12 to 16 ft	12 00	30 to 34 ft	16 00
18 to 20 ft	12 50	Ship culls	12 00
22 to 24 ft	13 00	Mill culls	10 00

Shingles and Lath.

Shingles, clear, 18 in, Ex	3 75	6 in. stocks clear, Ex	4 00
10 in. clear, 18 in	3 00	5 in. stocks clear, Ex	4 80
6 in. clear, 18 in	2 75	Lath	2 10

Add for surfacing one or two sides, $1.

Philadelphia, Pa.

PHILADELPHIA, Mar. 3rd, 1888.

White Pine.

Mich. uppers, 1 to 2 in., dry	$48 00@50 00	1¼ to 2 in. plank, barn quality	22 50@25 00
2½, 3 & 4 in	55 00 60 00	Common plank	20 00 22 00
Selects, 1¼ to 2 in.	42 50 45 00	⅞ box boards, wide	14 00 16 50
Selects, 1 in.	41 00 43 00	⅝ siding, selected	27 50 30 00
12 in. flooring quality	30 00 32 50	Culls, 12 in.	15 50 17 00
barn	19 00 23 00	Wide	15 00 16 00
Edge barn, all widths	18 00 20 00	Narrow	13 50
		No. 1 moulding	30 00 33 50

Cargo Lots.

Yellow pine edge bds	14 00@16 00	Scantling and plank	20 00 22 00
Heart face boards	19 00 21 00		

Hemlock Boards and Scantling.

Edge boards	10 50@11 50	Scantling, 2x3 & 2x4, 12 in. stock	11 50 12 00
Fencing, 6 in., 16 ft	11 50 12 00	16 & 18 ft	12 00@13 00
		3x4, to 12, 12 to 20 ft.	11 00 11 50

Shingles and Posts.

Cypress shingles, 24 in. heart, d & b	13 00@18 00	Cedar shingles, 30 in. hand dressed	35 00 40 00
24 in. sap, d & b.	10 00 12 00	Chestnut posts, 9 ft.	32 00
		7 ft.	28 00

HARDWOOD.

Walnut.

Nos. 1 & 2, 1 in., good dry, Indiana	$87 50@ 95 00	Reject or common, 1 in., 1¼ and up	60 00 65 00
1¼ & up	92 50 100 00	Culls, 1 in	35 00 37 50
Nos. 1 & 2, ⅝ in	72 50 77 50	1¼ in. & up	35 00 40 00

Poplar.

Nos. 1 & 2, ⅝ in. good wide, Indiana	25 00@27 50	Nos. 1 & 2, 1¼ in. & up, good wide, Ind.	32 50 36 00
1 in	28 00 32 50	Columns, 5x5 & up clear	35 00 35 00

Oak.

Nos. 1 & 2, 1 in., good western, straight	32 50@35 00	Nos. 1 & 2, 1¼ in. & up, good western, straight	35 00 37 50
quartered	49 00 50 00	quartered	52 50 55 00

Ash.

Nos. 1 & 2, 1 in., good western	35 00@40 00	Nos. 1 & 2, 1¼ in. & up, good western	32 50 42 50

Yellow Pine—Yard and Wholesale.

Sc'tlg, 2x4 to 12x14	22 00@23 00	Flooring, 1 in., Va.	17 00 19 00
Plank, 1¼ to 2 in.	23 00 27 50	1 & 1¼ in., Ga. & Fla. cargo run	22 00 24 00
Fl'g, 1 & 1¼ in. No. 1	27 50 30 00		

Cherry.

Nos. 1 & 2, 1 in., good	62 50 70 00	Nos. 1 & 2, 1½ in. & up, good	65 00 75 00

Saginaw Valley.

CARGO LOTS.

Uppers			
Common			
Scantling			
Mill Culls			

YARD QUOTATIONS.

Log Scaling.

Clear		Log Run	
A		D	
B			

Lumber Scaling, Inches.

Flooring, clear		Log Run	
No. 1		A	
No. 2		B	
No. 3		C	
No. 4		D	

Lumber Scaling, Inches.

Three uppers, 1 in.		Log Run	
1¼ & 1½		A	
Selects, 1 in.		B	
1¼ & 2 in.		C	
		D	

Joist, Scantling and Timber.

12 to 18 feet		Log Run	
20 feet		A	
		B	
		C	
		D	

Plank and Timber, 12 inches and over, $1 extra.

Wide Select and Common Lumber.

Clear (No. 1 com. 1 in. and 1¼ in.)		Log Run	
		A	
		B	
		C	
		D	

Lath, Shingles and Pickets.

Lath, No. 1		XXX	
No. 1		Dressed	
Shingles, river brands		Pickets	
XXX		Dressed	
Clear butts		Log Run	

New York City.

NEW YORK, Mar. 3rd, 1888.

Black Walnut.

⅝ in., all clear	$75 00@ 82 00	Culls, 1 in.	$35 00@ 37 00
1 and 1¼ inches	92 00 97 00	Culls, thicker	37 00 40 00
1½ and thicker	98 00 105 00	Counter tops, 1¼ in.	22 00 25 00
Rejects	52 00 55 00	and over	112 00 125 00

Poplar or White Wood.

⅝ in. 10 inches and over	22 00@24 00	1¼ to 2 inch	24 00@26 00
¾ in. coffin boards	27 00 28 50	2½ and thicker	27 00 30 00
1 inch, 10 inch and over	28 00 30 00	Common 1 to 2 inch	21 00 22 00
1 inch, 8 in. and over	26 00 28 50	Culls, 1 in.	21 00 23 00
		Culls, all thicknesses	15 00 15 00

Dressed Poplar.

½ inch panel	24 50@25 00	1¼ in. lg. 4 to 8 in.	21 00@21 50
⅝ inch panel	27 00 28 00	1¼ in. lg. 4 to 8 in.	24 00 24 50
¾ inch panel	29 00 30 00	1¼ in. lg. 4 to 8 in.	27 00 28 50
4, 5, 6 inch casing	30 00 31 00	1¼ in. lg. 4 to 8 in.	28 00 30 00
7, 8, 9, 10 inch casing	32 00 33 00	1¼ in. lg. 4 to 8 in.	30 00 32 00

Ash.

1 inch, white	30 00@ 34 00	Strips, clear	28 00@ 28 00
1¼ to 2 inch	38 00 40 00	Black ash, grade	28 00 30 00
2½ to 4 inch	40 00 41 00	Black ash, culls	11 00 12 00

Oak.

1 inch plain sawed,	37 00@ 39 00	inches and over	48 00@ 51 00
1¼ to 2 inch	37 00 40 00	Thicker	51 00 53 00
Thicker	38 00 40 00	Strips under 6 in.	38 00 40 00
Quarter-sawed, white, all clear, 9-			

Cherry.

⅝ in., white & clear	65 00@ 70 00	2½ and thicker	85 00@ 90 00
1 inch	75 00 80 00	Counter tops, 1¼ in.	100 00 115 00
1 inch strips	40 00 42 00	and over	100 00 115 00
1¼ to 2 inch	80 00 83 00	Culls, all thicknesses	18 00 20 00

Miscellaneous.

Chestnut, clear	35 00@ 38 00	Redwood, California plank	52 00@ 55 00
Chestnut common	20 00 23 00	Hickory, old growth	50 00 60 00
Basswood white	28 00 32 00	Hickory, 2nd growth	70 00 80 00
Basswood common	20 00 23 00	Elm	28 00 32 00
Maple, clear	25 00 30 00	Sycamore	24 00 27 00
Birch, clear	33 00 36 00	Sycamore quartered	35 00 40 00
Birch, 1s and 2s	20 00 30 00	Gum	36 00 41 00
Cottonwood	20 00 21 00	Butternut	45 00 50 00
Redwood, California boards	47 00 50 00		

Buffalo and Tonawanda, N. Y.

TONAWANDA, Mar. 2nd, 1888.

Norway Pine Rough.

No. 1, 1 & 1¼ in.	19 00@20 00	Stocks No. 1, 1 & 1¼ in.	21 00
No. 2, 1 & 1¼ in.	15 00 15 50	No. 2, 1 & 1¼ in.	17 00
No. 3, 1 & 1¼ in.	11 50 12 00	No. 3, 1 & 1¼ in.	12 00
		Scantling 2x4 to 2x12 12 to 16 ft	13 00
		Timber 4x8 to 12x12 12 to 16 ft	21 00

White Pine—Rough.

Uppers, 1 in.	$44 00@46 00	Shelving, No. 1, 13 in	31 00
1¼, 1½ and 2 in.	44 00 47 00	and up	31 00
2½, 3 and 4 in.	55 00 60 00	No. 2, 13 in. & up	22 00 24 00
Selects, 1 in.	36 00 40 00	Fine common, 1 in.	32 00
1¼, 1½ and 2 in.	40 00 45 00	1¼, 1½ and 2 in.	35 00
2½, 3 and 4 in.	45 00 50 00	Common, 1 in.	17 00 18 00
Cuts, No. 1, 1 in.	25 00 28 00	1¼ and 1½ in.	17 00 20 00
1¼, 1½ and 2 in.	32 00 33 00	2 in.	22 00
2½, 3 and 4 in.	37 00 40 00	Comm boards	17 50
No. 2, 1 in.	15 00 17 00	Box, 1 in.	12 00
1¼, 1½ and 2 in.	21 00 22 00	1½ in. & thicker	13 50
Moulding, 1 in.	28 00 32 00	A stocks, 1X10	24 00
1¼, 1½ and 2 in.	28 00 32 00	1X12	29 00
Siding strips, 1 in.	33 00	B stocks, 1X8 to 12	17 50
		C stocks, 1X8 to 12	13 50

Dressed Lumber.

	No. 1.	No. 2.	No. 3
Base and Casing under 6 inches	$33 00	$25 00	$18 00
Base and Casing, 6 inches	32 00	25 00	17 00
Base and Casing, 7 and 8 inches	40 00	28 00	18 00
Flooring, 1 and 1¼ inches, 2½ to 5 in wide	30 00	22 00	15 00
Ceiling, ⅜ in., 2½ to 5 inches wide	33 00	25 00	18 00
Ceiling, ⅝ in., 2½ to 5 inches wide	28 00	22 00	14 00
Ceiling, ½ in., 2½ to 5 inches wide	24 00	18 00	13 00
Philadelphia Fencing	30 00	23 00	21 00
Bevel Siding, 6 inches	23 00	21 00	11 00
Bevel Siding, 5 inches	23 50	21 00	17 00
Bevel Siding, 6 inches	23 00	19 00	14 00
Novelty Siding, 6 inches and over	40 00	23 00	16 00

Shingles and Lath.

Shingles, 18 in. XXX	3 85@ 3 90	Lath, pine No. 1	2 10 2 15
XX	2 85 2 90	No. 2	1 70
X	1 25	Norway	1 60
Shingles, 16 in. XXX	3 00	Hemlock	1 00
XX	2 10		
X	90		

Columbia's Lumber Trade.

Mr. John Hendry, of the Royal City Planing Mills, New Westminster, is in the city, on his way home from San Francisco, whither he went to arrange for timber charters by vessels to Australia, South America and other countries from his mills. Mr. Hendry states that the only obstacle to a very large trade is the unsatisfactory state of the Fraser river channel from the sandheads inwards for a couple of miles. Once a channel is established of say 24 feet, vessels will ascend as far as New Westminster and load lumber at his mills for the countries we have named. He found his principal difficulty to lay in the fact that no chart of the Fraser was extant for the use of the underwriters in San Francisco, New York and London. Steps will be taken to have a proper survey of the lower Fraser made and a chart prepared. Once the river is properly buoyed and vessels can go up Mr. Hendry is of the opinion that the traffic is practicably an unlimited one. Unless the Fraser is dredged the Royal City Mills will be compelled to look elsewhere for a site whereon to erect their mills for their export trade. This will be a serious matter for New Westminster. It is to be hoped the Government will be impressed with the necessity for dredging a channel as suggested by him.

He believes that a reciprocity in the natural products of the soil will be of an immense advantage to this province. In his line of business it would be equivalent to $2 per thousand feet, besides affording a home market, which would consume all the products of his mill even if they were doubled or trebled. He leaves for home to-morrow morning. — *Victoria (B. C.) Colonist.*

EXCHANGE ECHOES.

Chicago Timberman.

Whether there shall be more or less than an average output of lumber during the season of 1888, of course, is impossible to prognosticate with any degree of certainty at present ; but from the tabulated and published statements one inference is plainly deducible at least, viz : that there is an increasing consumption, which augurs well for the maintenance of prices in the future. The only logical conclusion deducible from the statements alluded to is that there is less lumber at the distributing centers than there was a year ago, as well as a smaller supply at the manufacturing centers ; hence, there must inevitably have been an increased consumption. The shortage at the large wholesale markets must be met as early as possible, and this must inevitable result in an active demand as soon as the selling season is fairly inaugurated, which will be in the near future. The indications point fairly and forcibly to the conclusion that there will be no weakening in lumber prices in the absence of unforeseen and unanticipated financial or other disasters generally. Anticipated extensive building operations throughout the country are fairly deducible from market and other reports, and this fact is another guarantee that the spinal columns of the holders of lumber will have no reason to exhibit any sign of weakness during the season of active operations which is approaching.

Northwestern Lumberman.

An anticipatory effect has been exerted upon certain Canadian holders of lumber by the present serious consideration of the free lumber question, since confidence is felt on the other side of the line that duties will be removed. The larger and more independent of the Dominion lumbermen are reported as showing no anxiety to dispose of stocks except at a good profit, believing in an increased demand from the United States by means of the removal of $2 duty, and under this feeling prices have acquired firmness and in some cases have been advanced, though the severe winter season has seriously restricted demand. This condition of affairs, however, appears to be a straw in the wind by which to judge the inclination of Canadian lumbermen. It is apparently more profit that they want rather than increased business. The United States is looked to as a source of demand to keep up a normal activity across the line, in the face of decreased export trade and this could result to a considerable extent without important injury to American prices or shipments, though the course of trade is likely to be changed somewhat by such competitive influences. It does not appear that the Canadians will make extra efforts to place their lumber output by underselling American producers, but rather do they seem to rejoice in the possibility that they will be able to sell their output at an increased price. If demand is small now and margins narrow, it would be quite another affair to sell more lumber in the United States at a good living profit. Yet it does not follow that the increased trade between Canada and the United States would soon reach a point of competition that would cheapen lumber to an extent, as the ordinary individual seems to think it would. There would likely be local friction near the line, but the Canadian flow of lumber would merge into the great stream of trade, and gradually lose its identity as a disturbing influence.

Miramichi (N. B.) Advance.

Now that the claim of the Province on account of Eastern Extension Railway is to be paid, it is to be hoped that the local government will recognise the claims of the lumber industry by relieving it of a portion of the heavy stumpage burdens imposed on the plea of revenue necessity. The fact that the lumber business is much depressed, that prices are low in the world's great market, with no prospect of material or permanent increase ; that the cost of lumbering operations is growing greater every year, and that the accumulated burdens of business have driven many operators to the wall and left many mills in idleness, ought to warn the government and legislature that the continued imposition of the existing high stumpage charges is suicidal. An opportunity is now presented for reducing these rates, and instead of new and, perhaps, needless avenues of expenditure being opened, let there be a just measure of relief afforded to our most important staple industry.

London Timber.

Whatever may be the opinion held as to the improvement or not of general trade, there can be no doubt as to the favorable development of business in the hardwood line. From its rise a month or two before the close of last year until now, the progress has been constant and regular, and at the present time matters look equally promising with the condition of the market at any time during that period. The outlook for the future is good, and there is a reasonable prospect of a continuation of the present revival of business. There are not only in this district, but all over the country, a large number of commercial enterprises either projected or already started, which largely increase the consumption of hardwood, and so considerably benefit the trade during the season. It is anticipated that there will be a large distribution of hardwood this year, and up to the present there has been nothing to induce a modification of those anticipations ; but on the other hand the general report is that the demand is more lively, whilst stocks are within very moderate limits, the rate of supply not equalling the distribution. As the issue of these features the condition of the market is firm, and from the present outlook a good and improving trade appears to be assured.

The Chicago Timberman.

The Michigan lumbermen who are strenuously opposed to the removal of the tariff on Canadian lumber, are watching congressional action with a vast amount of anxiety, believing as they do that free-trade in lumber and logs as proposed, will be fatal to the interests of Michigan's great industry ; some of them are a good deal vexed at the bill recommended by the ways and means committee, and in substantiation of their position on this question refer to the fact that there has recently been an enormous rise in the value of Canadian timber limits from about $400 per square mile to $3,000 per mile. They say that this fact does not indicate that American consumers are to receive the benefit of cheap lumber, or Michigan mills to receive the benefit of cheap logs, as has been argued by the advocates of the removal of the duty on lumber but, rather as one says, " that the Canadian government will secure an enormous increase in its revenue, and Canadian manufacturers will secure about $2 per thousand feet advantage over American manufacturers, and the benefit of the whole range of the American markets." Michigan lumbermen, at all events, are not, as a rule, in love with the advocates of the proposed measure.

CORRESPONDENCE.

TORONTO, March 12th., 1888.

Editor Canada Lumberman,

DEAR SIR.—You ask for a few words regarding my business the past year, and in reply would say that my operations for a retail yard the last twelve months were very extensive, having handled upwards of four million feet of all grades of lumber, my margin on same being very close indeed. Bills cut so close and heavy losses in some cases have left small profit, and we retail lumbermen have now got to make up our minds to one of two alternatives, either to do a small business and look after it properly, or take our capital and put it into some other business. For instance, to take a bill from a builder we have to figure it down as low as a wholesale man, who has no yard to keep up, or to lose it altogether. Again, the wholesale men in nearly all cases, have a portion of their lumber piled off on the Northern, Grand Trunk and Midland R. R. yards, and if a carpenter, butcher, baker, taylor, or any other tradesman wants half a thousand of lath or shingles, two or three scantling, or one hundred feet of boards, down they go to any of those places, and would you believe it, buy it from those who call themselves wholesale men at as low a rate as they would charge me if I took two or three thousand feet. How can the retailer expect to make a profit in the face of such unrighteous work as that? (I may here say there are a few exceptions but very few). All I can say is no wonder the trade is in such a demoralized state.

The retailers have been trying to form an association to put a stop to such work, and have been ably assisted by five of the largest wholesale dealers in the city, but whether from the present depression, or that some of the concessions they will have to sign to bind themselves might injure their trade for a time, half of them have withdrawn, and unless they form soon I have no hope of them organizing this season. A most unwise policy, particulary when all have expressed themselves as having made no money last year. I for one could see great good resulting from such an association, and the few meetings that were held in discussing a few matters, furnished information in an informal manner, that I consider is worth a few hundred dollars to me. How in the world a body of men commanding so much capital as the retail lumbermen of this city do can be so blind to their own interests I cannot account for. However good may flow from the agitation already commenced, as the wholesale men will have to be very chary of what builders they supply, and find out if they are customers of those yards they supply most to, and if so, it is but quite right that they should give them shorter time and charge them at least 50 cents per thousand more, as I fear the retailer will not be imposed upon any longer.

Another thing now that the Northern has come into the hands of the Grand Trunk we may look for a change and will realize that they will find other uses than making a piling ground of such a valuable piece of property.

Now, Mr. Editor, that I have opened up this much vexed question between the wholesaler and retailer, and taken up so much valuable space in your paper, I trust you will call upon every interested subscriber to give us their views on the matter.

Yours respectfully,

J. CARNOCHAN.

EUROPEAN NOTES.

—Baltic goods in London are said to be greatly diminished.

—Steamers are offering Montreal to London, at last year's opening rates, viz : 47s. 6d. for deals.

—Public timber sales in London seem to be more numerous than ever. The bidding, as a rule, has been active and well sustained.

—Free-on-board business is reported as very quiet in England, stocks are mostly cleared for first open water, and imports are coming in for later deliveries.

—Messrs. Browning & Co. have issued a very neat stock list made up principally of Canadian goods, containing a good assortment of all sizes of dry pitch pine and spruce, of which they make a specialty.

—The returns issued by the London Board of Trade shows that the imports during the month of February increased as compared with the same month last year £1,020,000, and that the exports increased as compared with February of last year £1,740,000.

—The sales of Quebec timber in Glasgow, so far this year from all accounts have been very limited. Up to the present a considerable business has been done by the Quebec merchants for spring shipment. Most of the importers are acting with caution, however, and the advanced f.o.b. prices being asked are deterring not a few from going in for very large cargoes. Of course the timber merchants round the coast have all been going in for their usual supply, and most of this business is now closed.

—Denny, Mott & Dickson, of London, in a recent circular speaking of Canadian timber say : "The market being practically bare of square white pine and oak, negotiations are confined to contracts for next season's goods. Shippers have come over with very enhanced ideas of value, and there seems little doubt that a substantial advance on last year's prices must be conceded by those who adopt the policy of covering themselves at once against their prospective requirements."

—The *Canadian Gazette* states under the heading of Quebec news :— It is understood that some heavy transactions in spruce and pine deals have lately been made in the market. It is said that McArthur Bros., W. & I. Sharples, and Dobell, Beckett & Co., have bought up most of the next season's cut of nearly all the more important mills in the Province, to the value of about £7,000,000, sterling." If this statement was true, adds *Timber*, the three above mentioned firms would be doing about 40 per cent. of the export trade of the vast Dominion of Canada. The total exports of all articles from the Dominion of Canada to all countries—timber, grain, cattle, hides, &c., &c.—for the fiscal year ending 30th June, 1886, was $85,251,314, or equal to about £17,000,000 sterling.

TRADE MARK

CANADIAN RUBBER COMPANY OF MONTREAL.

TRADE MARK

Corner Front and Yonge Streets, - - Toronto, Ontario.

MANUFACTURERS OF

PATENT PRESSED RUBBER BELTING DOUBLE STRIP

Valves, Gaskets, Car Springs, &c.

ENGINE,

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HOSE.

STEAM,

BREWERS

and FIRE

HOSE.

Rubber Blankets, Carriage Cloths,

Wringer Rolls, Stopples, &c.

RUBBER * HORSE * CLOTHING.

Mould Goods of all Descriptions

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CANADIAN RUBBER COMPANY

J. H. WALKER, Manager.

TORONTO, * ONTARIO.

TRADE MARK

The Gutta Percha and Rubber Manufacturing Company of Toronto.

Offices : 43 YONGE STREET, TORONTO. *Factories : PARKDALE, ONT.*

Sole Manufacturers of "Monarch," "Red Strip," and "Lion" Brands of

RUBBER BELTING

TRADE MARK.

Particular attention given to special Belts for Lumber Mills.

Our celebratd "Maltese Cross" Rubber; "Baker Fabric" and Ajax Cotton; "Giant" and Light Linen, and Fire Hose constantly in stock.

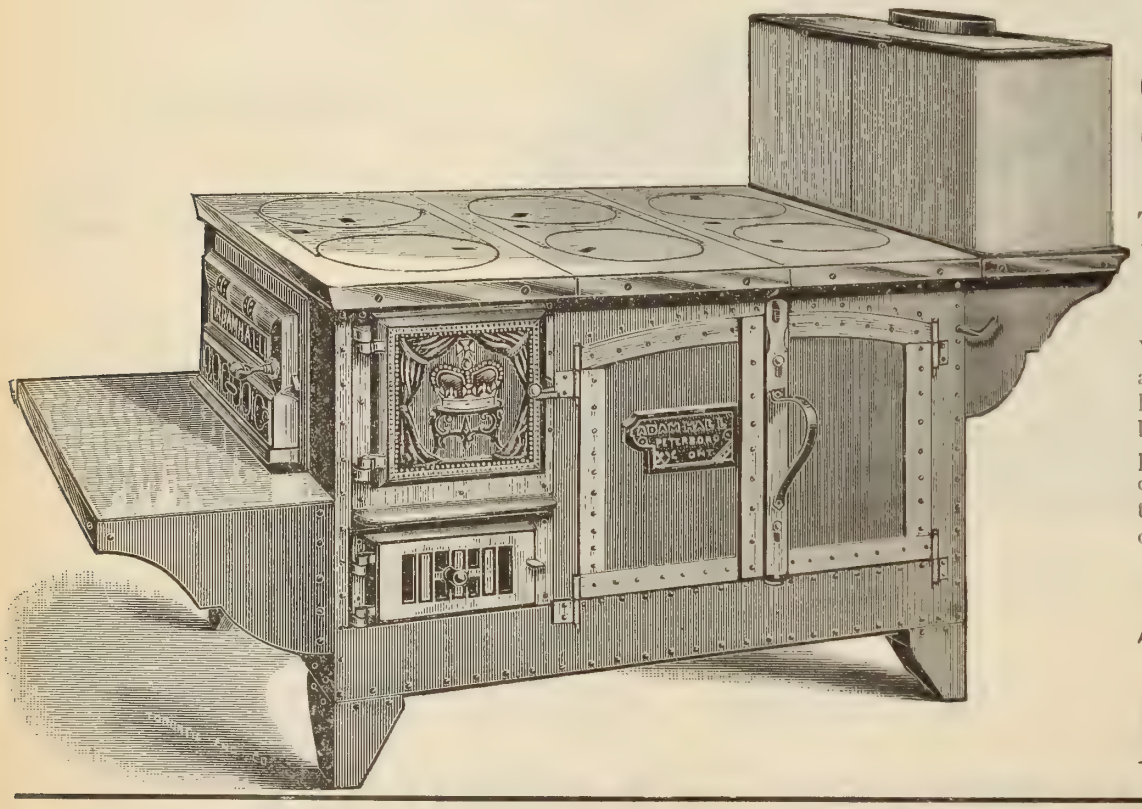
LUMBERMEN'S HEAVY RUBBER CLOTHING, OUR OWN MANUFACTURE.

Address all Communications to THE GUTTA PERCHA & RUBBER MFG. CO. OF TORONTO, 43 Yonge St.

LUMBERMEN'S PRINTING.

We wish to call the attention of LUMBERMAN readers to the facilities which we possess for doing all kinds of Printing for the lumber trade. Having equipped our office with the very latest designs in type and presses, we are prepared to furnish at the lowest price for first-class work, all kinds of stationery used in connection with the lumber business. Letter and Bill Heads, Cards, Statements, Envelopes, Blanks of all kinds, Stock Books, Day Books, Ledgers, Price Lists, Etc. Write for Estimates.

THE LUMBERMAN JOB DEP'T.



WROUGHT IRON SHANTY COOK STOVES

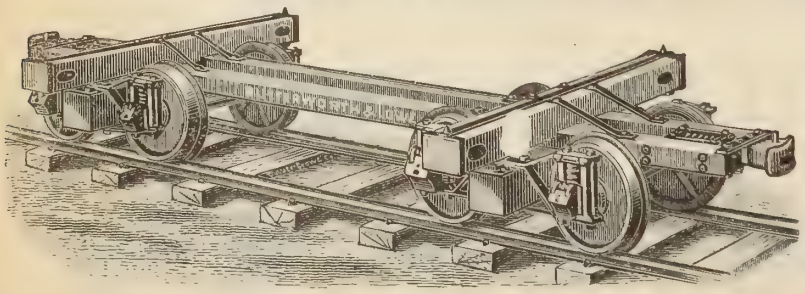
The BEST ARTICLE Ever Offered to the Trade.

I have much pleasure in drawing attention to my Wrought Iron Cooking Stove, for Shanty, Hotel and Boarding House use. These stoves are made of heavy sheet iron, the top and lining of the fire box being of heavy cast metal, and all the connecting parts of heavy wrought iron work. The dimensions of these Stoves are as follows :—Top surface contains six 10-inch holes, fire-box 28 inches long, and one oven 28x24x16.

EVERY STOVE GUARANTEED.

All the necessary TINWARE and CUTLERY for Shanties supplied at the Lowest Prices.

Adam Hall, Peterboro'.



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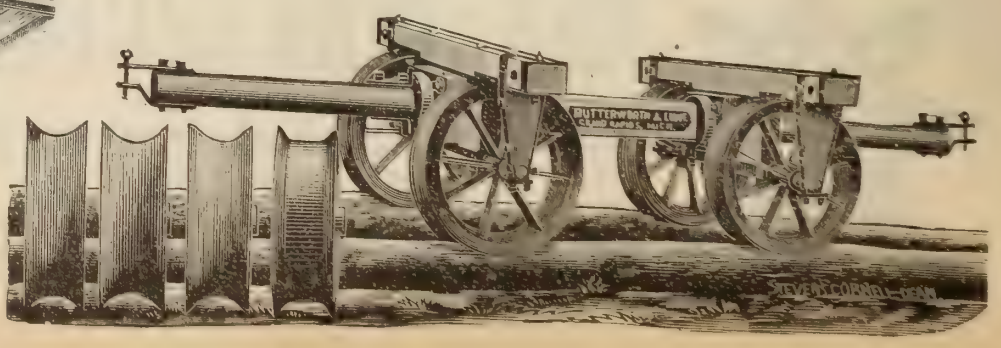
Logging Cars, Logging Trucks, Pole Road Cars, Wheels Chilled and Unchilled, Flat Faced and Concave, for every Description of Logging Road.

Send for Circulars and Mention this Paper.

BUTTERWORTH & LOWE,

Grand Rapids, Mich., U. S



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RELIABLE! RAPID! CHEAP!

GRANANTEED TO DRY

—IN—

Best Manner Possible

ALL KINDS OF

HARD and SOFT WOOD LUMBER.

WRITE*FOR*CATALOGUE.

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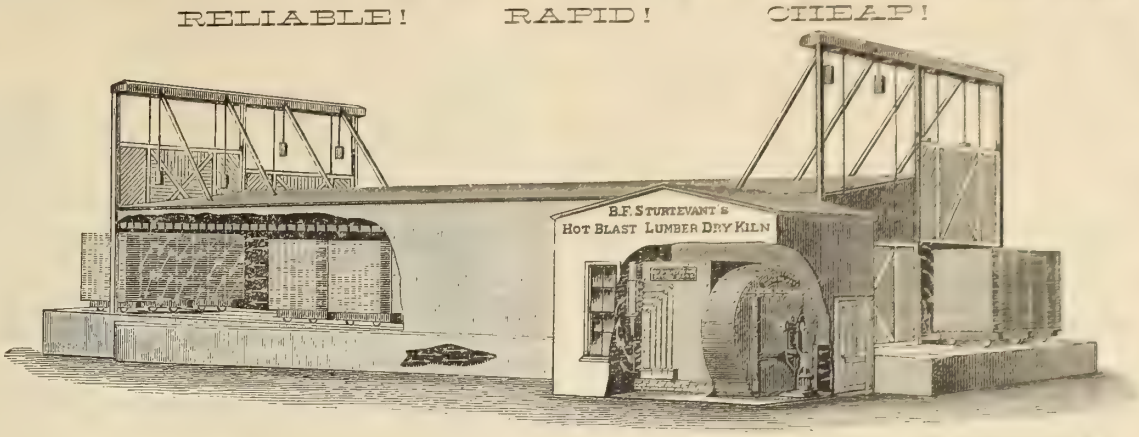


NO WARPING, CHECKING AND BLUEING

—with the—

STURTEVANT

Patent Hot Blast

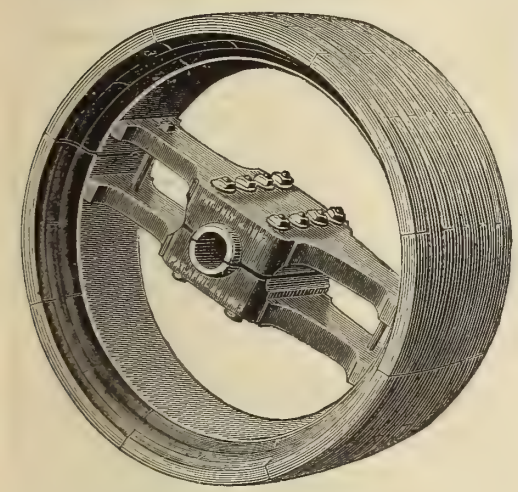
Steam Heating

Apparatus.

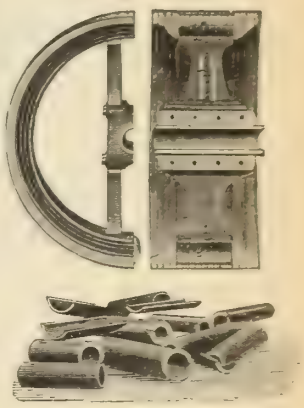
31 N. CANAL STREET, CHICAGO.

B. F. STURTEVANT, Patentee and Sole Manufacturer, BOSTON, MASS., U. S.

DODGE * PATENT * WOOD * SEPARABLE * OR * SPLIT * PULLEYS.



BEST BELT SURFACE, LIGHTEST, STRONGEST, BEST BALANCED AND MOST CONVENIENT PULLEY IN THE WORLD.



With our Patent Bushing System

Every pulley will fit 22 different sizes of shafting, and guaranteed to give from 30 to 60 per cent. more power from same belt and like tension than any iron or steel pulley. Every pulley a split pulley, 70 per cent. lighter than cast iron and 50 per cent. lighter than wrought iron or steel. Strong enough for any power required. Made in any size from nine inches to sixteen feet diameter.

As a material for pulleys wood is better than iron from the fact that it holds a belt much better. Most good mechanics are aware of this fact, but it may not be generally known how great is the difference, and for the benefit of our readers we give the result of two tests made and published by two of the most eminent mechanical authorities :—

Portion of Circumference embraced by Belt.	Rel. value of leather belt	
	On Wooden Pulleys.	On Iron Pulleys.
.20	1.80	1.42
.30	2.43	1.69
.40	3.26	2.02
.50	4.38	2.41
.60	5.88	2.87
.70	7.90	3.43

Morin.—Appleton's Encylopedia of Mechanical Arts.

Portion of Circumference embraced by Belt.	Rel. value of leather belt	
	On Wooden Pulleys.	On Iron Pulleys.
.20	1.90	1.40
.30	2.40	1.70
.40	3.30	2.00
.50	4.40	2.40
.60	5.90	2.90
.70	7.90	3.40

Haswell.—Engineers' and Mechanics' Pocket Book.

A Dodge Patent Wood Pulley is better than iron from the fact that it can be made very much lighter and thus save weight on the line shaft and bearings, thereby saving in expense from a saving in friction.

The advantages of the separable pulley are very apparent. By its use the necessity of taking down shafting already up for the purpose of putting on additional pulleys when needed, or to be changed, is avoided, thus saving time, trouble and expense, while their first cost is much less than any other pulley made not having these advantages.

The Compression Fastening whether used with keys in iron center or compression alone, keeps the pulley always in balance as the compression on the shaft and key is always towards the center.

The most perfect balanced iron pulley fastened with set screws or key, is invariably out of balance by being thrown from the centre, this fact is obvious to all mechanics.

The advantages of our mode of fastening over any other are : It is the only absolutely true fastening for a pulley. A pulley once properly balanced cannot be thrown out of balance in securing with this fastening. A pulley fastened with key or set screw in the ordinary way, cannot be screwed without lifting the pulley from the shaft at that point where the key or set screw is placed, thus throwing the pulley out of balance.

Manufacturers should carefully avoid any pulley with a set screw fastening for shaft ; also a key unless the pulley is compressed on it. The Dodge Patent Bushing system is a great convenience to manufacturers and also to agents who carry pulleys in stock, as with the aid of the patent bushings every pulley will fit 22 different sizes of shafts.

Haswell the acknowledged authority and most quoted by American mechanics, summarizes thus : The ratio is friction of pressure of leather belts, when worn over wooden pulleys is 47, over turned cast iron pulleys, 24, thus showing the average advantage of a wood pulley over iron to be 50 per cent.

We also manufacture GROOVED HARD WOOD PULLEYS FOR TRANSMITTING POWER BY MANILLA ROPES (tallow laid) by the Dodge Patent System of applying the ropes and taking care of the slack.

Illustrated catalogues of belt pulleys and the rope transmission system will be furnished on application to

The Dodge Wood Split Pulley Co., 89 Adelaide St. W., Toronto.

BOWDEN & CO.

A. GOODBY,

Manager.

Lubricating Oils.

Sole consignees of Southwick's Celebrated Cylinder, Engine and Machine Oils

MANUFACTURERS OF HIGH GRADE OILS.

Millmen requiring Oils of uniform quality and high grade should write us. Sole makers of **Crown Lubricant and Crown Crank Pin Grease**, the greatest thing in existence for Shafting and Engines, cups supplied. Note our address :

BOWDEN & CO., 59 Adelaide Street, East, Toronto, Ont.

REPRESENTATIVE TORONTO LUMBER FIRMS

TENNANT & CO.

Wholesale Dealers in

LUMBER, LATH & SHINGLES

Dressing and Better Pine.

Also Hemlock in all sizes a Specialty.

OFFICE:
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THOS. H. WILLMOTT. A. K. McINTOSH.

WILLMOTT & McINTOSH,

Wholesale Dealers in

LUMBER

44 and 46 Front Street East,

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Lumber Shipped to all Parts by Rail or Vessel.

Agents for the Celebrated LUFKIN BOARD AND LOG RULE.

Prompt Delivery in all Cases. CORRESPONDENCE SOLICITED.

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BILL STUFF CUT TO ORDER.

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Manufacturers and Wholesale Dealers in

PINE & HARDWOOD LUMBER

Office: 9 Victoria Street,

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Lumber Shipped to all parts.

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Wholesale Dealers in

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Nos. 16 and 17 Imperial Bank Buildings,

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Office: Union Loan Buildings, 28 & 30 Toronto St.

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PINE AND LUMBER HARDWOOD

Office: Dundas Street,

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Manufacturers and Wholesale dealers in all kinds of

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Ship Plank, Decking and Long Bill Stuff, a Specialty.

Mills at Burlington, Bronte and Huntsville.

Head Office: 16 UNION BLOCK, corner Toronto and Adelaide Sts., Toronto.
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CANADA DOCK,

LIVERPOOL, = = = = ENGLAND.

Is prepared to buy all classes of

HARDWOOD LUMBER

Either in Log or Dimension Stuff for Prompt Cash.

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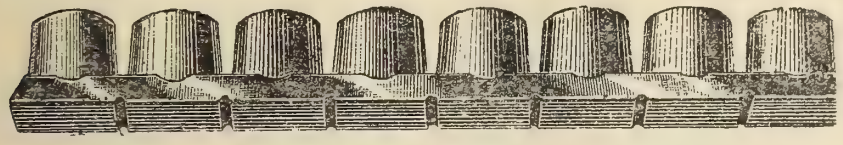

A NON-FIBROUS, ANTI-FRICTION BOX METAL, for Machinery Journal Bearings. Guaranteed Copper-Mixed, and to do work that no other metal can. Hardware Stores all keep it; if not order direct.

ALONZO W. SPOONER, Patentee and Manufacturer, PORT HOPE, ONT.

WANTED AND FOR SALE.

Announcements in this department will be inserted at the uniform rate of ten cents per line, each insertion, payable in advance. For three or more consecutive insertions of the same advertisement a discount of 25 per cent. will be allowed. Eight words should be counted as one line.

WANTED—A quantity of red oak and black ash. Nos. 1 and 2. Would contract for green or dry stock.
MANHARD & COMPANY,
Cape Vincent, N.Y.

TIMBER LIMITS FOR SALE.

TIMBER LIMITS FOR SALE IN ONTARIO, Quebec and Manitoba. W. J. FENTON & Co., 50 Adelaide Street, East, Toronto.

FOR SALE CHEAP.

A WATERPOWER CIRCULAR SAW AND Shingle Mill with ten acres of cleared land, log house and stable situated on South river, about 4½ miles from Trout Creek Station on the Northern Pacific Junction R. R., convenient to School, Churce and Post Office and s large settlement in Hainsworth. Also about 30.000 feet of dry Hardwood lumber, cut and piled about two years, and about 50.000 feet of Hardwond sawlogs, principally Birch. If not sold sooner, will cut to order this coming summer. For information apply to
THOMAS CORKERY,
Barrett, Ont.

SAW MILL FOR SALE.

FOR SALE, IN THE VILLAGE OF BELmorn, Sawmill in first-class running order, Will be sold with or without stock. For terms, apply to
H. R. PERKINS,
Belmore, Ont.

PINE TIMBER LIMITS FOR SALE.

Two choice Timber Limits in Northwest Territory, Canada, 100 square miles each; great bargain. Also, limits in Georgian Bay, Algoma and Muskoka districts for sale. JOHN SCULLY, Toronto, dealer in Pine Landsand Lumbermen's plant and supplies. Light iron and steel rails in stock.

FOR SALE.

CANADIAN PATENT NO. 45,597. DATED November 22nd, 1887, for improvement in SAW SWAGES. It is the best Swage made for band saws, and will do work equal to any other for circular saws, it being very simple and cheap, and easy to operate. Send for copy of specifications and drawings to
C. WARD, *Patentee*,
Haring, Wexford Co., Mich.

CHARLES A. BRAMBLE, D. L. S.

Frederickton, New Brunswick.

SURVEYS AND REPORTS UPON TIMBER Lands in any section. Can effect sale of properties occasionally if desired. References from former employers.

J. K. POST & Co.,

LUMBER MERCHANTS

And Shipping Agents.

OSWEGO, N. Y.

IRON AND STEEL RAILS.

A QUANTITY OF SECOND-HAND RAILS, 30 and 40 lbs. to the yard, for sale Cheap. In good order for re-laying.

JOHN J. GARTSHORE,
49 Front Street West, Toronto.

SEALED TENDERS marked "For Mounted Police Clothing Supplies," and addressed to the Honourable the President of the Privy Council, Ottawa, will be received up to noon on Monday, 16th April, 1888.

Printed forms of tender, containing full information as to the articles and quantities required, may be had on application to the undersigned.

No tender will be received unless made on such printed forms. Patterns or articles may be seen at the office of the undersigned.

Each tender must be accompanied by an accepted Canadian bank cheque for an amonnt equal to ten per cent. of the total value of the articles tendered for, which will be forfeited if the party decline to enter into a contract when called upon to do so, or if he fail to complete the work contracted for. If the tender be not accepted, the cheque will be returned.

No payment will be made to newspapers inserting this advertisement without authority having been first obtained.

FRED. WHITE,
Comptroller, N. W. M. Police.

Ottawa, March 12th, 1888.

Notice to Contractors.

Sealed Tenders, addressed to the undersigned, and endorsed, "Tender for Carpentry, Joiner, and other Works, &c., of Parliament Buildings," will be received at this Department until twelve of the clock, noon, on Tuesday, the SEVENTEENTH DAY OF APRIL next, for the carpentry and joiner, roofing, slating, iron work in roof construction, etc., painting and glazing, labor and materials, and other works, etc., in connection therewith, required for new Parliament and Departmental Buildings.

Printed forms of tender can be obtained at this Department, and persons tendering are specially notified that they will not be entitled to have their tenders considered unless the same are made on and in compliance with these printed forms, signed with the actual signature of every person tendering (including each member of the firm), followed by his postoffice address, and with all blanks in the forms properly filled up.

Each tender must be accompanied by an accepted bank cheque, payable to the order of the Commissioner of Public Works for Ontario, for the sum of three thousand dollars, which will be forfeited if the party tendering declines or fails to enter into a contract based upon such tender, when called upon to do so. Where the party's tender is not accepted, the cheque will be returned.

For the due fulfillment of the contract, satisfactory security will be required on real estate, or by the deposit of money, public or municipal securities, or bank stocks, to the amount of five per cent. on the bulk sum, to become payable under the contract, of which five per cent., the amount of the accepted cheque accompanying the tender will be considered a part.

To each tender must be attached the actual signature of at least two responsible and solvent persons, residents of Ontario, willing to become sureties for the carrying out of these conditions, and the due fulfilment and performance of the contract in all particulars.

Printed copies of the specifications can be obtained on application at the Department.

The Department will not be bound to accept the lowest or any tender.

C. F. FRASER,
Commissioner, &c.

Department of Public Works for Ontario.
TORONTO, 24th March, 1888.

Our readers will confer a favor by mentioning this Journal when writing to Advertisers.

TAPER PIKE POLES.

Peevey Stocks and Cant Hook Handles.

The Pike Pole handles are twelve and thirteen feet long; made of the best Straight Rock Maple; are turned in a machine made expressly for the purpose, and are 1⅜ inches in diameter for one-half their length, being then tapered to one inch at small end, and chucked to fit ferrule. We are the only manufacturers in the world who have the system and machinery for turning out Taper Pike Poles successfully.

THEY SELL ON SIGHT AND GIVE THE BEST OF SATISFACTION.

Price of Peevey Poles, Peevey Stocks and Cant Hooks, $25 per Hundred. Sample Poles sent for 25c.

The following are a few of the firms who have used these Poles for several seasons: D. Ullyott, Esq., J. M. Irwin, Esq., Geo. Hilliard, Esq., Peterborough; Gilmour & Co., Trenton; M. Brennan & Sons, Hamilton; Gilmour & Co., Chelsea, Que.; M. Boyd & Co., Bobcaygeon; Muskoka Mill & Lumber Co., Muskoka Mills; The Rathbun Co., Deseronto; Heath, Tait & Turnbull, Huntsville; Cookshire Mill Co., Cookshire, Que.

WM. FORSYTH, Peterborough, Ont.

The Ontario Canoe Company, Limited.

PETERBOROUGH, ONTARIO.

Manufacturers of all kinds of PLEASURE, FISHING and HUNTING

CANOES

Patent Cedar Rib Canoes, Patent Longitudinal Rib Canoes, Basswood Canoes, Folding Canoes, Paddles, Oars, Tents, etc., etc.

GOLD MEDAL LONDON FISHERIES EXHIBITION, 1883.

J. Z. ROGERS, President and Managing Director.

CANOES FOR LUMBERMEN designed to carry any amount of Goods and Chattles and Strongly Built, made to order on Short Notice.

Send 3 Cent Stamp for Illustrated Catalogue.

WANTED!

The undersigned is prepared to purchase any quantity of

Black Ash, Red Birch, Red Oak and Basswood.

ORDERS SOLICITED FOR

HOUSE BUILDING AND FURNISHING GOODS

Crown Jewel Flour—Unexcelled for Family Use.

If your Grocer does not keep it, order direct from us.

THE attention of Steam Users is directed to our preparation of **CEDAR OIL** for removing Scale and Sediment from Boilers, lessening the quantity of fuel used, and prolonging the life of the Boiler.

THE RATHBUN COMP'Y,

DESERONTO, ONTARIO.

LOGS WANTED

Tributary to Lake Huron.

ONE MILLION FEET OF WHITE PINE,

Also Norway Pine.

Persons having such will address,

LAKE SHORE SAW MILL LUMBER COMPANY,

C. A. KRAUSS & SONS, Props.

Cleveland, Ohio., U. S. A.

NEWS NOTES.

—A prominent lumberman at Atlanta, Ga., expresses the opinion that free Canadian lumber would ruin the Georgia pine industry.

—Shippers think that the opening rates on lumber will be $1.75 to Buffalo and Tonawanda, and $1.50 to Ohio ports, from Saginaw river.

—Robert Nixon, while logging on the Aroostock, in Maine, near New Brunswick, was instantly killed, a few days ago, by a fall from a load of logs.

—Mr. W. C. Cardwell, Lanark, Ont., who owns and operates a lumber mill and flour mill, will add the necessary machinery for manufacturing rolled oatmeal.

—Mr. F. W. Galbraith, Bethany, Ont., had his saw, shingle and planing mill destroyed by fire March 11. Loss about $3,000. The works will be rebuilt.

Through an oversight of the proof-reader the dates at head of the various market quotations were not changed. They should be dated at the end of March.

—The Chemainus mill, the only exporting mill on Vancouver's Island, B.C., has loaded twelve vessels since August 1st last, carrying over 10,000,000 feet of lumber.

—Messrs. Erb & Abrams, Apohaqui, N. B., include in their manufacturing works a sawmill, a gristmill, a machine-shop and a factory for the manufacture of sashes, doors, etc.

—It is reported that two large lumber firms will locate at Sault Ste. Marie in the spring, for handling manufactured lumber, and two new planing mills there are also projected.

—The Gutta Percha and Rubber Manufacturing Company, Toronto, have been awarded the contract for supplying the fire department of Hamilton, Ont., with 2,000 feet of cotton hose.

—Messrs. Bleakney & Jonah, Elgin, N. B., are a new firm who have recently bought out the plant and business of the Elgin Manufacturing Company, that town, manufacturers of lumber, wooden-ware, etc.

—The new mill of the John Spry Lumber Company, at Sault Ste. Marie, Mich., will be commenced shortly, and will have a capacity of from 80,000 to 100,000 feet daily. It will probably be completed by September.

—John Welde, of Bay City, is to try the experiment of sawing pine with a thin circular, and this season will run one of about one-half the gauge of the ordinary circular. He is confident that it will give satisfactory results.

—Carleton Place, Ont., cuts at its two sawmills between sixty and seventy million feet of lumber a year, and its woollen factories make seven or eight thousand yards of goods a week. About twenty-five car loads of freight per day is sent out.

—In the free-on-board trade in London business may be said to be at a standstill. Occasional sales are being made at wholesale prices, but as far as we can learn these were for special sizes, and no new features have developed themselves.

—W. J. Macauley, of St. Paul, has just arrived here. He reports having sold the Norman saw mills near Rat Portage, Lake of the Woods, in which he holds a leading interest. It is understood, however, that the sale has not yet been legally completed.

—The prospect of lumber being placed on the free list is said to be causing a perceptible appreciation in the value of timber lands in the Lake Superior district and other accessible regions of Canada to the frontier. The result of the placing of lumber on the free list would no doubt cause quite a boom to the Canadian lumbering industry, one of the first features of which would be an advance in timber lands, following an increased demand for limits from American investors.

—The Alberta Lumber company will shortly ask a vote of its directors on the proposition to raise $159,000, on the security of the company's property. This company has extensive timber limits in the Red Deer river country north of Calgary, which it purposes developing, for which the money is wanted. Some machinery was taken to the limits last summer to establish a mill, but little else has yet been done, and it is not likely that any great amount of manufacturing will be done for some time. The country wants two things first before extensive lumbering operations would pay. These are: Settlers and a railway. The former are going in to the district to some extent, and there is a charter out for a railway. A charter, however, does not always mean a railway, and it may be several years before the railway is built.

—A correspondent writing from Madawaska, N.B., says the soft weather has materially retarded hauling operations, and that it is very doubtful if the bulk of the lumber will be got off. Snow is scarce and it is not thought that there will be sufficient water in the small streams to float the logs.

—Alexander Gibson, a heavy lumberman of New Brunswick, is going largely into the deal business this year. It is reported that he has bought up about all the deals in market at St. John, and in that neighborhood, and has altogether between 15,000,000 and 17,000,000 feet. He will begin shipping very soon.

—Another strike is threatened in Toronto among the builders' laborers, who are asking for an increase in wages. Up to the time of going to press no positive action has been taken, but meetings are being held by both the Builders' and Contractors' Association and the Builders' Laborers' Union. What the outcome of the difficulty will be it is premature to deter mine.

—The mill men on the Saginaw river are making repairs and putting matters into shape for starting operations. A few mills will have railroad logs to commence on, but nearly all will wait until the boom company begins rafting. There is still a large body of ice and snow in the woods, and indications warrant the belief that there will be a good stage of water for log running.

—Advices from St. John are to the effect that 10 cargoes of spruce cleared last week, and that several of the main ports are open and will begin to contribute to the supply very soon. Under such circumstances it cannot be many days before we shall be called upon to chronicle activity in the spruce market. Lath have advanced to $2.50 a thousand, simply because a few dealers have been caught short; there was only a single cargo to offer, which was taken at that price. Two cargoes are afloat, and on arrival may not command over $2.25—it all depends upon the weather, and how bad off dealers are for supplies.

—Lumber from the Pacific cost of British Columbia, which was first introduced into the prairie country east of the Rocky mountains last summer, promises to come quite extensively into use the coming season. Shipments are already coming in, and Pacific lumber is found in yards all over Manitoba and the territories. The Douglas or Oregon pine and cedars are the qualities mostly in demand, these being used for finishing material in place of white pine. Carpenters do not receive the Pacific coast lumber with favor, on account of its tough nature, which makes it considerably harder to work. Cedar shingles from the coast are also coming into use here.

—The Upper Ottawa Improvement Company are asking for an Act of Parliament empowering them to place works on the Upper Ottawa as far up as the Quinze Rapids at the head of Lake Temiscamingue. At the present time the Company's works go no further up stream than the head Des Joachim rapids, from which point the Company take charge of all logs, and convey them down to the mills. By the contemplated works from that point to the Quinze, the company will have complete control of the Ottawa River from Ottawa city almost to the sources of the Ottawa River, and with the building of piers and booms will be enabled to greatly facilitate the log drive, as well as doing away with the present individual drive of lumbermen who drive their own logs to the Des Joachim. Should the Act pass, the company will be in possession of at least 175 miles of river more than what they at present control.

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for Post Office, &c., Joliette, Que.,", will be received at this office until Tuesday, 10th April, 1888, for the several works required in the erection of Post Office at Joliette, Que.

Specifications and drawings can be seen at the Department of Public Works, Ottawa, and at the office of Messrs. Vezina & Desarmier, Notaries, Joliette, on and after Thursday, 22nd March, and tenders will not be considered unless made on the form supplied and signed with actual signatures of tenderers.

An accepted bank cheque, payable to the order of the Minister of Public Works, equal to five per cent. of the amount of tender, must accompany each tender. The cheque will be forfeited if the party decline the contract, or fail to complete the work contracted for, and will be returned in case of non-acceptance of tender.

The Department does not bind itself to accept the lowest or any tender.

By order,
A. GOBEIL, Secretary.

Department of Public Works, }
OTTAWA, 19th March, 1888. }

EXTENSION OF TIME.

The time for receiving tenders for iron staircases for New Departmental Building,
OTTAWA.
is hereby extended to Thursday, 5th April.

By order,
A. GOBEIL,
Secretary.

Department of Public Works, }
OTTAWA, 12th March, 1888. }

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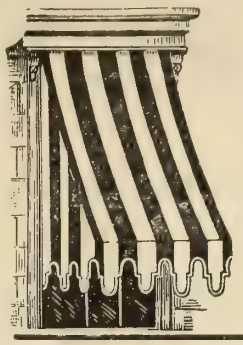

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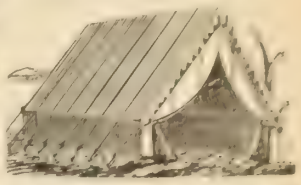

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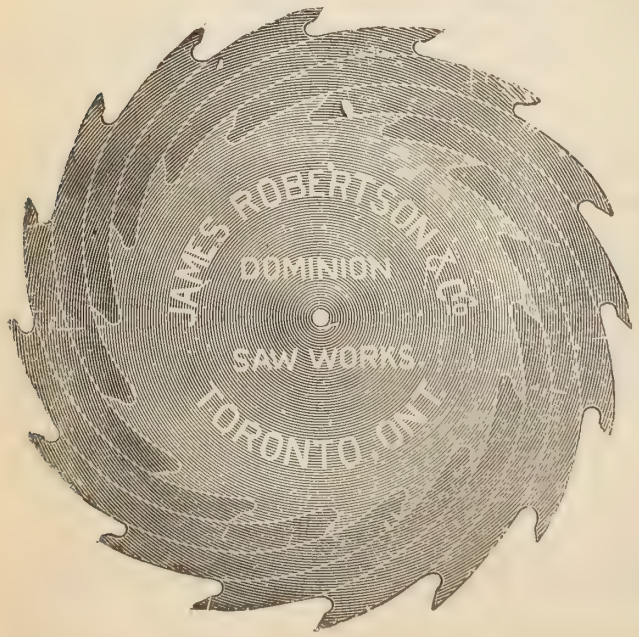

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THE CANADA LUMBERMAN.

VOLUME VIII.
NUMBER 5.

PETERBOROUGH, ONT., MAY, 1888.

ITEMS, $1.00 PER
SINGLE COPIES, 1

THE CANADA LUMBERMAN

PUBLISHED MONTHLY BY

ARTHUR G. MORTIMER,

OFFICE: SIMCOE STREET, PETERBOROUGH, ONTARIO.

TERMS OF SUBSCRIPTION:

One Copy one Year, in Advance, - - - - - $1.00
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Advertising Rates Furnished on Application.

THE CANADA LUMBERMAN is published in the interest of the lumber trade and of allied industries throughout the Dominion being the only representative in Canada of this foremost branch of the commerce of this country. It aims at giving full and timely information on all subjects touching these interests, discussing these topics editorially and inviting free discussion of them by others.

Especial pains are taken to secure the latest and most trustworthy market quotations from various points throughout the world, so as to afford to the trade in Canada information upon which it can rely in its operations.

Special correspondents in localities of importance present accurate report not only of prices and the condition of the market, but also of other matters specially interesting to our readers. But correspondence is not only welcome but is invited from all who have any information to communicate or subjects to discuss relating to the trade or in any way effecting it. Even when we may not be able to agree with the writers we will give them a fair opportunity for free discussion as the best means of eliciting the truth. Any items of interest are particularly requested, for even if not of great importance individually, they contribute to a fund of information from which general results are obtained.

Advertisers will receive careful attention and liberal treatment. We need not point out that for many the CANADA LUMBERMAN with its special class of readers is not only an exceptionally good medium for securing publicity, but is indispensable for those who would bring themselves before the notice of that class. Special attention is directed to "WANTED" and "FOR SALE" advertisements which will be inserted in a conspicious position at the uniform price of ten cents per line for each insertion. Announcements of this character will be subject to a discount of 25 per cent. if ordered for three successive issues or longer.

Subscribers will find the small amount they pay for the CANADA LUMBERMAN quite insignificant as compared with its value to them. There is not an individual in the trade, or specially interested in it, who should not be on our list, thus obtaining the present benefit and aiding and encouraging us to render it even more complete.

THE total number of boiler explosions occurring during the year 1887 is given by the *Locomotive* as 185, killing 254 persons and wounding 314. It is interesting to observe that, as stated to have been "invariably the case," the greatest number of explosions has been supplied by saw-mill boilers, 24.3 per cent. of the whole number being in this class.

MILL OWNERS in Nova Scotia are hoping for improved prices this season, principally owing to the fact of the more favorable outlook for the timber trade in England. It is said that there is little hope of a market for Nova Scotia lumber in the eastern states even with a reduction of duty, as west India and South America shipments pay more than present prices even without any duty. The best American market available is in Maine and New Hampshire, Boston and New York. A new river has lately been opened, known as Gold river, in Lunenburg county, and will this year contribute several million feet for the first time to the markets of the Atlantic.

THE Chaudiere lumbermen and the Dominion Government are mutually concerned at the present time over the question of water rents at the Chaudiere. It appears that the lumbermen are a long way in arrears in the payment of these rents, but have a considerable offset in the shape of expenditure for improvements made by them on these water powers to enable them to be utilized properly. At a meeting of the Banking and Commercial Committee of the House of Commons recently held, Hon. John Costigan, Minister of Inland Revenue, by whose department these rents were collected, explained that he did not want to enter into the claim of the lumbermen to the offset of expenditure for improvements and intimated that it was the intention of the Government to raise the rents as soon as the lease to the lumber firms expired, as the present rents were not nearly adequate considering the value of the water power.

A CHICAGO lumber journal has made the discovery that during a period of ten years the lumber trade of that city has paid out in premiums for fire insurance, a sum estimated but little, if any, short of $3,000,000. The losses during the same time, including yards, planing mills and box factories, have been inside of $500,000, or 16⅔ per cent. of the premiums. It is claimed that the rate paid by lumbermen heretofore has been exorbitant, so much so that steps are now being taken to organize a Mutual Insurance Company, having for its object lumber yard insurance throughout the United States.

NEW railroad projects are becoming as numerous just now as new patents for "the best car coupler extant," the number of which can only be guessed at by those who are familiar with the patent office returns. There seems to be more time taken up by committees in the consideration of railroad projects than anything else, and although they usually pass through successfully, seldom become more than paper charters. It is high time that the Government should exact some substantial guarantee of ability and good intention with each application for a charter before being taken up in committee. The public has to pay too dearly for the consideration of such wild-cat schemes.

FROM all accounts there is an ever-increasing flow of capital from the pockets of northern lumbermen to the southern timber regions, and likewise a migration to the latter point which will have its effect in the different north-western states. As an indication of the decline of the lumber industry in the Wolverine State, it is said that large lumber companies are being formed with timber possessions entirely in the South and with their projected operations there as well. The old fued which so long existed between the North and South is rapidly dying out, and a relationship is rapidly springing up which will result in making the hitherto divisional line, socially and politically, a thing of the past.

IF what is being published can be credited, there appears to be a considerable falling off of late in the receipts of the Grand Trunk Railway Co., so much so, it is said, that every possible expense is being curtailed, and the staff of employees considerably reduced. The Hamilton correspondent of the Toronto *Mail* in a recent letter to that paper said: "There is rumor among the railway employees here that 25 per cent. of the 580 men employed in the Grand Trunk shops are to be discharged on next pay day. The reason alleged is the heavy decreases in the recepts of the road during the past few weeks, said to amount to over $100,000 since the middle of March, which necessitates the reduction of expenses. The officers of the company here are very reticent regarding the truth of the rumor and refused to say whether it is correct or not."

ON various occasions THE LUMBERMAN has advocated the opening up of more extensive trade relations between the Dominion and the British West India Islands, but the Conservative members from the Provinces by the sea are going one better by pressing the question of annexation on the attention of the Dominion Government. The question of more intimate trade relations with those Islands has ever been an alternative one in the Maritime Provinces, and just at this juncture, when these provinces are withering for want of nourishment, it is thought that the strivings of the Nova Scotians and New Brunswickers for increased trade with their neighbors, may be turned into a new channel by working out the plan, not only for closer trade relations, but also for some form of intimate political connection. What we, as Canadians, want is intercourse of commodities with the people that are most convenient to us, who want to trade with us, and whom nature points out as out natural customers, instead of looking across seas to find a market for our products, and form unnatural political alliances in order that we may do so. It does not appear that the Government has yet shown a disposition to take the matter up, but a heavy influence, it is said, will be brought to bear to induce them to do so. The Government's dreams of peaceful conquest may wax wider than the mere proposal to annex Newfoundland would indicate.

PROMPTED by the withdrawal from business in Chicago of a large number of dealers in lumber, the daily papers of that city have recently devoted considerable space to the subject of the future of Chicago as a lumber market. They seem to perceive a decline in the importance of the Northwest metropolis as the great white pine distributing market of the country. The primary reason why Chicago is losing her grip on the lumber trade seems to be the fact that manufacturers find it more profitable to ship by rail direct to the consumer than to Chicago, to go into the hands of the midde men, and be subjected to the necessary charges for dockage and handling. Even the low lake freights do not compensate for these unnecessary expenses. The change in the conditions surrounding the handling of lumber in the West can be traced to the rapid increase in the railroad facilities in all the white pine producing region. Mr. Van Schaick, a well-known authority, is reported as saying that in Chicago's palmiest days as a lumber market, Michigan was the great lumber producing State. The consumptive demand was, as it is still, in a large measure westward. The lumber found its way to Chicago because it was in the track of the movement from the stump to the market. The streams brought the logs to the lakes, and the lakes afforded the means of transportation. But as the timber nearest to the streams was cut off, the logging railroads were built and brought into service, and these have in many cases been incorporated into the railroad system of the State. It has become possible, in consequence, to move lumber from the mill to the market cheaper than by the old method.

AT last the question of railway disallowance in M[illegible] which has been the all-absorbing topic for so many months, seems to have finally been settled in favor of the people of the Canadian North-west. It is understood that, acc[illegible] arrangement for the abandonment by the Canadian [illegible] railway company of its monopoly rights in the North-west, the Government will guarantee $15,000,000 of land grant bonds to be issued by the company, the bonds to run for fifty years and bear 3½ per cent. interest. As security the company pledges the unsold portion of its lands, some 14,000,000 acres, and its earnings from postal subsidies and transportation of militia stores, etc. The interest on the bonds is to be made a charge on the surplus earnings of the company after paying its fixed charges, thus ranking ahead of the ordinary shareholders. The company is pledged to devote the whole of the proceeds of the bonds to the purposes of the railway. It is understood that about $5,000,000 will be employed in extinguishing the floating liabilities and debts, and $5,500,000 will be spent in equipment, the construction of elevators, and otherwise increasing the facilities and earning power of the property, and the balance will go to such other improvements as are necessary and to raising the standard of the road bed, so as to enable it to bear a maximum of traffic at a minimum of cost. Through this arrangement Manitoba is now open to the reception of as many railways as wish to cross the boundary and come into the province. The result of this will be that within the next few months both the Northern Pacific and the M. & M. will have independent lines running into Winnipeg. Both the Canadian Pacific Railway Co., the Government, and the people of Manitoba are to be congratulated on such a reasonable adjustment of a much vexed question.

MR. ROBERTSON of Joggins, N. B., certainly cannot be accused of want of pluck or enterprise. The first failure of his big raft, when it refused to leave the ways and had to be taken to pieces, did not deter him. Stronger ways having been constructed, a still larger raft was successfully launched. Then came the catastrophe of the two ropes parting in a storm, the destruction of the huge raft, and the scattering of the logs far and wide over the ocean beyond the possibility of recovery. All this expense, heavy loss, trouble and disappointment would have deterred many men, but it seems only to have spurred Mr. Robertson on to further efforts. He has now nearly completed a still stronger raft or craft. This time it is piling for the New York market, not saw logs with which he is experimenting. Neither is this new marine monster to depend upon tugs, but to have motion power of its own in the

shape of six masts and their sails, and will carry a crew of twenty men. It will in fact be a solid ship with no hold, or all hold and all cargo if that view is preferred. Twenty-five thousand spruce trees and innumerable smaller pieces of piling are to form a mass 600 feet long, 54 feet wide, and 38 feet deep. Whether she will make her voyage in safety remains to be seen, but the trial is to be made in the early summer. She will not have many prayers for her success from the schooners which are in the business of carrying piling to market. A question has been raised, whether the spruce trees are not saw logs and thus liable to export duties, but Mr Robertson claims that they are really piling and thus exempt from duty and he says that the custom authorities at Joggins agree in his view.

THE committee of the Senate of Canada, which is now conducting an enquiry into the capabilities of the Mackenzie River basin, is obtaining much interesting and valuable information as to that enormous water system and the extensive district which it drains. Some of the witnesses have spoken particularly of the timber to be found in the region. As might be expected from its northerly situation there are a few timber trees for a long distance from the mouth of the river. Further south on the main river and its affluents on this side of the Rocky Mountains there seem to be rather extensive forests but chiefly of a nature that makes them of comparatively little commercial importance though they would be amply sufficient to supply local requirements. On the large rivers that run into the Mackenzie from the westward breaking through the Rocky Mountains the case is different. There are on their banks fine forest of the character of those on the Pacific coast and the excellent timber they can supply could be conveyed great distances by this gigantic water system to the settlers of the district. But that concerns a distant future.

THE statutory power that is asked by the Dominion Administration of rescinding by order in council the export duty on saw logs and shingle bolts, is in addition to the power they previously had of removing or reducing our import duty on lumber, if the United States would consent to reciprocate in this manner. The new power is to facilitate such a bargain for the benefit of both countries. It is indeed of considerable practical importance as congress has been asked if it removes the lumber duty to make it apply only to countries which do not impose an export duty on saw logs. If legislation in the United States takes this shape we will be prepared for it.

IN the United States Congress Mr. Mills' tariff bill has been exposed to the influence of the procrastinating methods in vogue on the eve of a Presidential election, and a discussion of it has been avoided in the House, though not in the press. It is indeed very doubtful what its fate may be even if any action is taken in regard to it. The whole tariff question is indeed full of pitfalls for the politicians. They treat the subject very cautiously and are very likely to postpone any decision. But though there may be a pause till after a President is elected, there is evidently a growing desire for a reduction or repeal of some of the duties which are yielding a revenue that is positively embarrassing from its magnitude. As in Mr. Mills' bill lumber is in most of these propositions one of the articles to be placed on the free list, and there is far less opposition now to the suggestion than there was a few years ago. There is every probability that before very long the United States import duty on Canadian lumber will be totally removed.

IN the last number of this journal reference was made to the trouble then existing between the Builders' Exchange and the Bricklayers' Union, of Hamilton, which for a time almost entirely put a stop to building operations throughout the city. The history of the affair has been furnished THE LUMBERMAN by a thoroughly reliable correspondent, which is as follows: "Mr. W. Hancock owns a quarry in which union laborers were employed, but they refused to work ten hours a day and he discharged them and employed non-union men. The other union laborers in the city then refused to handle his stone, although all the other quarries in the city were non-union, and then Mr. Hancock set about organizing the Builders' Exchange, which when in running order fell in line with his wishes, and without hearing from the other side at all, proclaimed a lockout of all trades until the laborers agreed to handle the stone. This a good many consider was very unjust, as the laborers, as was afterwards assertained, were not supported by the other unions until after this action, and even then only by the Bricklayers' Union. The whole matter was eventually settled a week ago by the contractors again following Hancock's lead and giving an advance of wages to almost every trade in the city. The workmen may be said to have gained substantially everything that they asked, and most of their demands were merely vague and would not have come to anything, or could have been settled by arbitration had the exchange not taken the stand they did. The settlement arrived at has undoubtedly lowered its prestige and will make it much harder to settle matters next year unless some of the more level-headed of the contractors take matters into their own hands and go about it in a business like way and leave out the bulldozing. The general impression among the more sensible builders is that they will in future steer clear of the private quarrels of any of their members, as it turned out on looking deeper into the matter, that the aggrieved quarryman had actually made money by the whole business, and in fact, with the assistance of the hot-headed ones of the party, carried matters pretty much as he pleased for a while. There are no changes to speak of in lumber here. There are still prospects of a fair year's building, but nothing like what would have been but for the trouble above referred to."

LUMBER TAXATION.

REFERRING to our remarks in a late issue of THE LUMBERMAN, anent lumber taxation in the province of New Brunswick, and in reply to our enquiry for further information, the Miramichi *Advance*, usually well informed on such matters, replies as follows:

"The Crown Land policy of the New Brunswick Government is complained of because it has directly affected those actually engaged in the lumber business, mill owners being the chief sufferers. As we understand the matter in the upper provinces the crown timber lands are held in perpetuity. That is, the lessee holds his limits indefinitely, so long as he complies with the regulations of the Department. That being so, a large interest in these lands is acquired by third parties—capitalists—who make advances to the limit-holders, their security being the latter's tunure of the lands, and, therefore dependent on the stability of the Government regulations. The Government of Quebec and—we believe—that of Ontario, also, have increased the mileage and stumpage charges, which, of course, lessons the value of these lands to those who have treated them as a security for moneys advanced to the operators.

"Capitalists who make investments in connection with the trade in this section of New Brunswick do not secure themselves in the lands held by lessees, for the tenure of the latter is for a fixed period—ten years—at the end of which the 'limits' are open to general competition. The capital invested is, therefore, in mills, booms, facilities for moving lumber, such as steamers, barges, scows and other plant connected with the business. The cause of complaint with us is that the time when our largest permanent investments were made in these facilities for carrying on the business, there was no reason to believe that the Government tax on Crown Land lumber would be even one half what it is at the present time. Not only so, but the utterances of members of the Government at that time, in the legislature, were calculated to create the belief that the then existing rates would be decreased rather than increased. We refer to a period about fifteen years ago when an annual allowance of $150,000 a year was arranged for between the Dominion and local governments, to be paid by the latter to the former, in consideration of New Brunswick relinquishing her right to levy export duty. That arrangement relieved the trade of the provincial export tax of twenty cents per thousand sup. feet on all merchantable lumber, and the Government of the day claimed great credit for the 'boon' it had secured for the lumbermen. They showed that they had gained for the public treasury some $75,000 a year more than the province had realized from the export duty and could afford to make things easier than formerly for the lumber industry.

"New Brunswick was, under these circumstances, a promising field for lumber operations on Crown Lands. There was no stumpage tax, the only charge being $6 per square mile for the land, which was held from year to year, only, subject to annual public sale.

"Unfortunately, however, for those whose operations were on Crown Lands, as those of the Northern Counties of New Brunswick were, and are still, immense blocks of the best lumber lands of the province had been granted, absolutely, to land and railway companies, as well as to private individuals, either for about fifty cents per acre, or as subsides for the construction of certain railways To show the relative positions of the Northern and Southern sections of the province in respect of their lands, we group the four Northern Counties together and also the four largest Southern Counties for the sake of comparison—not from the statistics of fifteen years ago, as we would like to do, but those of 1877, which are the only ones we have at hand—and we find the following:

	Total Acres	*Granted*	*Crown Land*
Restigouche, Gloucester, Northum'd, Kent	7,372,885	2,174,774	5,198,111
York, Carleton, Victoria, Charlotte	4,922,460	3,196,298	1,726,172

"The greater part of the acres granted in the second or southern group were in the hands of land and railway companies or pledged to them in 1873, and as these lands had been selected by the owners because they were the best lumber lands of the province, it was natural that the government should be encouraged by the representatives of those counties to increase the taxation on Crown lands lumber, in order that the value of that on the private lands might be enhanced. And we may say that the rest of the province is practically against the four northern counties in this matter, for the seven counties not included in the above groups, although their aggregate acreage is only 5,052,010, had but 1,705,118 of it remaining in possession of the Crown in 1877. Increased provincial expenditure was soon made a plea for increasing the taxation on lumber, and it will not, therefore, be wondered at that the ten representatives of the four northern counties could do little to prevent what was urged in the interest of the counties which sent thirty-one representatives to the legislature.

"The record of the advancing steps by which the New Brunswick lumber dues have reached their present industry-crushing figures is briefly told—

"From the charge of $6 per sq. mile in 1873 they were advanced, in 1874, to $8 per sq. mile and a stumpage tax of 60c per M. on spruce and pine logs cut anywhere on the North Shore and 80c. elsewhere in the province. Mileage dues, however, were refunded to operators who paid sufficient stumpage to cover the amount they had contributed on that account. This arrangement lasted until 1877, with some slight alterations in items of small lumber.

"In 1877 the mileage was continued at $8 but the stumpage tax on merchantable saw logs was made 80c. all over the province, the drawback of mileage being still allowed on payment of stumpage. This arrangement lasted for six years, the leases being renewable for five years and an extension of a year being practically allowed. In 1883 the mileage rate was continued at $8, but the stumpage tax was raised to $1 per thousand sup. feet for spruce and pine saw logs with no drawbacks on account of mileage. Leases were made renewable for ten years at an annual charge of $4 per sq. mile and stumpage dues at $1.25 per thousand sup. feet for spruce and pine saw logs. These are the rates now taxed upon the lumbermen. In addition to this great increase in stumpage on logs, and the retention of mileage fees, the rates on timber have been increased and many items of small lumber, such as boom-poles, etc., which were not taxed before, are made to contribute to the revenue of the province.

"The Government, having set the example, the private land holders have not been slow to imitate and even better it. It will, therefore, be readily understood that the effect of the government's policy has been to place the New Brunswick trade at a great disadvantage. It is well known that mill-owners with large capital invested can neither suspend operations nor realise anything near cost on their properties. They are, therefore, obliged to go on. Many have done so for the past two or three years at a loss. Some of our best known concerns have been squeezed out of the business, as so many idle mills testify. Should prices improve across the Atlantic the best prepared—those who have any capital left—may make both ends meet. If they can do so and pay $1.25 per M., Government stumpage on spruce, it follows that the Quebec lumbermen who pay only 60 cents will make what is a handsome profit in these times. And that is why we expressed the view that the Government of Quebec, which charges $3 for mileage and 60c. per M. stumpage for spruce is merciful, compared with that at New Brunswick which exacts $8 mileage the first year, $4 for subsequent years, and $1.25 stumpage."

New York City.

New York April 27.—The market drags. Dealers evince little disposition to buy, unless they can secure a snap trade and such opportunities are scarce, because sellers look forward to a general thawing out of business. when sales will be more numerous and prices better Many factories are running with small crews, and have but little work on hand. Certain dealers go so far as to say that business in certain directions has been overdone, and if care and sound judgment are not used, a crash of more or less severity will follow. Weakness, if any exists, is among consumers, and yard dealers are hesitating about piling their yards with stock which may not be saleable. A month ago trade was fully as strong as it is now, and at that time the dealers looked forward to a decided improvement in the time which has intervened.

LONDON BOARD OF TRADE RETURNS.

With this issue, says the *Timber Trades Journal*, we publish the timber portion of the Board of Trade returns for March and the past three months, which are rather later in appearance than usual, the Government report not being issued to the public till the afternoon of the 9th inst. Extending our remarks beyond that portion confined to wood, we observe that, although the business of the country continues favorable, it works upward very slowly from a national point of view. The general character of the returns is very much in keeping with the accounts we receive from the provinces; there is certainly an increase of business, and in some places trade may be even rather brisk; but there is no "boom" yet to inspire that confidence in commercial circles which is the customary forerunner of advancing prosperity. People rather think there is a good time coming, but they do not depend on it, and those who try to persuade themselves that the good time has actually arrived, as they see more business doing, wonder that so small a share of it reaches themselves. Last year the Board of Trade returns for March, in the export department, surpassed those of the March previous (1886) by £492,011, and in our imports for the same month there was an increase of £1,303,993, but we did not improve on those figures to a like extent in the March just passed.

All we have to the good in the comparison is £45,224 in the export trade, while our imports show a small deficiency amounting to £204,109. In other words, our oversea trade as a whole has fallen back in the month of March as compared with March last year by £158,885. This may not be altogether unfavorable, but it shows that we are not doing any great things in the way of regaining our former foreign trade. All the same there is something for from discouraging in the figures the Government have just put before us if we look carefully into them. There is an item of £187,196 less of manufactured articles. We are surely able to do without these, and will hardly regret the deficiency; and as food and drink are cheap and plentiful with us, we can very well dispense with the £1,974,965 worth of eatables and drinkables duty free, which we did not receive this March, but did the corresponding month last year. On the three months including March we have gained on the trade of last year for the same period, say—

On the import side	£4,589,039
On the export side	2,557,450
Total increase during the 3 months,	£7,146,489

If our export trade holds its own we shall be sure to have plenty of imports.

So much for the general trade, which it is always desirable to take a glance at before going into that branch, which more nearly interests ourselves, as every section must assimilate to the whole mass. Timber importations at this early period is seldom a trustworthy index to that which is to follow, the foreign trade being very desultory, but we all like to see the season open quietly. It disheartens the most sanguine to see cargoes coming forward early one on top of the other as it were, to be thrown into the public sales as fast as they are unloaded, which has been the case for the past four or five years.

If it be admitted (which some will not allow) that the import season for timber has begun, it must also be allowed that it has commenced with great moderation. Last year at this time we had to record an excess of import over 1886 up to 31st March amounting to within a fraction of 100,000 loads (see No. 554, Vol. 22, page 413), but this year tells a very different tale. The import of timber goods in March just passed is 60,982 loads in arrears of March, 1887, and, instead of the first quarter of the year showing an increase on the previous year's import up to that date, it is, according to the Board of Trade returns, 41,703 loads behind it. We are admonished of large east coast contracts gone out, and of steamers with heavy cargoes on board on their way home, and that the great thaw will be followed by a very considerable fleet of timber-laden vessels for this country. But, if so, that is nothing unusual when the spring trade begins, and in the meanwhile we have the important fact before us that, instead of being supplied with 100,000 loads more than last year as was the case in 1887, we are 41,000 loads deficient, in the comparison, up to the present date, with stocks generally very much below what they stood at then. Our readers can substantiate these figures for themselves from the subjoined timber returns of the Board of Trade, which may be considered very satisfactory as far as they go.

The following are the official returns for the month of March, 1887 and 1888, compared, and also for the three months ending March 31st. 1887 and 1888, compared:—

	Quantity.		Value.	
	1887	1888	1887	1888
TIMBER (Hewn).	Loads.	Loads.	£	£
Russia	1,681	574	9,949	2,438
Sweden and Norway.	63,103	21,515	83,203	29,599
Germany	6,793	1,005	18,121	1,560
United States	3,701	9,475	14,650	40,357
British E. Indies	2,659	1,654	26,571	19,420
Brit. North America	280	692	1,100	2,406
Other Countries	42,668	50,565	38,585	53,427
Total	120,885	85,480	192,179	149,207
TIMBER (Sawn or split, Planed or Dressed).				
Russia	1,643	15	1,919	21
Sweden and Norway.	62,149	24,258	129,523	51,473
United States	14,222	28,159	37,122	76,357
Brit. North America.	7,223	8,240	13,786	16,147
Other Countries	2,632	1,625	9,881	6,889
Total	87,869	62,292	192,231	150,887
Staves (all sizes)	8,877	3,126	53,051	15,117
Mahogany (tons)	2,107	4,896	17,297	41,734
Total of Hewn & Sawn	208,754	147,772	384,410	300,194

Three Months ending March 31st.

	Quantity.		Value.	
	1887	1888	1887	1888
TIMBER (Hewn).	Loads.	Loads.	£	£
Russia	4,421	3,687	14,513	7,898
Sweden and Norway.	110,327	66,912	149,218	88,029
Germany	12,147	8,842	33,182	14,578
United States	8,991	19,597	39,076	83,701
British E. Indies	4,268	5,060	42,910	60,053
Brit. North America.	492	1,012	1,674	3,366
Other Countries	116,438	137,896	106,933	132,480
Total	257,081	243,006	387,506	390,105
TIMBER (Sawn or Split, Planed or Dressed).				
Russia	24,794	6,233	38,592	12,150
Sweden and Norway.	105,443	73,485	220,593	155,557
United States	31,628	44,426	86,755	121,602
Brit. North America.	11,914	19,893	23,198	38,584
Other Countries	7,235	9,349	24,292	30,084
Total	181,014	153,386	393,430	357,977
Staves (all sizes)	17,323	13,908	102,307	89,099
Mahogany (tons)	11,256	9,722	92,510	84,499
Total of Hewn & Sawn	438,095	396,392	780,936	748,082

PERSONAL.

The Ottawa papers report Mr. R. Nagle, the well-known lumberman, as improving though still very ill.

The return of Mr. D. B. Meigs, a well-known lumberman, for Missisquoi, as member of the House of Commons, has been announced in the *Canada Gazette*.

Mr. Tucker David, has vacated the editorial chair of the New York *Lumber Trade Journal* and transferred his interest in the same to his late partner, Mr. J. D. Crary. We wish the new management every success.

One of Nova Scotia's pioneer lumbermen, N. L. Jodd, of St. Margaret's Bay, will be missed this season by his company, having died suddenly last winter. The mill will run as usual, the past winter proving very favorable for the taking out of logs.

M. M. Boyd & Co., the enterprising lumbermen of Bobcaygeon are working on the system of tramways throughout their property, intended to greatly facilitate handling the immense cut of lumber to be cut during the season, which will amount to from ten to twelve million feet.

BUSINESS NOTICES.

The Gutta Percha and Rubber Manufacturing Company, of Toronto, have recently supplied about 3,000 feet of the larger sizes of Monarch rubber belting to Messrs. Hurdman & Co., Ottawa, for their saw mills at that place.

Attention is directed to the announcement in this issue of the Ball Electric Light Co., manufacturers of Electric Light Apparatus, Toronto. Mill owners contemplating introducing electric light into their mills will do well to correspond with the above firm.

As per announcement in our advertising columns, tenders are being asked up to the 30th June next, for the purchase of the estate of George Baptist, Son & Co., Insolvents, of the city of Three Rivers, lumber merchants. As this is a very valuable property there well in all probability be a brisk competition among prospective purchasers.

The Napanee Cement Co., Napanee, Ont., are Manufacturers of hydraulic cement of a superior quality, which they say is specially adapted to the construction of bridges, sewers, cellars, culverts, cisterns, foundations, etc. They also manufacture quicklime of special grade suitable for paper manufacturers, gas purifying, strong masonary and fine finishing work.

The Rathbun Co., of Deseronto, Ont., are calling attention in our advertising columns to the terra cotta manufactured by them, specially intended for rendering fireproof both new and old buildings. It is endorsed by leading architects as the most suitable material in the market for the construction of mills, factories, etc. Terra Cotta is a fireproof, material capably of withstanding the severest test. It is being used in the construction of some of the finest buildings on the continent, and is giving the most universal satisfaction.

We take pleasure in drawing the attention of our readers to the announcement in this issue of the well-known firm of Goldie & McCulloch, Galt, Ont., manufacturers of flour mill machinery, wood-working machinery, safes, vault doors, etc. This old-established firm are too well known to need any introduction from us, and their manufacture can be classed as second to none on the continent. Parties visiting the Queen City would do well to call at the company's warerooms, next to the *Mail* office, where their courteous manager, Mr. Bostwick, will be pleased to show them as fine a sample of safes as can be found in the Dominion.

NEWS NOTES.

—The North Hastings Lumber Co., capital $[illegible] been incorporated.

—Another man gone wrong! Aldermen Patterson, of Cadillac, Mich., employed at Haynes Bros.' planing mill, thinks he has discovered perpetual motion, and has a machine going which he proposes to let alone for 30 days, to demonstrate his belief.

—Pacific coast capitalists are said to have made arrangements with the Maine Compress Company, of Bangor, to introduce its sawdust baling machine on the coast, which presses a ton of wet sawdust into three bales, each 24x24x36 inches, a reduction in bulk of 75 per cent. One coast concern aggrees to bale 20 tons of sawdust daily.

—The Toronto *Empire* says: The wholesale men want the freight agents to see the necessity of constructing a general lumber depot in this city in connection with the Northern railway at the sole expense of the railways. Naturally enough the retail men are kicking against this, as it would deprive them of the earnings of their yards, or at all events it would do so to a great extent. The lumbermen of the Board of Trade went about their object very quietly and pretty successfully represented their story to the public. When, however, they met the railway freight agents the majority of them had not made up their minds as to what they did want, and railway representatives express no opinion whatever on the scheme. A committee was then appointed of the wholesale lumbermen to draw up some definite plan which they will submit to the railways in a few days. There is pretty sure to be some hard kicking on the side of the retailers, and the railway companies, if the matter should be submitted to them by their agents, are certain to consider it in a serious spirit. Though no expression of opinion has so far been given the fact of great piles of timber being placed in even comparatively close proximity to the engine-house and other railway sheds will have to be well considered. At any rate it is well that the public should know what the proposition is and give every side a show.

—The Miramichi *Advance*, in speaking on the stumpage question, "sits down" on the members of the Provincial parliament in the following unique but forcible manner: "The lumber trade, from Kent to Restigouche, has begged, by petition, for some relief from the oppressive stumpage, which is helping to close down mills and drive those formerly employed in them from the country. The Government pleads its revenue necessities for several years and says that but for these it would give the relief asked. When the exchequer is full and it has thousands to spare it spends the money for a third railway between Fredericton and Woodstock, for an additional public building at Fredericton, etc, and it hopes to make us forget its Punic faith by throwing this paltry $5,000 grant at us in the form of an item in the Supplementary estimates, ostensibly in the lumber interest but, really, to build a road to the Salmon waters owned chiefly in official circles at Fredericton, and which it is said to be now determined not to spend after all. At least, it does not seem to have been voted and we cannot see, therefore how it can be 'appropriated.' Who asked for this $5,000 to be spent for a substitute for the promised stumpage reduction? Were there any petitions, or requests for it from the lumbermen of the Miramichi as a body? Moreover, this idea of improving the lumber lands, is only a step in the direction already taken by the railway land corporation, which gives a drawback on stumpage at times to lumbermen who make such improvements. Even if the government spent $5,000 in a *bona fide* way it would not be doing more than its duty and the appropriation would be in its own interest, rather than that of the lumbermen."

NAVIGATING THE OTTAWA.

On the Upper Ottawa, from Lake Temiscamingue to the Chaudiere, things are beginning to look lively, says a local paper. The ice has all passed out of the river, and the different boat companies are preparing their fleets to receive and transport the logs, which formed the lumbermen's cut in the forest ranges of that country during the past winter months.

Mr. Alex. Lumsden, of New Edinburgh, has the contract from year to year to drive all the logs on the Ottawa River from the Long Sault Rapids, which is above the points where the logs are driven into the main Ottawa, except those cut on Lake Temiscamingue which are driven separately, to Des Joachims. This is the first part of the drive and the logs are driven loosely by a large gang of men, the volume of logs increasing as the mouth of each stream is passed and the logs are collected in the drive.

Arriving at Des Joachims the logs are taken over by the Upper Ottawa Improvement Co. and the Upper Ottawa Towing Co. They are boomed out and towed by the steamers H. F. Bronson and H. Robinson to Fort William where they are again let loose and driven loose through Fort William boom, after which they are boomed out and towed to the head of Allumette Rapids by the steamer Dolphus. Here they are again turned loose and driven to Mellon's Chenail boom where they are boomed out and towed to the head of Calumet Chenail by the steamer G. B. Pattee. The same process is repeated and the logs driven into Chenaiux boom, where they are boomed out and towed to the head of Chats Rapids by the steamer Pembroke, again they go loose over the Chats Rapids and into the Quio boom where the logs for mill owners on the North or Quebec side are sorted from the logs on the south or Ontario side. This done, the logs are boomed out once more and towed by the steamer Baldwin and a new steamer put on this year to replace one burned last year, to the head of the Deschenes Lake.

Here the Upper Ottawa Improvement Co., and the Upper Ottawa Towing Co. hand the logs over to Capt. Goulet with his steamers the Castor and Chaudiere, and the Upper Ottawa Steamboat Company with their steamer the Monitor and they are towed by them to the head of the Deschenes Rapids, where the logs belonging to Messrs. Perley and Pattee, J. R. Booth, Bronson & Weston, Pierce & Co. and Mason are turned into the south shore snie and run into Thompson's Bay where they are held in reserve, sorted and supplied to the various mill ponds as required.

The logs belonging to Messrs. E. B. Eddy, Hurdman Bros., Hamilton Bros., McClymont, McLaren, Conroy, W. C. Edwards and Rathbun & Co., are turned into the north shore snie and sorted at Eddy's gap, Messrs. Hamilton Bros. and W. C. Edwards' logs running through Eddy's canal into the lower Ottawa and towed to their mills at Hawkesbury and Rockland. The other logs are distributed into the ponds of their owners as on the south shore. All the boats used in this work on the Upper Ottawa are of the most powerful character, large paddle wheel steamers capable of standing a heavy sea.

This brings the logs to the mills from the limits. At the mills they are converted into lumber with wonderful rapidity, piled in the yards and piling grounds, and when dried shipped by boat and rail to Montreal and Quebec and re-shipped in American bottoms for Bur'ington and the Eastern States, and deals to England, or shipped direct from Ottawa in Canadian and American bottoms direct to Burlington via the Chambly Canal and Lake Richelieu.

The firms who will be engaged in this sawn lumber carrying from the Chaudiere this summer are :

J. B. Blanchard & Co., with the steamers Dolphin, E. B. Eddy and Owens, and fifty-five barges.

D. Murphy & Co., with the steamers Ivy, J. R. Booth, Angus Mahan, Dandy, Elfin, John Young, Silver Spray, Hope, Vermon and about sixty barges.

Messrs. Bangs & Kirby, with the steamer Allan Gilmour and six barges.

Mr. Geo. Harris, with the steamer Geo. A. Harris and ten barges.

Mr. J. Parks, with the steamer Rigaud and four barges.

Mr. Ogilvy, with steamer Ada and two barges.

The work of shipping the remains of last year's cut to the New England market actually began on Saturday. The canals at Calumet and the lower Ottawa will be open in a week's time, when the work will be started in earnest, and continued until the ice forms next fall.

The freight and passenger business on the Ottawa River, from Ottawa River to Montreal will be done by the Ottawa River Navigation Company's steamers. The passenger steamer Empress, which has been newly fitted up in luxurious style, will run from Ottawa to Grenville, and a new boat just completed in Montreal by the company between Grenville and Montreal. The freight business will be conducted by the steamers Maud, Olive, Welshman, Gatineau and a few other steam barges.

NEWS NOTES.

—The mills in the Northwest are commencing their season's operations.

—All the saw mills in Winnipeg will be running this summer, all three having been closed down last year.

—Machinery has arrived at Maclead, Alberta, for a new mill which will be established there by Jas. McLaren.

—M. B. McAulay, and A. Mercier took out from two to three million feet of lumber on the Victoria River the past winter.

—Mr. Mathison's saw mill, at Havelock, Ont, which was burned some time ago, has been rebuilt and is now in good running order.

—The stop-logs in the timber slide at the Chaudiere have been removed, and all Government works opened for navigation and the running of logs.

—Mr. Robt. Dollar, of Marquette, Mich., who is considerably interested in Canadian and Michigan lumber operations, has invested in California lumber during the past winter.

—C. Beck & Co,, of Penetanguishene, Ont., has taken a contract to saw ten million feet of lumber this season for an American firm. This will be the largest cut ever turned out in this mill.

—R. Balfour, inspector of bridges on the Canadian Pacific Railway, has lately written a letter in which he speaks very highly of the value of British Columbia lumber for bridging and similar purposes.

—The report is confirmed that James McLaren, the Ottawa Lumberman, will build a mill at some point on the Pacific coast this season. He declares it will be a model mill and will cut for both export and local trade.

—The cut this season by the Chaudiere firms, Messrs. Booth, Perley & Pattee, Bronson & Weston, Hurdman & Co., Pierce & Co. and the E. B. Eddy Manufacturing Company, is estimated by the lumbermen at about 375,000,000 feet, if no delay occurs in the fall from low water.

—The returns of the government timber inspector shows that 1,400,000 feet of lumber and 875,000 shingles were cut in the far northwestern district of Edmonton last year, 1,000 miles northwest of Winnipeg. The cut was made by five mills, these being mostly moveable affairs.

—Saw log driving has become brisk on the Madawaska and other streams. No timber driving has, however, yet begun on the streams of the Upper Ottawa on the north side. The ice on the lakes is, in many places it is said, of a winter solidness. The season in respect to driving is two weeks behind the ordinary one.

—The lumbermen are a little anxious about the lowness of the water in the Ottawa River this spring, and it is feared that trouble may be experienced in the fall from that cause. It is very important that no delay occurs to the log drive, as the reserve of logs from last season is very small and may not be sufficient to keep the mills busy till the drive logs arrive at the Chaudiere.

—Harbor improvements at Penetanguishene will be carried on this year on an extensive scale. The Dominion Government has placed $20,000 in the estimates for that purpose, which is being supplimented by the town to the extent of $10,000, and a like sum by the Grand Trunk railway. Forty thousand dollars should make Penetang. harbor one of the best on our northern lakes.

—It is stated that Messrs. J. Burstall & Co., of Quebec and London, have sold a large quantity—between 1,800 and 2,300 standards--of the lower grades of a well known and favored Ottawa pine stock wintering in Canada, to be shipped to the London market. Prices have not transpired, but the current quotations for 4th pine deals range from £7 12s. 6d. to £7 15s. according to specification, including cost, insurance and freight.

—The partnership heretofore existing between Mr. J. D. LeBel and Mr. McCausland lumbermen of London, Ont., has lately been dissolved. Mr. LeBel will continue the business alone in the future. He has secured for this year's shipments some 3,000,000 feet of the different kinds of hardwoods, such as black ash, hard maple, basswood, cherry, birch, etc. He reports trade as gradually improving with every prospect for a still further increase when the season fairly opens, his business being largely with firms in Boston and New York.

—A correspondent writing from Madawaska, N. B., says: "We are having cold, dry weather for this season of the year, which is not any too favorable for logging operations so far as floating is concerned. It looks very much at the time of writing as if the rivers and small streams would be very short of water at the time when the same is most required. From reports received there is nearly double the output of logs there was last year. On the American side some of the mills have been running some time manufacturing Provincial cedar."

—William Smith, while working in a saw mill, in the county of Bruce, met with a fearful accident one day recently. He was attending the engine, and was alone ; how the accident happened is therefore only surmissed. The mill was running, and a fellow workman was at work upstairs, when he noticed something wrong with Smith and immediately ran to his assistance. He found the poor man had been carried round the shaft, and is thought he was adjusting the belt. All his ribs on one side were broken, and other severe injuries sustained, causing the poor man's death.

—A correspondent writing to the Winnipeg *Free Press* from Carbery, Man., says: Matters are getting interesting in the timber permit business here. There are three inspectors around and they are making things lively for delinquents. Not only are they attending to the business of the present winter, but it is said they are raking up the business for a year or two back. It is somewhat peculiar they did not settle some of this before the last general election. Most people consider the permit system obnoxious and better adapted to fill the pockets of a few Government officials than any good it does to the Dominion Treasury.

The following official list of saw mills in Manitoba and the district ot Keewatin has been published :

Name of Owner or Owner and Assignee.	Where Situated.	Cut of Logs in Winter of 1887-88. Feet.
Boyd & Crowe	Fisher River	30,000
G. I. Brouse & Co	Bad Throat River	7,000
Brown, Rutherford & Nelson	Fisher Bay	15,000
F. T. Bulmer & Co.	Keewatin	50,000
A. Cameron	Minnedosa	4,000
Dick & Banning	Keewatin	40,000
Federal Bank of Canada	Ebb and Flow Lake	20,000
Hudson's Bay Company	Riding Mountain House	
Jermyn & Bolton	Minnedosa	15,000
Stgr. Johnson	Bad Throat River	12,000
Keewatin Lumbering and Manf. Co., Limited	Keewatin	120,000
J. Likely	Fort Alexander	5,000
Manitoba and Northwest Railway Co	Ebb and Flow Lake	4,000
Miller and Patton	Bird Tail Creek	30,000
D. McFayden	Sec. 19, Tp. 17, R. 16, W. 1st	3,000
H. B. Mitchell	Millwood	30,000
G. Morton	Turtle Mountain	12,000
Northwest Timber Co.	Bull Head Bay	15,000
Rainy Lake Lumber Co.	Rat Portage	40,000
" "	Fort Francis	
D. Ross	Whitemouth	12,000
S. Smith	Turtle Mountain	3,500
D. Sprague	Winnipeg	20,000
J. Stewart	Fort Ellice	3,000
A. Watts	Norquay	3,000
Wells Bros.	Balmoral	2,500
Williams & Harrison	Wakopa	3,000
Weimster & Kyall	Strathclair	4,000

CORRESPONDENCE.

150 MILE HOUSE, B.C., April 2nd, 1888.

Editor Canada Lumberman.

DEAR SIR,—In one of the first numbers of the CANADA LUMBERMAN you sent me I observed a mistake which I wished long ago to rectify, but delayed till now, In dealing with the timber of B.C. you mention the timber called the Douglas Pine and state that it was named after Governor Douglas, this is entirely wrong—it was named after its discoverer, viz: Douglas the great Botanist, who was killed on one of his floral expeditions in the Sandwich Islands by falling into a pit, along side of a wild bull who was in at the time.

Yours truly,

GAVIN HAMILTON.

GALT ITEMS.

From an Occasional Correspondent.

Building operations which have been very brisk in Galt for the past few years, still continue, the most important present project in this line being a general hospital, for which a by-law is being submitted to the ratepayers.

Mr. Peter Hay, of the Galt Machine Knife Works, an establishment well known to readers of THE LUMBERMAN, is building a new grinding shop, 48x24 feet, to meet increased business, and will add a 40-h. p. Wheelock engine to the present plant, from the well-known firm of Goldie & McCulloch of this town.

The new Opera House is fast nearing completion, only a few of the interior details being unfinished.

Of the seventeen new stores erected last year all are now occupied except one or two in the new opera block.

Trade among the several lumbermen operating here appears to be brisk, and a full average cut is anticipated the present season.

T. V.

THE NEWS.

—The season for stripping tan bark is near at hand.

—M. Wilson has opened a lumber yard at Newdale, Man.

—Mr. Spencer, Ursa, Ont., is about to erect a saw mill on Bear Lake.

—Lumbering operations at Victoria Harbor have been brisk during the past winter.

—Mr. Geo. B. Gordon has bought the saw mill property of Mr. Angus Millan, Sunderland.

—The first carload of square timber from Lake St. John has arrived at the Palace depot.

—Mr. C. G. Fox has got out 3,000,000 feet of logs for G. Jesperson's mill at Rodney, Ont.

—Mr. S. D. Bryan has lately purchased saw mills at Keewatin and has taken up his residence there.

—It is now believed that the lumber business will be good on the Saginaw river during the season of 1888.

—The Midland *Free Press* says that the saw mills of that berg will have all they can do the coming summer.

—Isaiah Feir's shingle mill, Feirville, Ont., was burned on March 31st, with 50,000 shingles. Insurance, $500.

—An Ogemaw lumberman by the name of Anderson has skipped to Canada, leaving about $5,000 unpaid debts.

—Not less than ten thousand to twelve thousand feet of lumber per day has been cut during the past season at Jordan, Ont.

—Mr. H. H. Cook, of Kinmount, Ont., while operating a circular saw, on Good Friday, lost two fingers from his left hand.

—The capacity of G. Y. Slate's shingle mill at False Creek, Vancouver, B. C. has been increased from 30,000 to 100,000 per day.

—The Kootenay Valley Co. are cutting material in their saw mill for the construction of a navigable canal between Kootenay and Columbia rivers.

—Mr. Tait, of the Bird Tail Creek limits, (Man.) reports over 3,000,000 feet of timber cut and on the bank ready for rolling into the water.

—About 3,000,000 feet of logs have been taken out in the Riding Mountains to be cut at Yait's mill at Birtle, Man. The timber is a fine sample of spruce.

—Mr. Wm. Thompson, Orillia, Ont., intends having a large burner erected on the Esplanade for the disposal of sawdust and other refuse from his shingle mill.

—J. McLaren & Co., Ottawa, Ont., will saw from 25,000,000 to 30,000,000 feet of logs this season, and employ 250 men at their mill. They have been in the trade for 30 years.

—It is said that the lumbering firms of McLarens, of Perth, Ont., and Ross, of Quebec, will erect a model saw and lumbering manufacturing mill at New Westminster, B. C. this summer.

—Wm. Dunn, of Atwood, Ont., has got in over one million feet of logs this season for the manufacture of cheese boxes, about 23,000 of which are turned out in this establishment every season.

—The proposed sale of the Hastings saw mill at Vancouver, B.C., for $175,000, has not yet been completed and it is stated that negotiations for the transfer are not likely to be carried through.

—Adam G. Clark, a native of Truro, N. S., and lately in the employ of the Elk River Mill & Lumber Co., of Humboldt Co., Cal., has been missing since March 6, when he was last seen at a Eureka restaurant.

—Building operations will be very brisk in Ottawa this summer. It is said that contracts footing up to half a million dollars have already been made. Ottawa people haven't got to import their lumber anyhow.

—An official report shows that the lake receipts of lumber at the port of Oswego, N.Y., were 145,799,067 feet for 1887, as compared with 148,710,367 feet for 1886, 169,814,279 feet for 1885, and 189,515,335 feet for 1884.

—Along the line of the Grand Trunk railroad, in Ontario, the chief source of employment for the farmers during the winter is the tie demand, which has been large enough to keep many of them busy the season through.

—Henry Gilchrist, tail-sawyer in Maxwell's mill, near Owen Sound, while swinging a slab around from the edger, was thrown across the circular saw and instantly killed. The poor fellow was completely sawed through below the breast.

—The total output for 1887 of one sawmill at Moodyville, Burrard Inlet, B.C., was 30,513,808 feet of lumber, 23,337 bundles of lath, and 23,926 lineal feet of piles. The product was shipped to Australia, China, South America and California.

—February was a fiery month. In the United States and Canada the total loss by fire was about $11,250,000, over $4,000,000 above the average February loss for thirteen years. Wood-working industries contributed about $525,000 to the total for the month.

—The Restigouche Boom Company have deposited with the Minister of Public Works a plan and description of the site of certain booms constructed by the company across the Restigouche river, and have made application to the Governor and Council for approval of the same.

—Mr. James Brown, of Acton, Ont., writes us that he has about 600 M. feet of logs at his mill, principally hemlock, basswood and cedar, and has already commenced to cut. Acton, he says, is growing rapidly, manufacturing industries forming the neuclus of a thrifty town.

—The men employed in Messrs. Gillies Bros'. shanty on White Lake recently presented Rev. Mr. Sirrell, Baptist minister at White Lake, with a handsome set of Buffalo robes, valued at $34 as a mark of their appreciation of his kindness in ministering to their spiritual needs.

—It is estimated that Michigan railways alone consumed three and three quarter million ties last year. Thereupon the Manitoulin *Expositor* remarks: People on the Manitoulin should not be too free in parting with their cedar. It will yet be worth a good deal more than it is to-day.

—Mr. James McLaren, millionaire lumberman of Buckingham, Que., is at present in Victoria, B.C., where, it is understood, he is having explored a limit recently purchased by him. It is said Mr. McLaren intends erecting saw mills with a capacity of fifty million feet annually at Victoria.

—About 200,000 logs, part of last season's drive, which were abandoned on account of low water and boomed above O'Brien's Bridge, Belleville, have broken loose and are now jammed against Fairfield Bridge, four miles further down the stream, and it is said will probably carry the bridge away.

—William Train, lumber merchant and real estate agent, Toronto, has assigned, not only his personal estate but also the partnership business in which his son is interested with him at Burk's Falls. The Dominion Bank is largely interested but fully secured. A meeting of the creditors has been called.

—A Leslie correspondent of the Pontiac *Advance* says: "Great excitement prevails among the jobbers, because one man has been detected sawing off the marked ends of the logs and getting them remeasured as fresh logs. He is supposed to have treated 100 logs in this way. It is a very serious offence."

—S. D. Ryan, who succeeded W. J. McCaulay in the management of the Minnesota and Ontario Lumber Co., is now at Rat Portage getting things in shape to commence the season's operations. He is just now actively opposing the proposal to grant a license for the sale of liquors in the vicinity of the mill.

—Mr. John Irwin, of Irwin, Ont., delivered recently a monster Balm of Gilead log at the mill yard of Mr. D. H. Vanallen. It was fourteen feet in length, five feet six inches in diameter, at the larger and five feet at the smaller end, and when measured at the mill was found to contain over 2,200 feet of lumber.

—Several parties are operating on the Port Medway river, in Queen's county, N. S., and this old lumber river will this season have over 10,000,000 feet to ship, should all the drives get to the mills. Davison & Sons have bought largely of the stock, and will supply their customers from Bridgewater, Port Medway and Liverpool.

—Mr. J. B. Charleston, timber limit inspector for the County of Ottawa, has recently returned from the Gatineau shanties. He reports the work done during the season as good, the cut being considerably more than last year. The road from the Desert to Ottawa is in a terrible condition and travelling in some places is dangerous.

—A movement is on foot among the employes of the Lake of the Woods mills to have the hours of labor reduced. Eleven hours each day is now the established usage, and the men are agitating to have the time reduced to ten hours. They are forming themselves into a Knights of Labor organization in order to facilitate the movement.

—We learn from the Ottawa *Journal* that Mr. Geo. H. Millan, mechanical manager of the E. B. Eddy Manufacturing Co., has gone to New York for the purpose of making inquiries and obtaining information respecting a number of small yard locomotives which will be used in the extensive lumber yards of the firm at Hull for hauling lumber. The firm have come to the conclusion that much more and better work can be done with locomotives than with the horses used at present. The introduction of locomotives will, however, necessitate the laying of new rails in all parts of the yard, which work will take a considerable part of the summer to complete.

—The proposed bridge across the [illegible] point is expected to be [illegible] Quebec Government will contribute [illegible] Government $5,000, the city of H[illegible] $8,000 will be made up by [illegible] Gatineau point, Templeton, Buckin[illegible] The bridge will be of iron [illegible]

—A Petitcodiac, N. B., correspondent writes, "There is considerable activity in the lumber business this season. D. J McLaughlin's mills will cut about six million superficial feet. Humphrey & Trites will cut between three and four million feet of various kinds of lumber. Wilson & McLaughlin will cut about two million feet. The mill belonging to the Sir Albert J. Smith estate will cut about one and one half million feet, and John Found will cut about one million.

—Messrs. Hurdman & Co. intend, as soon as the ice leaves the Ottawa river and the water has [illegible] ordinary level, to begin the construction of docks and crib wharfing about the shores of the small island in the centre of the river, opposite Blythe's Point. The wharfing will be built sufficiently high to prevent the water from reaching the piles of lumber which the firm intend piling upon the island. This will be one of the best piling grounds at the Chaudiere.

—The Ottawa *Journal* says that the smaller dealers in lumber are troubled to get supplied at reasonable prices, the claim being that in Ontario the prices have advanced 15 per cent. all round during the past eight months. Stocks left over and the prospective cut are said to have been contracted for, chiefly by Dobell, of Quebec, the Export Lumber Company and New York firms. Three-inch deals have risen from $7 to $9.50. The lumber producers are therefore said to be enjoying prosperity.

—The St. John N. B., *Sun* would like to know whether the Government proposes to let the Goggins raft go to New York without paying duty, and if so why? "It is not a raft of piling or other small stuff, but contains some of the heaviest timber that is grown in the Cumberland forests. There is an export duty on such timber when sent abroad in the rough. The duty is a proper one, and the *Sun* thinks it is a bad thing for the country to send logs away to be manufactured into lumber abroad instead of at home."

—During the last season the firms operating on the Labare river in the vicinity of Bridgewater, N. S., have sold out their lands and mills to E. D. Davidson & Sons, who are thus enabled to continue their regular output of from 8,000,000 to 12,000,000 feet yearly. The last season being very dry there are about 6,000,000 feet of logs left over, and there will be about 7,000,000 feet of new stock, consequently the mills will have their usual supply. Additional branches of the river have been improved, and now logs will come to the mill drouth or no drouth.

—The Longford Lumber Co. of Longford Mills, Ont., in renewing their subscription to THE LUMBERMAN write: The winter just closed has been admirably adapted to our saw-log operations, every day being suitable for work in the woods. We have taken out our usual stock and have now our men at work driving the Black River. From the present outlook our usually active community will this season be more alive than ever, as the quality of logs coming into Lake St. John and over the portage will be much larger than the usual. Mills will commence running about May 1st.

—Preparations are already being made for the rafting of timber on a large scale at Belleville. The probability is—so favorable has been the experience of those who have rafted their timber here—that more timber will be brought to Belleville by rail for rafting than was ever heretofore brought to the bay. The industry is a highly important one, as it involves the expenditure in the city and in the surrounding county of a large sum for labor and material; and it is only in its infancy, as when the Grand Trunk complete their line to the Sault, Belleville will become the greatest timber rafting port in Ontario.

—Orilliaites are highly elated over their success in securing what is likely to prove one of the largest wooden-ware factories in Ontario. The extensive buildings, which are estimated to cost in the neighborhood of $40,000, are under construction, and will be pushed to completion at the earliest possible date. The manufacture will consist of tubs, pails, butter firkins, oyster pails, lard tubs, jam jars, preserve jars, washboards, clothes pins, and the hundred and one other things that only a wooden-ware factory on an extensive scale can turn out. The wood to be used in the manufacture of these articles will partly consist of the refuse from the company's shingle mill at Orillia, and their lumber mills at Longford, thereby entailing a very slight expense for the raw material. They will also use a considerable quantity of different kinds of wood, principally white birch and spruce, of which there is any amount in the vicinity. The new company is under the management of Mr. Geo. Thompson, and the mechanical responsibility rests on Mr. D. A. Lundy, late of the Cane Manufacturing Co. of Newmarket.

NEWS NOTES.

—C. Caron, sash and door maker, Arnprior, Ont. has assigned.

—The large Cedar Mill at Deseronto is expected to commence operations shortly.

—Mr. C. H. Doxsee has erected a new planing mill at Campbellford, which will be put in operation shortly.

—The Georgian Bay Lumber Company have the largest number of logs ever cut in Matchedash.

—The Canada Lumber Cutting Machine Co. has made satisfactory trials of their machinery at Belleville.

—The Deseronto *Tribune* says there is going to be a great building boom in that town this summer.

—The lumber cut in the upper St. John this winter is estimated at 130,000,000 feet; about the same as last year.

—The cut of logs on Moosehead Lake and tributaries, in Maine is figured at 35,000,000 to 45,000,000 feet. There have been 900 men employed in the work.

—Lumbermen in the Peterboro' district apprehend considerable difficulty this year in floating their logs to the mills, owing to low water in the rivers and streams.

—It is said that a good deal of lumber will be exported from Quebec to Melbourne, Australia, during the coming season.

—At Petitcodiac, N. B., April 12th, D. J. McLaughlin's large lumber mill was totally destroyed by fire. Loss 10,000 insurance 6,000.

—Messrs. J. & B. Bear's carriage factory, at Doon, Ont., with their sawmill adjoining, were totally destroyed by fire April the 9th. Loss about $20,000.

—Mr. Alfred Attridge, Schomberg, Ont, is building a large lumber and planing factory for manufacturing sash, blinds, doors, moldings, etc. It will be equipped with a full outfit of the best machinery, embodying all the latest improvements.

—A lumber stacking machine which takes the place of fifteen men has been invented and successful use. The lumber is carried on chains from the trimmer and dropped on the cars in better shape than by the men who formerly did the work. Bnt one man is necessary to manipulate the machine.

—Mr. Marshall's lumber and shingle mill, at Washago, Ont., was destroyed by fire the latter end of March. About 300,000 shingles was piled close to the mill, part of which were removed and the balance saved by the constant application of water. The mill was insured. Mr. John Waldron's mill and Messrs. Brady & Hartley's, both situated in this village, are running, the latter likely to run double tour in a short time.

—Lumbermen sometimes seem to vie with each other as to who can "get on" the largest load of logs. We have published reports of several of the "largest loads on record," and now from the Longford Lumber Co's camp comes the following; "At No 1 camp Longford township one team of horses actually drew for one mile on bush road, on sleighs at one time, seventy-five pcs., of sawlogs, with 22 men on the top of the same, and another load contained 5500 feet board measure." What a "whalloper" that must have been. Next!

—Fesserton, a smart little village in northern Ontario, is rapidly coming to the front as a lumber producing point. We learn that Mr. E. W. Wiffen has the past winter got out about 3,500,000 feet of pine stock, all of which he intends cutting at his mill this season. Brissley & Wood are building a dock on their water front, 100 feet square to facilitate the shipment of their lumber by water. The same firm are removing and fixing up their old shingle mill for future use as a planing mill. Through such additions as these Fesserton will likely be a busy town the coming season.

—A shipment from a sawmill at Barrard Inlet, B. C., was recently made to Japan, which will give some idea of British Columbia timber. The cargo consisted of 1½ million feet of timber 36x36 inches square, ninety feet long. A very common order for mills on the Gulf of Georgia, for the Japan and China trade in cargo lots comprises 3x24 and 3x36--60 and 90 feet long; intermediate lengths are practically uknown. A saw-log in this region is understood to be twenty-four feet long, unless otherwise specified; anything less than twenty-four feet would be cut only on special contract.

—There appears to be quite a "boom" working up in the lumbering interests of the Pacific coast of British Columbia. A short time ago it was announced that a large mill would be established at Port Moody, Burrard Inlet. A New Brunswick lumber corporation has since sent an agent to the Pacific coast with a view to selecting a site for an extensive export mill, and it is said that a location will probably be selected at Westminster. James MacTarly, a famous Ottawa lumberman, is now on the coast looking for a location for a mill, having in connection with other eastern parties secured valuable timber limits in British Columbia.

—Messrs. W. J. Trenouth & Bros., Fawkham, Ont., write the LUMBERMAN: The first of the drive on Black River has reached the canal here and men have commenced to sort. Each company will employ about thirty hands from now until the middle of June. We have something over a million feet this year, and expect to start our shingle mill about the first of May, in which we will cut about 4,000,000 shingles.

—The Alberta Lumber company recently held its annual meeting at Winnipeg, the head office of the company. W. W. Huntington and Henry B. Beard, of Minneapolis, and J. B. McArthur, J. S. McEwan and Hugh J. MacDonald were elected directors. The property of this company is in the Red Deer country, Alberta Territory, about 1,000 miles west of Winnipeg and north of Calgary. The company secured valuable timber limits there some time ago, and some machinery was taken in last fall with the intention of erecting a mill. The work, however, appears to have been delayed. At the meeting an issue of $150,000 in bonds was authorized, for the purpose of building the mill and developing the territory. The district is said to be one of the finest for settlement in the northwest, but owing to its isolated position it has not yet received much attention. The company will make an effort to induce settlement. Now that railway monopoly has been done away with, it is probable that the the district will shortly be opened up by railway communication. A charter for a railway through the territory is now being asked for.

TRADE REVIEW.

Toronto, Ont.

TORONTO, April 27th, 1888.

With the opening of spring orders and enquiries for lumber are coming in more freely. On a whole business so far this season is ahead of that of last year. Prospects for local as well as outside trade are very fair, although not in excess of past years. Money seems a little easier and more confidence in general business noticeable. Prices remain about the same, as follows:

CAR OR CARGO LOTS.

1¼ and thicker clear picks, American inspection	$34 00@35 00
1¼ and thicker, three uppers, American inspection	40 00
1¼ and thicker, pickings, American inspection	30 00
1x10 & 12 dressing and better	20 00 22 00
1x10 & 12 mill run	15 00 16 00
1x10 & 12 dressing	14 00 16 00
1x10 & 12 common	12 00 13 00
1x10 & 12 spruce culls	10 00 11 00
1x10 & 12 mill culls	9 00
1 inch clear and picks	24 00 26 00
1 inch dressing and better	18 00 20 00
1 inch siding mill run	13 00 15 00
1 inch siding common	12 00 13 00
1 inch siding ship culls	10 00 11 00
1 inch siding mill culls	8 00 9 00
Cull scantling	8 00 9 00
1¼ and thicker cutting up plank	22 00 25 00
1 inch strips 4in to 8in mill run	14 00 15 00
1 inch strips, common	11 00 12 00
1¼ inch flooring	14 00
1½ inch flooring	14 00 15 00
XXX shingles, sawn	2 40 2 50
XX shingles, sawn	1 40 1 50
Lath, Sawn	1 80

YARD QUOTATIONS.

Mill cull boards & scantling	$10 00	Dressing stocks	14 00@15 00
Shipping cull boards, promiscuous widths	12 00	Picks Am. inspection	30 00
" stocks	13 00	Three uppers, Am. inspect.	40 00
		B. M.	
Scantling & joist, up to 16 ft	13 00	1½-in. flooring, dres'd	25 00 30 00
" " 18 ft	14 00	1½ " " rough	14 00 15 00
" " 20 ft	15 00	1¼ " " dres'd	23 00 25 00
" " 22 ft	16 00	" " undres'd	14 00
" " 24 ft	17 00	" " dres'd	16 00 20 00
" " 26 ft	18 00	" " undres'd	12 00 14 00
" " 28 ft	19 00	Beaded sheeting, dressed	18 00 20 00
" " 30 ft	20 00		
" " 32 ft	21 00	Clapboarding, dres'd	12 50
" " 34 ft		XXX sawn shingles	
" " 36 ft	22 50@23 50	per M	2 75 2 90
" " 38 ft	24 00	Sawn Lath	2 25
" 40 to 44 ft	27 00	Red oak	20 00 25 00
Cutting up planks 1¼ and thicker dry	30 00	White "	25 00 30 00
" board	25 00 26 00	Basswood, No. 1 & 2	18 00 20 00
	18 00 20 00	Cherry, No. 1 & 2	50 00 60 00
		White ash, 1 & 2	25 00 30 00
		Black ash, 1 & 2	20 00 25 00

Goderich, Ont.

GODERICH, April 27th, 1888.

There is nothing interesting to report from this point. Business is very quiet. There is the customary spring demand for lumber. Vesselmen are fitting out their craft, and we hear of several lumber charters already being made to this and other ports. Navigation will be late in opening this season, very little water to be seen here yet. A few changes in prices have taken place principally in clear and picks and lath.

PRICES IN CAR LOTS.

1 inch Mill Culls	$8 00@ 8 50
1x6-8-10 & 12, common	12 00
1x6-8-10 & 12, dressing	16 00
1x14, and wider, common	12 00
1x14, " " dressing	16 00
1¼ dressing	16 00
1½ "	16 00
1¼ Norway pine flooring	14 00
1½ " " "	14 00
1 inch clear and picks 4 to 9 inch	25 00
1 inch " " 4-in. and up	26 00
1 inch " " 9-in. and up	27 00
1¼ and 1½ clear and picks	35 00
Lath 1½x4 feet	1 80

Montreal, Que.

MONTREAL, April 30th, 1888.

Pine, 1st qual'y ₱ M	$35 00	40 00	Basswood, run of log culls out per M	$13 00	20 00
Pine, 2nd " "	22 00	30 00	Oak, per M	40 00	50 00
Pine, shipping culls ₱ M	14 00	16 00	Walnut, per M	60 00	95 00
Pine, 4th quality deals ₱ M	10 00	12 00	Cherry, per M	80 00	100 00
Pine, mill culls, ₱ M	8 00	10 00	Butternut, per M	30 00	40 00
Spruce, per M	10 00	13 00	Butternut, per M	30 00	40 00
Hemlock, per M	9 00	10 00	Birch, per M	15 00	25 00
Ash, run of log culls out per M	13 00	18 00	Hard Maple, per M	20 00	25 00
			Lath, per M	1 75	2 00
			Shingles, 1st, per M	2 00	3 00
			Shingles, 2nd, per M	1 25	2 00

Ottawa, Ont.

OTTAWA, April 30th, 1888.

The busy season among the lumbermen has arrived and the prospects for this year are good. The mills are all getting in readiness to commence cutting, and at an early date the hum of the saw will be heard in all the old as well as in new quarters. Prices are firm with few changes.

	Dimensions, Inches.	*Per M.*
Mill culls	10 x 1	
"	12 1	$8 00
"	12 1½	
"	12 2	
" selected 16 ft. long, above dimensions		8.50 to 9.00
Cull strips, 1 in. thick, 5 to 7 wide		7.00 to 8.00
Mill cut outs	12 x 1	4.00 to 5.00
"	11 1½	
"	12 2	
Scantling	2 4	12.00
"	3 4	
" culls	2 4	7.00
" "	3 4	
Laths		1.25
Stock shorts, 12 x 1		10.00
1 inch siding outs, 1¼, 1½, 2		15.00
" outs from shorts, 1¼, 1½, 2		6.50 to 7.00
Outs from stocks	12 x 1	10.00 to 12.00
" "	12 1¼	
" "	12 1½	
Shingles, X		1.25
" XX		2.00
" XXX		3.00
" cedar, No. 1		2.00 to 2.75
" cedar, culls		1.25
Difference in planed lumber, in waste and planing		5.00
Ditto, on average good stock		20.00 to 25.00

Hamilton, Ont.

HAMILTON, April 27th, 1888.

Mill cull boards and scantlings	$ 9 00	@10 00	Dressing stocks	$ 6 00	18 00
Shipping cull boards, promiscuous widths.	10 00	12 00	1¼ flooring, rough	16 00	18 00
Shipping cull stocks.		13 00	1½ flooring, rough	16 00	18 00
Scantling and joist up to 6 feet		13 00	1½ flooring, dressed		25 00
do up to 18 feet		13 50	1 flooring, dressed		32 00
do up to 20 feet		14 00	Beaded sheeting 1.	28 00	23 00
do up to 22 feet		15 00	Picks, Am. inspection		30 00
do up to 24 feet		16 00	Three uppers Am. In.		40 00
do up to 26 feet		17 00	XXX sawn shingles	2 60	2 70
do up to 28 feet		18 00	Sawn Lath		2 25
do up to 30 feet		20 00	Red Oak	20 00	25 00
Cutting up plank 1¼ and thicker, dry	20 00	25 00	White Oak	25 00	30 00
Cutting up boards		20 00	Basswood No. 1. & 2.	18 00	20 00
			Cherry No. 1 & 2	50 00	60 00
			White Ash No. 1 & 2.	25 00	30 00
			Black Ash, No. 1 & 2.	20 00	25 00

Philadelphia, Pa.

PHILADELPHIA, April 28th 1888.

White Pine.

Mich. uppers, 1 to 2 in., dry	$50 00	@52 50	1¼ to 2 in. plank, barn quality	23 00	@25 00
2½, 3 & 4 in	60 00	65 00	Common plank	20 00	22 50
Siclets, 1¼ to 2 in.	42 50	45 00	⅞ box boards, wide.	16 00	17 50
2½ 3 & 4 in	47 50	52 50	⅝ siding, selected	30 00	32 50
12 in. flooring quality	30 00	35 00	Culls, 12 in.	16 00	18 00
barn	19 00	21 00	Wide	17 00	18 00
Edge barn, all widths	18 00	20 00	Narrow		13 50
			No. 1 moulding	37 50	40 00

Cargo Lots.

Yellow pine edge bds	14 00	@16 00	Scantling and plank	20 00	22 00
Heart face boards	20 00	22 50			

Hemlock Boards and Scantling.

Edge boards	10 50	@11 50	Scantling, 2x3 & 2x4, 12 in. stock	12 50	@14 00
Fencing, 6 in., 16 ft.	12 50	14 00	3x4, to 12, 12 to 20 ft.	11 00	12 00

Shingles and Posts.

Cypress shingles, 24 in. heart, d & b	13 00	@17 00	Cedar shingles, 30 in. hand dressed	35 00	40 00
24 in. sap, d & b.	10 00	12 00	Chestnut posts, 9 ft.		35 00
			7 ft.		30 00

HARDWOOD.

Walnut.

Nos. 1 & 2, 1 in., good dry, Indiana	$87 50	@ 95 00	Reject or common, 1 in., 1¼ and up	60 00	65 00
1¼ & up	92 50	100 00	Culls, 1 in.	35 00	37 50
Nos. 1 & 2, 5/4 in.	72 50	77 50	1¼ in. & up	35 00	40 00

Poplar.

Nos. 1 & 2, 5/4 in. good wide, Indiana	25 00	@27 50	Nos. 1 & 2, 1¼ in. & up, good wide, Ind.	32 50	36 00
1 in.	28 00	32 50	Columns, 5x5 & up clear	35 00	35 00

Oak.

Nos. 1 & 2, 1 in., good western, straight	32 50	@35 00	Nos. 1 & 2, 1¼ in. & up, good western, straight	35 00	37 50
quartered	49 00	50 00	quartered	52 50	55 00

Ash.

Nos. 1 & 2, 1 in., good western	35 00	@40 00	Nos. 1 & 2, 1¼ in. & up, good western	32 50	42 50

Yellow Pine—Yard and Wholesale.

Sc'tlg, 2x4 to 12x14	22 00	@23 00	Flooring, 1 in., Va.	17 00	19 00
Plank, 1¼ to 2 in.	23 00	27 50	1 & 1¼ in., Ga. &		
Fl'g, 1 & 1¼ in. No. 1	27 50	30 00	Fla. cargo run	22 00	24 00

Cherry.

Nos. 1 & 2, 1 in., good	62 50	70 00	Nos. 1 & 2, 1½ in. & up, good	65 00	75 00

St. John, N. B.

ST. JOHN, April 27th, 1888.

Deals, Boards, Scnatlng, etc.

Spruce deals	$12 00	Spruce boards	12 00
Pine "	15 00	Pine "	12 00@40 00
Deal ends	6 00	Oak "	40 00
Scantling	10 00	Ash "	15 00@25 00
		Hemlock "	7 50

Shingles.

Spruce, extra	$3 50	" No. 1	1 25
" clear	3 00	Pine	1 25
" No. 1 extra	2 25		

Clapboards.

Pine, extra	35 00	Spruce, extra	24 00
" clears	45 00	" clears	23 00
" 2d clears	35 00	" " No. 1	15 00
		" " No. 2	10 00

Flooring, Dressed.

6 in., No. 1	12 00	4 in., No. 1	12 00
" No. 2	10 00	" No. 2	10 00

Miscellaneous.

Staves	3 00@ 4 50	Laths	1 80
Heading, 17 in. per pr.	04	Pickets	6 50@15 00
" 18 in. "	04½ 05½	Railway ties	15
" 22 in. "	04½ 06		

Burlington, Vt.

BURLINGTON, April 28th, 1888.

Canada Pine Sidings—1x8 in. and up, 12 to 16 ft. d 2 or 4 s.

Select & shelving	$46 00	Finish	$38 00
Pickings	37 00	Dressing	28 00
Pickings & better	40 00@42 00	Common	20 00@21 00

Canada Pine Stacks—1x10 in, 12 to 16 ft., d 2 or 4 s.

Selects (clear)	55 00	Pickings & better	40 00
1st shelving	42 00	As run, common out	28 00@30 00
2nd	39 00	No. 1 barn boards	25 00
3rd	30 00	Common	21 00
Pickings	38 00		

Canada Pine Stock—1x12 in. 12 to 16 ft. d 2 or 4

Selects (clear)	57 00	Pickings & better	44 00
1st shelving	47 00	As run, common out	33 00
2nd	41 00	No 1 barn boards	26 00
3rd	32 00	Common	21 00@22 00
Pickings	38 00		

Canada Pine Stock—14 in. 12 to 16 ft. d 2 or 4 s.

Pickings & better	45 00	3d shelving	33 00
As run, common out	33 00	Common	22 00

Canada Pine S. B'ds—1x8 in. & up, 11 ft. and under, d 2 s or r.

Pickings & better	33 00@35 00	Dressing & common, d 2 s or	
As run, common out	30 00	d 2 s & m	20 00@21 00
		Common	18 00@19 00

Canada Pine Sheathing, d. m. & b.—1," 4 to 7", 5" & up. cb 7/8".

1st quality, 12 to 16 ft	46 00	1st & 2nd quality, 9 to 11 ft.	33 00
2d	37 00	7 & 8 ft.	34 00
3d	27 00	3rd quality, 11 feet & under	22 00
4th (selected Common)	22 00	4th	18 00

Canada (Quebec) Spruce—1 & 1½ in., 4 to 7 in. d 2 s & m.

Clear, 10 to 16 feet	32 00	No 2, 10 to 16 ft.	15 00@16 00
No 1	22 00		

Above prices delivered on a rate of $30 per car load.

Saginaw, Mich.

SAGINAW, April 28th, 1888.

Senator Palmer is credited with the statement "That Michigan alone has standing pine sufficient to build a fence around the globe eight feet high of twelve feet boards." If this statement is correct the Saginaw district will soon make a healthy hole in it at the present rate of operations. The estimated cut during the past winter is placed at 790,000,000 feet. At the close of operations in 1887 there were in the mill booms on the Saginaw River 22,829,000 feet of logs, against 33,190,000 feet in 1886. About 85,000,000 feet of logs will be brought to the Saginaw River this season by raft for manufacture. The tributary streams will yield 550,000,000 probably, and the railroads will bring in 150,000,000 feet more, making altogether 800,000,000 as the stock for this season. Throughout this district there are upwards of 100 mills to be run this season, most of which have already started cutting.

The cargo market has not developed astonishing activity as yet, neither is the yard trade booming, but a good healthy seasonable trade is reported.

Following are the ruling prices:

CARGO LOTS.

Uppers	36 00@38 00	Norway	9 00 12 00
Common	17 00 20 00	Box	15 00 11 00
Shipping Culls	8 50 11 00	Straight measure	13 00 20 00
Mill Culls	6 00		

YARD QUOTATIONS—CAR LOTS DRY.

Drop Siding.

Clear, ⅞ in	42 00	C, ⅞ in	30 00
A	38 00	D	19 00
B	36 00		

Flooring and Siding—Dressed.

Flooring, clear, d & m	40 00	Siding, clear, ½ in.	22 00
No. 1	31 00	A	20 00
No. 2	30 00	B	17 00
No. 3	20 00	C	14 00
No. 4	13 00	D	12 00

Finishing Lumber—Rough.

Three uppers, 1 in.	41 00@43 00	Fine common, 1 in.	28 00 31 00
1¼ & 1½	42 00 44 00	1¼ & 2 in.	32 00
Selects, 1 in.	35 00 36 00	C, 7, 8 & 9 in.	25 00
1¼ & 2 in.	38 00	Base, 2 to 9 in. No. 1	40 00
		No. 2	30 00
		No. 3	20 00
		Coffin boards 16 in. and over	16 00

Joist, Scantling and Timber.

12 to 18 feet	10 00	22 feet	12 00
20 feet	11 00	24 feet	13 00

Plank and timber, 12 inches wide, $1 extra.

Wide Select and Common—Rough.

C (No. 1 com.) 13in. and up	28 00	D (common) 14 in. and up	16 00

Lath, Shingles and Pickets.

Lath, No. 1	1 75	Country brands XXX	3 25	3 35
No. 1	1 25	Clear butts	2 25	2 35
Shingles, river brands		P'kts, 2 to 2½ in rough	12 00	13 00
XXX	3 40@ 3 50	Dressed		20 00
Clear butts	2 40 2 50	1¼ in. square, dressed	14 00	19 00

New York City.

NEW YORK, April 28th, 1888.

Black Walnut.

5/4 in., all clear	$78 00@ 82 00	Culls, 1 inch	$35 00@ 37 00
1 and 1¼ inches	92 00 97 00	Culls, thick	37 00 38 00
1½ and thicker	98 00 105 00	Counter tops, 18 in.	
Rejects	52 00 55 00	and over	110 00 150 00

Poplar, or White Wood.

⅝ in. 10 inches and over	22 00@24 00	1¼ to 2 inch	29 00@30 00
¾ in. coffin boards	27 00 28 50	2½ and thicker	31 00 33 00
1 inch, 10 inch and over	28 00 30 00	Common 1 to 2 inch	21 00 22 50
1 inch, 8 in. and over	26 00 28 50	Saps, 1 inch	21 00 25 00
		Culls, all thickness	15 00 18 00

Dressed Poplar.

⅛ inch panel	24 50@25 00	⅜ in. clg. 4 to 6 in	21 00@21 50
⅝ inch panel	27 00 28 00	½ in. clg. 4 to 6 in	24 00 24 50
¾ inch panel	29 00 30 00	⅝ in. clg. 4 to 6 in	27 00 28 00
4, 5, 6 inch casing	30 00 31 00	¾ in. clg. 4 to 6 in	29 00 30 00
7, 8, 9, 10 inch casing	32 00 33 00	⅞ in. clg. 4 to 6 in	30 00 31 00

Ash.

1 inch, white	36 00@ 39 00	Strips, clear	26 00@ 28 00
1¼ to 2 inch	38 00 40 00	Black ash, good	26 00 30 00
2½ to 4 inch	40 00 41 00	Black ash, culls	10 00 12 00

Oak.

1 inch plain sawed,	37 00@ 39 00	inches and over	48 00@ 51 00
1¼ to 2 inch	37 00 40 00	Thicker	51 00 53 00
Thicker	38 00 40 00	Strips under 6 in.	38 00 40 00
Quarter-sawed, white, all clear, 6-			

Cherry

5/4 in., white & clear	65 00@ 70 00	2½ and thicker	85 00@ 90 00
1 inch	75 00 80 00	Counter tops, 18 in.	
1 inch strips	40 00 42 00	and over	100 00 115 00
1¼ to 2 inch	80 00 83 00	Culls, all thickness	18 00 20 00

Miscellaneous.

Chestnut, clear	35 00@ 38 00	Redwood California plank	52 00@ 55 00
Chestnut common	20 00 23 00	Hickery, old growth	50 00 60 00
Basswood white	28 00 32 00	Hickery, 2nd growth	70 00 80 00
Basswood common	20 00 23 00	Elm	20 00 22 00
Maple, clear	25 00 30 00	Sycamore	24 00 27 00
Birch, clear	33 00 36 00	Sycamore quartered	35 00 40 00
Birch, 1s and 2s	26 00 30 00	Gum	36 00 41 00
Cottonwood	20 00 21 00	Butternut	45 00 50 00
Redwood, California boards	47 00 50 00		

Buffalo and Tonawanda, N. Y.

BUFFALO, April 27th, 1888.

Spring has arrived, the river is open, and vessels are being moved from winter quarters to loading docks. Building operations will be brisk this summer which naturally makes a good home market for lumber. Car trade with the Eastern markets is reported quiet. Stocks are badly broken, and there is a scarcity of course lumber. Uppers and selects are in good supply with small demand. Hardwoods are in better demand than Pine. It is anticipated that lake navigation will open about May 1st from this port to Chicago, and that canal navigation will commence a few days later. The receipts of sawed and cut barrel staves promises to be fully up to last year. Considerable of this stock is bronght over from Canada.

Norway Pine—Rough.

No. 1, 1 & 1¼ in.	20 00@22 00	Stocks No. 1, 1 & 1¼ in	22 00
No. 2, 1 & 1¼ in.	15 00 15 50	No. 2, 1 & 1¼ in.	17 00
No. 3, 1 & 1¼ in.	11 50 12 00	No. 3, 1 & 1¼ in.	12 00
		Scantling 2x4 to 2x12 12 to 16 ft	13 00
		Timber, 4x6 to 12x12 16 00	25 00

White Pine—Rough.

Uppers, 1 in.	$43 00@45 00	Shelving, No. 1, 13 in.	
1¼, 1½ and 2 in.	44 00 47 00	and up	29 00
2½, 3 and 4 in.	55 00 00 00	No. 2, 13 in. & up	22 00 24 00
Selects, 1 in.	34 00 36 00	Fine common, 1 in.	32 00
1¼, 1½ and 2 in.	37 00 40 00	1¼, 1½ and 2 in.	32 00 35 00
2½, 3 and 4 in.	45 00 50 00	Common, 1 in.	16 00 19 00
Cuts, No. 1, 1 in.	25 00 28 00	1¼ and 1½ in.	17 00 20 00
1¼, 1½ and 2 in.	32 00 33 00	2 in.	20 00 22 00
2½, 3 and 4 in.	37 00 40 00	Coffin boards	16 00 19 00
No. 2, 1 in.	15 00 17 00	Box, 1 in.	12 00
1¼, 1½ and 2 in.	21 00 22 00	1¼ in. & thicker	13 50
Moulding, 1 in.	28 00 32 00	A stocks, 1x10	27 00
1¼, 1½ and 2 in.	28 00 32 00	1x12	28 00
Siding strips, 1 in.	38 00	B stocks, 1x6 to 16	17 50
		C stocks, 1x6 to 16	13 50

Dressed Lumber.

	No. 1.	No. 2.	No. 3
Base and Casing under 6 inches	$33 00	$23 00	$16 00
Base and Casing, 6 inches	34 00	25 00	17 00
Base and Casing, 6, 7 and 8 inches	35 00	27 00	20 00
Flooring, 1 and 1¼ inches, 2½ to 5 in. wide	30 00	20 00	15 00
Ceiling, ⅞ in., 2½ to 5 inches wide	33 00	23 00	16 00
Ceiling, ⅝ in., 2½ to 5 inches wide	28 00	22 00	14 00
Ceiling, ½ in., 2½ to 5 inches wide	24 00	18 00	13 00
Philadelphia Fencing	36 00	25 00	17 00
Bevel Siding, 6 inches	23 00	21 00	11 00
Bevel Siding, 5 inches	23 50	19 00	14 00
Bevel Siding, 6 inches	23 00	19 00	14 00
Novelty Siding, 6 inches and over	40 00	25 00	17 00

Shingles and Lath.

Shingles, 18 in. XXX	4 25	Lath, pine No. 1	2 10 2 25
XX	3 25	No. 2	1 70
X	1 25	Norway	1 60
Shingles, 16 in. XXX	3 00	Hemlock	1 60
XX	2 10		
X	90		

Detroit, Mich.

DETROIT, April 28th, 1888.

Uppers, Selects, Stocks, etc.

Uppers, 4-4	$45 00	Shop, 5-4, 6-4 & 8-4	$25 00
5x4, 6x4 & 8x4	45 00	Fine common, 4x4	31 00
3 & 4 in	50 00	5x4, 6x4 & 8x4	33 00
Selects, 4x4	38 00	Stocks, 1x12 & 1x10, No. 1	19 00
5x4, 6x4 & 8x4	40 00	1x12, & 1x10, No. 2	16 00
Shop, 4x4	22 00	1x12, & 1x10, No. 3	13 00

Flooring, Siding, Ceiling, etc.

Flooring, select common	22 00	Roofing, D & M	16 00
No. 1 common	18 00	Siding, clear	21 50
No. 1 fencing	16 50	A	20 50
Ceiling, select common	25 00	B	18 50
No. 1 common	22 00	C	13 50
No. 1 fencing	20 00		

Bill Stuff and Culls.

Bill stuff, ordinary sizes:		26 to 28 ft	14 00
12 to 16 ft	12 00	30 to 34 ft	16 00
18 to 20 ft	12 50	Ship culls	12 00
22 to 24 ft	13 00	Mill culls	10 00

Shingles and Lath.

Shingles, clear, 18 in. Ex	3 75	6 in. stocks clear, Ex	4 00
10 in. clear, 18 in.	3 00	5 in. stocks clear, Ex	4 80
6 in. clear, 18 in.	2 75	Lath	2 10

Add for surfacing one or two sides, $1.

Albany, N.Y.

ALBANY, [illegible]

The season of 188[illegible] which [illegible] gation is open; enquires [illegible] wintered throughout the city about [illegible] lumber, which, if no set-back [illegible] probability be disposed of befo[illegible] quiries for hardwood are brisk; the spr[illegible] considerable activity; and [illegible] favorably

Boston, Mass.

BOSTON, April 22[illegible]

The lumber busines[illegible] the advance of spring. City [illegible] of the trade in surrounding town[illegible] for spruce, with man[illegible] at the same time, the [illegible] $14.50. But the advance prom[illegible] yet any cargoes here, though [illegible] quotations on car spruce are [illegible] dimensions. $15 to $15.5[illegible] Random cargoes, $13 [illegible] $16. Spruce boards are [illegible] firm: Clear $18 to $19; [illegible] refuse $9 to $11. Planed [illegible] pine is in fair request, but t[illegible] selling readily, where good [illegible] tions are steady at: Spruce ex[illegible] $22. Pine, sap extra, $45 to $45; [illegible] $50 to $55; heart clear, $45. T[illegible] extra and clear shingles. [illegible] all the old stock they can rake together. [illegible] to be firm till the n[illegible] to $3.62½; clear, $3 to $3.12½; e[illegible] $1.25 to $1.75; cypress, $4.75 to $5 f[illegible]

For laths there is a good request, [illegible] at $2.25, as f ast as they come in. [illegible] far in the season at least.

Western Pine—by car load.

Uppers, 1 in	$48 00@50 00	Fine com., 3 & 4 in	46 00 50 00
1¼, 1½ & 2 in	50 00 52 00	No 2, 1 in. Fine com.	29 00 30 00
3 & 4 in	55 00 60 00	1¼, 1½ & 2 in	31 00 33 00
Selects, 1 in	42 00 45 00	No. 1 strips, 4 to 6 in	$41 00@43 00
1¼, 1½ & 2in	44 00 46 00	No. 2	37 00 38 00
3 & 4 in	48 00 52 00	No. 3	25 00 27 00
Moulding boards, 7 to		Cut ups, 1 to 2 in	26 00 30 00
11 inch clear	37 00 41 00	Coffin boards	22 00 26 00
60 per cent clear	35 00 37 00	Common all widths	20 00 25 00
Fine common 1 inch	37 00 42 00	Shipping culls	23 00 24 00
1¼, 1½ & 2 inch	40 00 42 00		

Eastern Pine—Cargo or Car Load.

Nos. 1, 2 & 3	40 00@43 00	Clapboards, 4 f[illegible]	
4	28 00 30 00	clear	40 00 [illegible]
5	23 00 26 00	Sap, 2nd clear	30 00 [illegible]
Ship'g bds & coarse	16 00	Heart extra	50 00 [illegible]
Refuse	12 00	Heart clear	[illegible]
West'rn pine clapbds 4 ft. sap extra	43 00 45 00		

Spruce—by Cargo.

Scantling and plank, random cargoes	13 00@13 50	Clear floor boards	18 00@18 00
		No. 2	16 00 16 00
Yard orders, ordinary sizes	14 00 15 00	Coarse, rough	9 00 12 00
		Hemlock bds., rough	10 00 11 00
Yard orders, extra sizes	15 00 16 00	" " dressed	12 00 12 00
		Clapbds., extra, 4 ft.	28 00 30 00
Frames, to order, small sizes	14 00 14 50	Clear, 4 ft.	26 00 28 00
		Second clear	20 00 22 00
Frames, to order extra sizes	15 00 15 50	No. 1	12 00 15 00

Lath.

Spruce	[illegible] 2 [illegible]

Shingles.

Spruce	1 40@1 50	Cedar, sawed, extra	3 30@3 60
Pine, 18 in. extra	4 50 4 75	Clear	3 00 3 15
Pine, clear butts	3 50 3 70	Extra, No. 1	2 00 2 20
		Cypress, No. 1, 18 in.	5 00 5 25

Oswego, N. Y.

OSWEGO, April 28th, 1888.

Pine.

1¼, 1½, 2 and thicker uppers	$40 00@43 00
" " " pickings	30 00 33 00
" " " No. 1 cutting up	22 00 26 00
" " " cuttings up pickings and uppers as run	30 00 35 00
1 inch selected sidings	25 00 30 00
1¼ " " "	30 00 35 00
1 & 1½ box or No. 2 culls	11 00 12 00
1 & 1¼ sidings No. 1 dressing and better	17 00 25 00
1x10 & 12x12 to 16 feet dressing and better	17 00 25 00
" " " shipping culls	14 00 17 00
" " " No. 2 "	11 00 12 00
1 & 1¼ in. strips 4 to 7 wide selected	20 00 30 00
" " " dressings	16 00 17 00
" " " box	9 00 12 00

Brown Ash.

1 1¼ 1½ 2 & 3 in. 1st & 2nd quality	17 00 21 00
" " " culls	9 00 11 00

Basswood.

1 & 1¼ 1st & 2nd quality	20 00 21 00
" culls	9 00 12 00

Shingles.

XXX 18 inch pine standard thickness to 2¼	$4 25
XX " " " " "	3 25
X " " " " "	1 10
XXX " cedar " " "	3 40
XX " " " " "	2 25
XXX 16 " pine " " "	3 20
XX " " " " "	2 20

Lath.

No. 1 1⅜, 1½	2 00 2 10
" 2 "	1 25 1 50

A LUMBERMAN'S VIEWS ON RECIPROCITY.

Speaking upon business principles, says the *Journal*, "Not as a politician, but as a lumberman of long standing," Ottawa's senior member, W. G. Perley, made a valuable contribution to the debate on the unrestricted reciprocity resolution in the small hours on Saturday morning. The speech was not too lengthy, occupying only about forty-five minutes in delivering, but it was brimful of information bearing upon the point at issue as it affects the lumbermen, for whom, perhaps no one is better qualified to speak than is Mr. Perley. Notwithstanding the unseasonable hour at which by force of circumstances he had to speak, the practical common sense of his remarks and his strict adherance to the subject, won for the speech fair attention. This is more than could be said for any other speech delivered during the riotous closing hours of the debate.

To show how uncalled for had been the sympathy expressed for the duty-burdened lumberman or—exporter of lumber—during this debate, Mr. Perley pointed out that all the products of the forest that have been subject to duty on entering the States since the abrogration of the treaty of 1854, are for the future to be admitted free without any such sacrifice as Canada is asking to make, as a bill with that object is now before congress, with every likelihood of becoming law. And he conclusively showed in addition that even now the duty on lumber is paid not by the Canadian producer, but by the United States purchaser. These were his words:

WHO PAID THE DUTY?

I do not know that there is any settled principle; but the dealers in lumber and manufacturers in the United States, without any exception, contend that they pay the duty. They come here and buy lumber free on board and pay the duty on it. I do not intend to argue the question, but I will state my experience in the application of the treaty of 1854, and leave the hon. members to draw their own conclusion as to which contention is right. Notice for the abrogation of the treaty of 1854 was given in 1864, and the abrogation took place on the 1st of July, 1866, when a duty of 20 per cent. was imposed on pine lumber. At that time my firm was engaged in the sawing of lumber, and at the time this resolution was introduced my impression was that we did not experience any difference in the price of our lumber from the imposition of that duty. But to verify my impression I had an examination made of the books of my firm, and I found that from 1864 to 1867 there was no perceptible change in the price of our products. If anything, the prices increased in the latter year to some extent. But this instance goes to show conclusively that at that time we certainly did not pay the duty that was imposed on lumber by the United States."

ONE POSSIBLE RECIPROCITY BOON.

While showing the fallacy of the opposition contentions as to the benefits to be derived by the lumbermen, Mr. Perley on the other hand pointed out a benefit not touched upon in this debate which they would receive by the removal of the duties, however brought about. He said "the only advantage, I contend, which we can obtain by the removal of those duties, is to enable us to cut and saw an inferior quality of logs, and perhaps, in many cases, trees that have been burnt and killed a long time ago might be cut and used for boxes, and so on, which might be worked here and exported to the United States, if there were no duties to pay." He pointed out that the mere earnings of the laboring classes and the payment of Crown dues, with even only a small profit to the millmen, would be a great boon for the country to get from such timber. The advantages thus in store for the lumbermen Mr. Perley claimed had been offset by the action of the Government of Ontario and Quebec in materially increasing lately the Crown dues upon timber. He contended that they were unwarranted in making such a large increase, and that so far as trade was concerned in the Ottawa valley, there was no reason for increasing the Crown charges as they have done, except in anticipation of the removal of the duties upon the products of the forests going into the United States. According to the conditions of the lumber trade in the Ottawa valley, those charges could not be paid by the lumbermen at the present time, otherwise it being a well-known fact to all practical lumbermen and sawmill men, that a low grade of lumber as produced now cannot be exported to the United States under that system of duties, without a loss to the men who saw the logs.

EFFECT OF THE N. P.

Not only did Mr. Perley contend that no such scheme as unrestricted reciprocity was called for in the interest of the lumber trade, but he illustrated how that trade had been built up by the National Policy which it was now sought to supplant. "At the inauguration of our present fiscal policy," he said, "it was contended on what we considered reasonable grounds, that that trade would have to suffer, under the National Policy, for the benefit of other industries. It was contended by some members of my own firm and by my neighbors that we would have to pay increased prices for the different articles from our own manufacturers at rates fully as low as those we would have to pay the foreign manufacturer. What was the fact? The articles of clothing and the vast amount of goods that enter into shanty supplies were never advanced in price, and to-day we can get them cheaper than ever we could get them before.

"An enormous increase in the home consumption had taken place, he said, since 1880. As a sample he cited statistics gathered in Montreal, where in 1887 the lumber consumed amounted to 20% of the cut of all the mills in Ottawa and its immediate neighborhood. In that city," he said, "the estimated local consumption for 1880 was from 45,000,000 to 50,000,000 feet, while in 1887 it ran up to 120,500,000 feet. I look upon this as one of the important elements of the prosperity and success which this National Policy so-called, has given to this country. And if we were able to obtain the statistics of other cities, I am sure we would be able to show the people and hon. gentlemen opposite, who are contending that we should throw overboard everything we have achieved, that upon that basis we have developed our trade and given our own people employment in the manufacturing interest."

A PARTING MORAL.

Before concluding, he administered a rebuke to the "murky-fingered painters of blackness and despair," as Mr. Foster calls the pessimists on the Opposition side. "I think," said Mr. Perley, "that if we can get over this attempt to disturb the progress and development of this country, and if the hon. gentlemen in this House would take some other means of criticising the action of the governing party, we would do far better and get along more successfully in developing the resources of the country. It seems to me that this feeling of enmity against the successful party and this complaining that has been going on since I have known anything about Parliament, and this raising of the cry that we are going to ruin, are calculated to retard the progress of the country, and to embarrass the Government from carrying on measures for its welfare. I may be criticised for expressing my views on this point, being a young member of the House, but I may say that I consider this resolution uncalled for in any sense of the word, so far as the lumber trade is concerned, and I can see no ground upon which they can justify themselves in introducing a resolution of that kind."

The whole speech was terse and practical, and made a marked impression on the members of the House who heard it.

Purchasing Belts.

We find the following in a treatise on belting recently issued by the Page Belting Co.: Having properly arranged the machinery for the reception of the belts, the next thing to be determined is the length and width of the belts.

When it is not convenient to measure with the tape line the following rule will be found of service: Add the diameters of the pulleys together, divide the result by two, and multiply the quotient by 3¼. Add the product to twice the distance between the centres of the shafts, and you have the length required, substantially.

The width of the belt needed depends on three conditions: 1st, the tension of the belt; 2nd the size of the smaller pulley and the proportion of the surface touched by the belt; 3rd, the speed of the belt.

The average strain under which leather will break has been found by many experiments with various good tannages to be 3,200 pounds per square inch of cross section. A very nice quality of leather will sustain a somewhat greater strain. In use on the pulleys, belts should not be subjected to a greater strain than one-eleventh their tensile strength, or about 290 pounds to the square inch of cross section. This will be 55 pounds average strain for every inch in width of single belt three-sixteenths inch thick. The strain allowed for all widths of belting—single, light, double and heavy double—is in direct proportion to the thickness of the belt. This is the safe limit; for, if a greater strain is attempted, the belt is liable to be overworked, in which case the result will be an undue amount of stretching, tearing out at the lace or hook holes and damage to the joints.

When the belt is in motion the strain on the working side will be greater than on the slack side; and the average strain will be one-half the aggregate of both sides.

The working adhesion of a belt to the pulley will be in proportion both to the number of square inches of belt contact with the surface of the smaller pulley, also to the arc of the circumference of the pulley touched by the belt. This adhesion forms the basis of all right calculation in ascertaining the width of the belt necessary to transmit a given horse-power. A single belt, three-sixteenths inch thick, subjected to the strain we have given as a safe rule—55 pound per square inch in width—when touching one-half of the circumference of a turned iron pulley, will adhere one-half pound per square inch of the surface contact; while if it be a leather covered pulley, the belt will adhere two-thirds of a pound per square inch of contact. If the belt touches but one quarter of the circumference of the pulley, the adhesion is only one quarter pound to the square inch of contact with the iron pulley, and one-third pound per square inch on the leather covered pulley.

The adhesion one inch in width if the belt has on the pulley is the number of pounds which each inch in width of belt is capable of raising or transmitting. Multiplying this by the velocity of the belt in feet per minute will give the total number of pounds each inch in width will raise to transmit one foot per minute. Now multiply 33,000, the number of pounds raised by one-horse power one foot per minute, by the horse power to be transmitted, and divide this product by the number of pounds which one inch in width will raise or transmit one foot per minute, and the quotient will be the width of the belt required.

A Log Runner's Appeal.

As illustrative of the kind hearts that beat beneath a rough exterior, says a Michigan paper, let us relate a little incident that occurred on the Grand Rapids and Indiana railroad last Monday. At Grand Rapids there got on the train going north a typical lumberman or log runner. He was clad in a checkered costume so familiar to us all, and was filled to overflowing with Valley City bug juice. On the train his offensive familiarity and ribald songs and jokes made him a nuisance to all in the same car. The train men, however, succeeded in curbing his frolicsome spirits until Big Rapids was reached. Arriving at the latter place, a young fellow boarded the car whose appearence at once excited the sympathy of all. His face, at one time handsome, was thin and haggard, his form, once robust was sadly emaciated, and where his strong right arm should have been was an empty sleeve.

Immediately upon entering the car door, our friend, the lumberman, saw him and jumping to his feet, he rushed at him with, "Zhay, Jimmie, zhat you? Where you been?" and looking at Jimmie's empty sleeve, big tears gathered in his eyes and began to trickle down his cheek as he mournfully ejaculated, "too bad; too bad." Then, hastily drawing the back of his hand over his eyes, as if ashamed of a little honost emotion, he grasped the back of a car seat to steady himself, and turning to a car full of passengers said:

"Say, boys, I am nothing but a poor devil of a lumberman, and I am pretty drunk, but here is a poor fellow who is worse off. He lost his arm while breaking a jam on the Muskegon river, he has been in the hospital for six weeks. He has an aged mother, God bless her, who is entirely depending on him for support. When I went to Grand Rapids last week I had $140 in my pocket, now I have only $6, but here goes a 'V'," and he dropped a shining gold piece into his hat. His example was infectious, and after taking a tour through the car his hat must have contained nearly $100. This he turned over to his friend, who returned a few broken words of thanks, and together they left the train at Upper Big Rapids.

A passenger of a suspicious turn of mind thought the business looked a little fishy, and followed the pair from the train and around a lumber pile, where, unseen himself, he saw the one-armed man take off his coat and vest and from a sack made on purpose withdrew his lost arm, and then two of the slickest confidence men in Michigan meandered down town chuckling over the gullibility of the human race.

The Toothpick Business.

"Are you aware of the extent of the toothpick business in Maine?" Mr. J. C. Bridgman, who represents the National Toothpick Association, asked a representative of the Portland *Press* the other day. "That seems to be a pretty big name for small business, I suppose you think," he continued. "But you will be surprised when I tell you that our association have contracted for enough toothpicks to be made in Maine the coming year to load a train of fifty cars with nothing but toothpicks. We shall take out of Maine before next June five thousand million toothpicks. A pretty fair sized wood lot, you see will be slit up to go into the mouths and vest pockets of millions of Americans. Maine furnishes the larger portion of all the toothpicks used in the country. Our association controls the trade. It is something like the Standard Oil Trust, the Cotton Seed Oil Trust, and the lately formed Rubber Trust. It regulates the price and output of toothpicks as the big trusts regulate the price and output of oil or rubber goods. We have not adopted the name of Toothpick Trust yet, however. We have a mill at Belmont, N. Y., Harbor Springs, Mich., and Fond du Lac, Wis. Besides these, all our mills are in Maine; one at Strong, one at Farmington, one at Canton and two at Dixfield. There is a small mill at Mechanic Falls, also, but it has not joined our association. In Massachusetts, also, there is one small mill not in the association. So you see Maine is the great centre of the industry of toothpick making."

700,000,000 FEET THE PAST WINTER'S CUT OF LUMBER.

The season for making logs and timber on the Upper Ottawa and the great forest limits of the Ottawa valley has concluded, and the lumbering firms are busy drawing their logs and timber to the nearest waters.

This year's cutting season opened very unfavorably. To begin with, the lumbering firms had no reserve logs on hand from last season's cut. Then, in the first few weeks of the winter season, no logs could be cut at all owing to the want of snow. This feature, though a drawback in one sense, was a great assistance to the lumbermen in the end, as the hard frost previous to the fall of snow made an excellent bottom on all the roads, and froze the lakes and rivers solid when the snow came and work was commenced about Christmas ; it was continued without interruption until a few weeks ago.

Speaking of the Chaudiere lumbermen a *Journal* reporter learned that the season, although short, had been one of the most favorable and busiest the lumbermen have had for a number of years. The cut of logs with few exceptions are quite up to what was estimated in the fall of the year, and are on the whole about one-quarter larger than the cut of the previous season.

A GROUNDLESS APPREHENSION.

A fear has been expressed by some of the lumbermen that a great many of the logs cut on limits back from the Ottawa river front would be hung up, as many of the small creeks through which this timber is taken to the main Ottawa are frozen to the bottom, and there is a danger of the spring freshet, upon which the lumbermen rely to carry out their logs, passing out over the ice, leaving the logs in the shallow creeks, where they would then remain until the following spring. Mr. G. B. Green, manager of the Upper Ottawa Improvement Company, who has had an extensive experience in superintending the work of getting out timber and driving it down the Ottawa, speaking of this difficulty said that more or less every year the lumbermen have cause of fear from this source, but the appearance of affairs this spring is not a particle worse than it has been during years past, and there is little trouble anticipated by the lumbermen.

THE PRINCIPAL CUTS.

The following is a carefully prepared estimate obtained from most reliable sources, of the cuts this season of the principal firms on the Upper Ottawa and its tributaries. The French River, Parry Sound, South River and the Whanapitae and the Sturgeon River.

Firm.	*Feet.*
Canada Lumber Co	80,000,000
Bronson & Weston Co	60,000,000
Gilmour & Co	60,000,000
J. R. Booth	70,000,000
McLaughlin Bros (Arnprior)	75,000,000
Pierce & Co. (formerly J. & B. Grier)	30,000,000
Richard White	7,000,000
Booth & Gordon	10,000,000
Hurdman Bros.	50,000,000
Hamilton Bros	20,000,000
Perley & Patteé	60,000,000
E. B. Eddy Co	60,000,000
Alex. Fraser	15,000,000
A. Barnet (square timber)	200,000
Carswell, Mackey & Thistle (square timber)	150,000
French River.	
J. McLean	4,000,000
Ontario Lumber Co	7,000,000
New York & Tonawanda Lumber Co.	7,000,000
Parry Sound, South River and Whanapitæ.	
J. Jackson	3,000,000
Bick & Bates	4,500,000
J. R. Booth	6,000,000
Alex. Fraser	2,500,000
S. McKay	4,000,000
Emery Bros	5,000,000
Coburn & Fraser	2,000,000
Timmins & Gordon (sq timber)	100,000
W. Mackey	3,000,000
Sturgeon River.	
J. R. Booth	5,000,000
Booth & Hale	3,000,000
J. R. Booth (Duchenes Creek)	1,000,000
J. & Chas. Moore	6,000,000
Thos. Mackie	1,000,000

This calculation shows that the cut of the principal firms taking out lumber on the Ottawa River and its tributaries is about 635,000,000 feet of lumber and about 350,000 feet of square timber.

On the French river the cut is about 18,000,000 feet of lumber.

On the Parry Sound, South River and Whanapitæ districts, about 29,000,000 feet of lumber and 130,000 feet of square timber, and on the Sturgeon River about 150,000,000 feet of lumber.

All this immense quantity of lumber—over 700,000,000 feet is taken out by the Ottawa River, with the exception of the cut on the Whanapitæ, which is taken out by the waterway to the Georgian Bay and shipped by the C.P.R.

About two thirds of this immense cut from the forests of the Ottawa valley is cut at the Chaudiere saw mills and the remainder on the Upper Ottawa between Lake Temiscamingue and the Chaudiere. Messrs. Hamilton Bros. will of course, cut their timber at Hawkesbury. In addition to the 20,000,000 cut by Messrs. Hamilton Bros. on the Dumoine that firm having taken out about 20,000,000 feet more on their Gatineau limits. Messrs. Gilmour and Co. and James McLaren have also taken out large cuts on the Gatineau river.

THE FALLING FORESTS.

"About how much forest land cleared would the cutting of seven hundred millions of feet of lumber mean?" asked the reporter of a lumberman.

"Well," he replied, "that's a difficult question. But let us figure on it and see. Seven hundred millions feet of lumber represents say 3,500,000, an average standard of 200 feet of sawn lumber from each tree. Now in a good forest a tree that you can get 200 feet of lumber out of will take up from 250 to 400 square feet of ground—that is ground 15 or 20 feet square. Take the average to be 300 square feet, and add another couple of hundred feet for the waste and cutting necessary to get the logs to the rollways—this would give 500 square feet of land cleared for every standard log that comes to the Chaudiere. If there are 3,500,000 standard logs cut, the territory cleared of pine will be about 1,750,000,000 square feet in area, or about sixty five square miles.

"Of course this means sixty-five square miles of uniform thick pine forest, but as you never find a stretch like that—there are barrens, and hills, and swamps and creeks—the annual cut probably clears twice or three times that area of all its available lumber. But this is rough guess-work anyway. —*Ottawa Journal.*

EXCHANGE ECHOES.

Mississippi Valley Lumberman.

It is gradually beginning to dawn upon lumbermen all over the country that a pretty generous supply of logs has been got in—all that it was intended should be put in, and more than it was hoped would be secured. If the break up had come early in March instead of actually about the first of April, all the logs would have been secured that the mills will be able to turn into lumber this season. It is now certain that quite as many logs will be carried over on nearly all the streams and at the different manufacturing centres, as were carried over last winter and possibly more. Under all these circumstances it will require an exceedingly active spring trade to prevent the market for lumber sagging along about July or August. All the dry lumber now in pile will undoubtedly find a ready market at fair values, but the disposition will be to cut prices in anticipation of an overstock by and by. All the logs put in this winter have been secured at a greater cost than usual, and this is about the only influence now present calculated to sustain values during all the summer. Should there be a full and bounteous harvest, as there may be, with a lively fall trade in its wake, it is possible the weakness which manufacturers are already beginning to prophecy may be averted. It is clear now that the mill men at almost every point are preparing for a season of exceptional activity, and are determined —because it is possible—to run their mills to their full capacity, and to restore the stocks of lumber at least to the normal condition. The present supply of white pine lumber in the northwest is undoubtedly below what is justified by an ordinary active demand.

Lumber, Chicago.

The report that eastern buyers of lumber are delaying their purchases, and otherwise greatly disturbing themselves, because of the possibility that the market will be flooded with cheap Canadian lumber, admitted duty free, is one that is to be taken with a grain of allowance. They no doubt fully recognize the fact that even if the bill placing lumber among the untaxed articles is passed, the immediate effect of it is not likely to be startling. It takes time to bring lumber into market, and it is now an imminent danger that the distributing points on the lakes will be flooded with Dominion lumber within a few hours after the removal of the duty. Manufacturers on the other side, in order to enter into effective competition with Michigan and Wisconsin producers, will need a chance to prepare for the business they propose to do. It is not likely they will accumulate a stock of lumber and keep it piled up for shipment waiting for the change to come. They are entirely too shrewd to bank so heavily on what is only a possibility at best, and many think a rather remote one. At the earliest there will be an addition to the offerings of Canadian lumber great enough to materially affect prices before next season, and it is questionable whether then the output of mills on the other side will be sufficiently increased to produce a decline in values. If eastern buyers are keeping away from Saginaw, which is not a fact beyond dispute, it must be for some other reason than because they are afraid of Canadian lumber.

Canadian Mining Re[illegible]

It is becoming obvious, even to the modified intelligence of the statemen at Quebec, that the mighty forests of the Laurentian country are rapidly disappearing before the axe of the settler and lumberman and frequent destructive forest fires. Recently a disposition has been manifested to check this criminal waste of a rapid diminishing source of revenue but so far with little practical effect. In the sale of mining lands, for instance the Government reserve the timber for three years. During that time the lumberman who owns the limit in which the lands are situated has the privilege of removing such timber as he may want. Very frequently this timber would be of considerable value to the miner in the construction of his works and buildings, but having no direct interest in the timber, and having every interest in learning the character of the rocks beneath it, his first step after taking possession is usually to start a forest fire to burn the moss, forest growth and debris from the rocks. But with them goes valuable timber. It is lost to the owner of the land, to the limit holder, and to the Province. What is wanted is an amendment to the Mineral Act which will give the proprietor of the land the ownership of the timber upon it from the day of purchase, thus making it his interest to exercise himself to save such portions of the forest as do not interfere directly with his operations.

PUBLICATIONS.

Something entirely new in class publications, the first number of which is before us, is known as "Science of Photography, at Home and Abroad," published by James W. Queen & Co., 924 Chestnut street, Philadelphia, Pa. It is gotten up in a neat pamphlet form, handsomely printed and illustrated, and treats on all subjects pertaining to the photographic art. It is promised that every issue will contain a number of original articles from the pens of writers well known in photographic circles, together with a few pages of carefully selected matter of value to the trade in any country. The price of subscription is $1 per year.

Novel in name, form, purpose and method is The Novelist, Alden's new weekly magazine of American fiction. It undertakes to give the worthiest fiction that *American* authors can be tempted to produce. Foreign authors not admitted. It is handy in form, and low in price ; well suited in all respects to meet the wants of the intelligent millions who are capable of appreciating "the best." Terms, $1 a year, at which rate it will give over 2,500 pages, equal to from eight or twelve ordinary American dollar novels. The stories will follow successively, one at a time, a novel of ordinary length thus being completed in from four to eight weeks. For a ten-cent subscription (if you don't wish to enter for all at $1.00), you will receive the first chapters of every story published during the year, which you can then order separately, if you wish. A specimen copy of The Novelist will be sent free on request. Address, John B. Alden, Publisher, 393 Pearl St., New York ; P.O. Box 1227.

We have received Vol. 1, No. 1 of *America*, a weekly paper devoted to the advancement of distinctively American ideas, and the strengthening and preserving of American institutions. It is a handsomely printed 20-page paper about the same size as the LUMBERMAN and is well fitted with original and interesting matter. It has among its list of contributors some of the best writers in the United States, and if it retains the excellence of its initial number it is deserving of a large measure of success. *America* is issued by the American Publishing Co., 180 Monroe Street, Chicago, and the subscription price is $3.50 per year.

Our esteemed contemporary, the *Canadian Trade Review*, of Montreal, has appeared in a new dress of type, and presents a healthy appearance.

We are in receipt of a neat little pamphlet, from the office of the *Northwestern Lumberman*, containing figures of the production of white pine lumber and shingles in the Northwestern States in 1887, by mills and districts, with comparisons for each year since 1873. The lumber trade generally will find in this handy little reference book much interesting information.

—An Ottawa paper says that some two hundred and fifty shantymen have left that city already this spring for the western Ontario lumber district.

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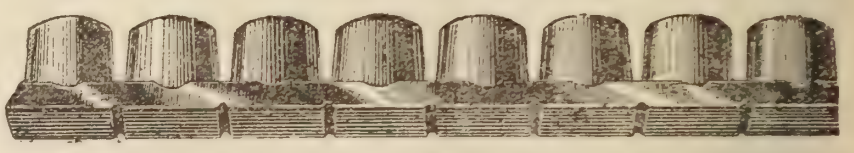

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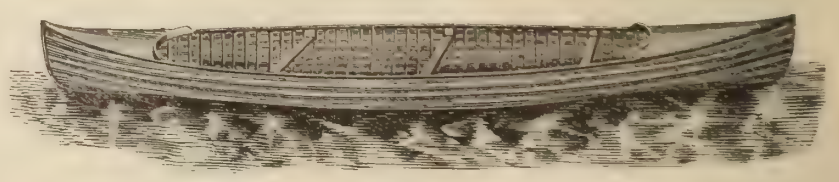

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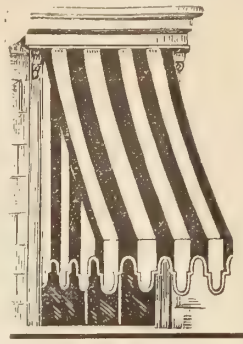

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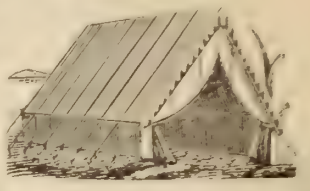

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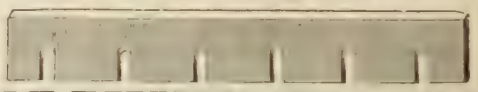

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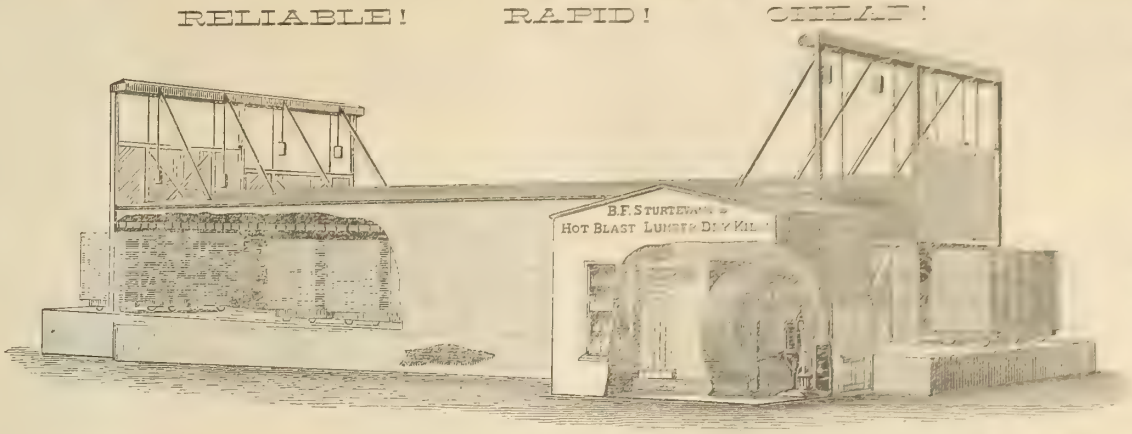

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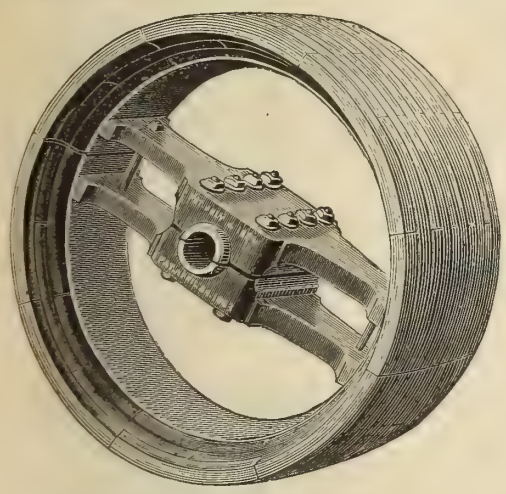

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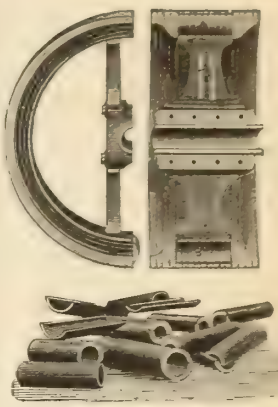

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Every pulley will fit 22 different sizes of shafting, and guaranteed to give from 30 to 60 per cent. more power from same belt and like tension than any iron or steel pulley. Every pulley a split pulley, 70 per cent. lighter than cast iron and 50 per cent. lighter than wrought iron or steel. Strong enough for any power required. Made in any size from nine inches to sixteen feet diameter.

As a material for pulleys wood is better than iron from the fact that it holds a belt much better. Most good mechanics are aware of this fact, but it may not be generally known how great is the difference, and for the benefit of our readers we give the result of two tests made and published by two of the most eminent mechanical authorities :—

Portion of Circumference embraced by Belt.	Rel. value of leather belt		Portion of Circumference embraced by Belt.	Rel. value of leather belt	
	On Wooden Pulleys.	On Iron Pulleys.		On Wooden Pulleys.	On Iron Pulleys.
.20	1.80	1.42	.20	1.90	1.40
.30	2.43	1.69	.30	2.40	1.70
.40	3.26	2.02	.40	3.30	2.00
.50	4.38	2.41	.50	4.40	2.40
.60	5.88	2.87	.60	5.90	2.90
.70	7.90	3.43	.70	7.90	3.40
Morin.—Appleton's Encylopedia of Mechanical Arts.			Haswell.—Engineers' and Mechanics' Pocket Book.		

A Dodge Patent Wood Pulley is better than iron from the fact that it can be made very much lighter and thus save weight on the line shaft and bearings, thereby saving in expense from a saving in friction.

The advantages of the separable pulley are very apparent. By its use the necessity of taking down shafting already up for the purpose of putting on additional pulleys when needed, or to be changed, is avoided, thus saving time, trouble and expense, while their first cost is much less than any other pulley made not having these advantages.

The Compression Fastening whether used with keys in iron center or compression alone, keeps the pulley always in balance as the compression on the shaft and key is always towards the center.

The most perfect balanced iron pulley fastened with set screws or key, is invariably out of balance by being thrown from the centre, this fact is obvious to all mechanics.

The advantages of our mode of fastening over any other are : It is the only absolutely true fastening for a pulley. A pulley once properly balanced cannot be thrown out of balance in securing with this fastening. A pulley fastened with key or set screw in the ordinary way, cannot be screwed without lifting the pulley from the shaft at that point where the key or set screw is placed, thus throwing the pulley out of balance.

Manufacturers should carefully avoid any pulley with a set screw fastening for shaft ; also a key unless the pulley is compressed on it. The Dodge Patent Bushing system is a great convenience to manufacturers and also to agents who carry pulleys in stock, as with the aid of the patent bushings every pulley will fit 22 different sizes of shafts.

Haswell the acknowledged authority and most quoted by American mechanics, summarizes thus : The ratio is friction to pressure of leather belts, when worn over wooden pulleys is 47, over turned cast iron pulleys, 24, thus showing the average advantage of a wood pulley over iron to be 50 per cent.

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INSOLVENTS.

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SATURDAY, 30th JUNE, 1888,

AT NOON.

for the purchase of the following ASSETS belonging to above Estate. Tenderers may offer for the whole *en bloc* or for each lot separately.

1. TIMBER LIMITS

	Miles
Nos. 1, 2, 3, 4, 6, 8, 10 and 12 West St. Maurice	328
No. 2, Rear West St. Maurice	36
Nos. 4 and 5, East St. Maurice	100
No. 11, South St. Maurice	30
Part of Caxton	15
No. 1, South Rat River	40
No. 1, East Shawenegan	24
Nos. 1, 2 and 3 North, 1, 2 and 3 South, 1 and 2 Rear South, 2, 6 and 7 Rear North, West Half Rear A, D and C, Mattawin	434
A, B, C and D. Wessonneau	185
East and West Couisacouata	60
Nos. 1 and 2, North and South Flamand	137
No. 1, West, and 1 West Rear Milieu	86
Nos. 1 East and West, and 1 West, Rear Lac Long	95
No. 3 East and West Lac Clair	65
Nos. 4 and 5 North and 5 South, and Nos. 4 and 5 North Rear Vermillion	235
Total Miles	1,870

2. ISLAND MILL PROPERTY

This property includes Islands at mouth of St. Maurice River, known as Baptist Island, Isle Margot and one-third of Isle aux Cochons, and 12 arpents front by half arpent deep of lots fronting St. Maurice River in the Parish of Cap de la Madeleine. On Baptist Island are the remains of a Steam Saw Mill, Workshop, Office, Dwelling Houses, Stables, Wharf, etc., etc.

3. THE GRAIS PROPERTY,

comprising the "Poste of Les Gris," with Saw Mill, Stores, Workshop, Stables, Dwellings, Barns, etc., containing in all 731 8-9 acres of land more or less.

4. RAT RIVER FARM,

at the junction of the Rat and Wessonneau Rivers, in the Township of Turcotte, in the County of Portneuf, containing 5,110 acres, more or less, with Store, Dwelling Houses, Barns, Stables and other buildings thereon erected.

5. IMPROVEMENTS AT MATTAWIN RIVER

Buildings erected on South Bank of the Mattawin River at its confluence with the St. Maurice River.

6. PROPERTY IN CITY OF THREE RIVERS

(*A*)—Lot No. 2, 194 St. Ursule Ward, fronting on Notre Dame street, known as "Old Fuel Yard," containing 34,178 feet.

(*B*)—Lot 2,195 St. Ursule Ward, fronting on Notre Dame street, known as "Office Property," with brick office and other buildings thereon erected, containing 33,258 square feet.

(*C*)—Saw and Planing Mill, and Sash and Door Factory, on corner of Notre Dame and Rene streets, known as lot 598, St. Phillipe Ward.

(*D*)—Beach Lot and Wharf, known as "Dean's Wharf," with store and other buildings thereon erected, Lot No. 597, St. Phillipe Ward,

(*E*)—Two-storey Wooden House and Lot No. 10 St. Julie street, No. 1,459, Notre Dame Ward.

(*F*)—Wooden House and Lot, N.E. side of Gervais street, No. 154, St. Phillipe Ward.

(*G*)—Wooden House on Notre Dame street, known as Lot 548, St. Phillipe Ward.

7. FARM LOTS, ETC.

71.—Lots 159 and 160 in the Parish of Mont Carmel, Rang les Gres.

72.—Lots 73, 77, 78 and 18 in the 1st Range of Township of St. Maurice, known as "The Gabelle Property."

73.—Lots 133, 134, 135, 136, S.W. part 137, 138 and part lot 137, Parish of Mont Carmel.

74.—Lot 148 in the Parish of Cap de la Madeleine.

75.—Lots 2, 3 and 4 in the Township of Caxton, Parish of St. Mathieu; 300 acres.

8. SHIPPING

Steamer "Arthur," 9 Batteau, 1 Cordwood Chaland, and 2 Jolly boats.

9. LIVE STOCK

Thirty-three Horses, 41 head of Cattle, and 25 sheep.

10. WAGGONS, SLEIGHS, SHANTY OUTFITS, FARM IMPLEMENTS, ETC.

A large quantity of Waggons, Sleighs, Boats and Bark Canoes, Chains, Ropes, Threshing and Mowing Machines, Machinest and Blacksmith's Tools, Two Patent Hay Presses, Sets of Harness, etc., etc.

A deposit of Ten per cent, on amount of Tender by accepted cheque, to order of Joint Curator, must be made with each Tender, which will be forfeited should successful Tenderer not complete his purchase. Inventories may be seen at the office of the undersigned, Standard Building, 157 St. James street, Montreal, or at the office of George Baptist, Son & Co., Three Rivers.

Plans showing location of Timber Limits may be had on application to the undersigned.

The lowest or any Tender not necessarily accepted.

Further terms and conditions and all other information can be obtained by applying at our Office.

JOHN MACINTOSH, } Joint
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225 H. P., PAIR CONDENSING ENGINES.

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35 H.P. HORIZONTAL, STATIONERY. Northy.

30 H.P. JAS. MARTIN STATIONARY Engine.

25 H.P. SAW MILL ENGINE. WATEROUS make.

25 H.P. PLAIN SLIDE VALVE, McDOUGAL builder.

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20 H.P. STATIONARY. CENTRE Crank. Dickey Neil.

20 H.P. SLIDE VALVE. GOLDIE & McCULLOCH

20 H.P. STATIONARY HORIZONTAL. Corbett & Sons.

18 H.P PLAIN SLIDE VALVE. GOLDIE & McCULLOCH.

18 H.P. HORIZONTAL, SPALDING make, Lockport.

18 H.P. HORIZONTAL, TIFFT & SONS, Buffalo, N.Y.

16 H.P. STATIONARY ENGINE. AMERICAN build.

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12 H.P. STATIONARY. KILLEY & Co. builders.

12 H.P. UPRIGHT ENGINE. AMERICAN build.

12 H.P. STATIONARY, HORIZONTAL. Syracuse, N.Y. make.

10 H.P. HORIZONTAL STATIONARY. Leonard & Sons.

10 H.P. VERTICAL ENGINE. SWAMSCOTT Machine Co. build. U. S. A.

8 H.P. OSCILLATING ENGINE, WITH Link motion.

8 H.P. SLIDE VALVE. HORIZONTAL. Leonard & Sons.

6 H.P. STATIONARY HORIZONTAL. Leonard & Sons.

5 H.P. UPRIGHT ENGINE. AMERICAN make.

5 H.P. STATIONARY, HORIZONTAL. Slide Valve. Reed & Barr.

5 H.P. THREE CYLINDER ENGINE. English make.

4 H.P. SLIDE VALVE HORIZONTAL. Beckett.

3 H.P. HORIZONTAL ENGINE. USED Six Months.

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2 H.P. STATIONARY ENGINE. IN A 1 order.

THREE 1 H.P. ENGINES FOR LIGHT work.

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SEND FOR DESCRIPTIVE LIST 13 and 14. Address, H. W. PETRIE, Brantford, Ont.

CHARLES A. BRAMBLE, D. L. S.

Fredericton, New Brunswick.

SURVEYS AND REPORTS UPON TIMBER Lands in any section. Can effect sale of properties occasionally if desired. References from former employers.

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And Shipping Agents.

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Deadens Noise. Gives Warmth in Winter; Coolness in Summer.

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Circular Saw Tables; Wood Turning Lathes; Morticing Machines.
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Large Surface and General Purpose Wood Planing Machines.
Graining Machines; Tenoning Machine; Sand Belt Machine.
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Steam Heater, 51x72 inches.
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Leffel Water Wheels: Portable Engines.
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Belting, Shafting, Hangers, Pulleys, Couplings.
Wrought Iron Heater for Glue and Wood; Circular saws.

JOSEPH HALL MACHINE WORKS,
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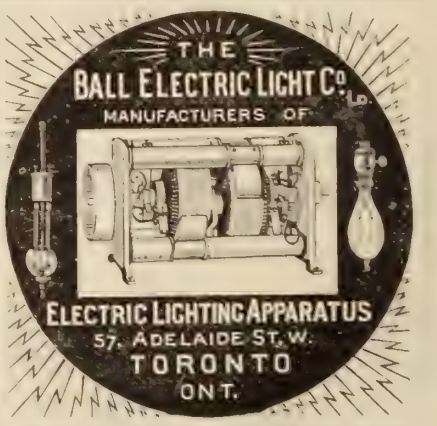
JOHN LIVINGSTONE, Trustee.



Our readers will confer a favor by mentioning this Journal when writing to Advertisers.

WANTED AND FOR SALE.

Announcements in this department will be inserted at the uniform rate of ten cents per line, each insertion, payable in advance. For three or more consecutive insertions of the same advertisement a discount of 25 per cent. will be allowed. Eight words should be counted as one line.

WANTED—A quantity of red oak and black ash. Nos. 1 and 2. Would contract for green or dry stock.
MANHARD & COMPANY,
Cape Vincent, N.Y.

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TIMBER LIMITS FOR SALE IN ONTARIO, Quebec and Manitoba. W. J. FENTON & Co., 50 Adelaide Street, East. Toronto.

FOR SALE CHEAP.

A WATERPOWER CIRCULAR SAW AND Shingle Mill with ten acres of cleared land, log house and stable situated on South river, about 4½ miles from Trout Creek Station on the Northern Pacific Junction R. R., convenient to School, Church and Post Office and a large settlement in Hainsworth. Also about 30,000 feet of dry Hardwood lumber, cut and piled about two years, and about 50,000 feet of Hardwood sawlogs, principally Birch. If not sold sooner, will cut to order this coming summer. For information apply to
THOMAS CORKERY,
Barrett, Ont.

SAW MILL FOR SALE.

FOR SALE, IN THE VILLAGE OF BELmore, Sawmill in first-class running order. Will be sold with or without stock. For terms, apply to
H. R. PERKINS,
Belmore, Ont.

PINE TIMBER LIMITS FOR SALE.

Two choice Timber Limits in Northwest Territory, Canada, 100 square miles each: great bargains. Also, limits in Georgian Bay, Algoma and Muskoka districts for sale. JOHN SCULLY, Toronto, dealer in Pine Lands and Lumbermen's plant and supplies. Light iron and steel rails in stock.

TO LUMBERMEN.

Young man, (36) married, would accept permanent engagement. First-class penman, accountant and correspondent. Thorough practical knowledge of every department in the trade—the woods, the mill, the yard and the office. Good salary expected. Unquestionable character and references.
"BETA,"
Care of CANADA LUMBERMAN.

NOTICE.

The Select Committee to examine into etc., combinations said to exist with reference to the purchase and sale, or manufacture and sale in Canada, of any Foreign or Canadian Products, hereby invite all parties aggrieved by such combinations to correspond at once with the undersigned, giving the names of witnesses who are likely to give material evidence on the subject, and to furnish such information and data as may enable the Committee to judge of the testimony offered.

Address
N. C. WALLACE, M.P.
House of Commons, (Chairman Com.)
9th March, 1888. House of Commons, Ottawa.

Notice to Contractors.

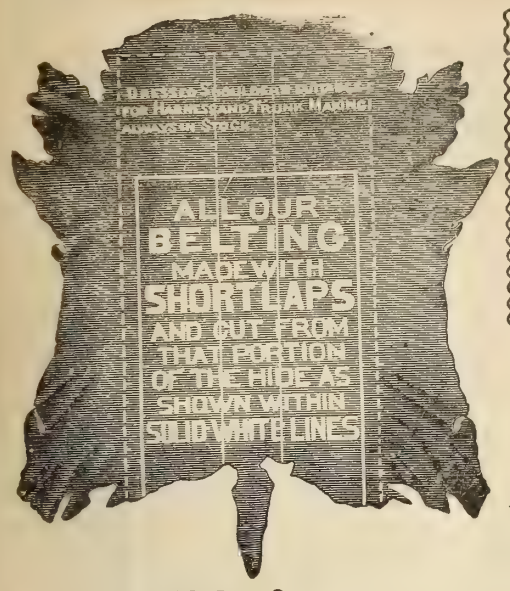
Sealed Tenders, addressed to the undersigned, and endorsed, "Tender for Iron Work of Parliament Buildings," will be received at this Department until noon of Thursday, the 17th day of May, for sundry wrought and cast iron work required for the new Parliament Buildings.

Printed specifications and forms of tender can be obtained at this department. All blanks in form of tender are to be properly filled up; and tenders must, as to form, sureties and otherwise comply with the terms set forth in the specifications.

An accepted bank cheque for the amount of Fifteen hundred dollars and payable to the order of the undersigned, must, subject to and upon the conditions mentioned in the specifications, accompany each tender.

Security for the fulfilment of any contract entered into is to be given as stipulated in specifications; but the Department will not be bound to accept the lowest or any tender.

C. F. FRASER,
Commissioner, &c.
Department of Public Works for Ontario,
TORONTO, 30th April, 1888.



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All Sizes Kept in Stock.

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EVERY SAW FULLY WARRANTED.
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Particular attention given to special Belts for Lumber Mills.

Our celebratd "Maltese Cross" Rubber; "Baker Fabric" and Ajax Cotton; "Giant" and Light Linen, and Fire Hose constantly in stock.

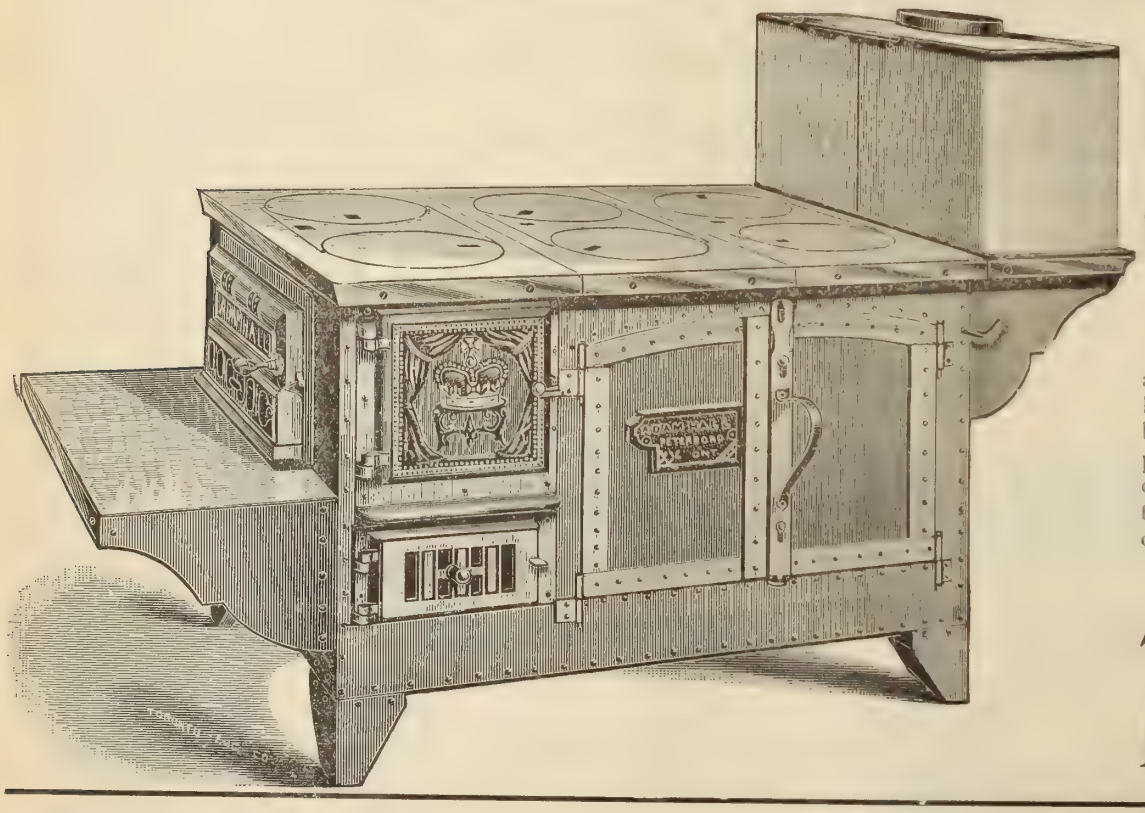
LUMBERMEN'S HEAVY RUBBER CLOTHING, OUR OWN MANUFACTURE.

Address all Communications to THE GUTTA PERCHA & RUBBER MFG. CO. OF TORONTO, 43 Yonge St.

LUMBERMEN'S PRINTING.

We wish to call the attention of LUMBERMAN readers to the facilities which we possess for doing all kinds of Printing for the lumber trade. Having equipped our office with the very latest designs in type and presses, we are prepared to furnish at the lowest price for first-class work, all kinds of stationery used in connection with the lumber business. Letter and Bill Heads, Cards, Statements, Envelopes, Blanks of all kinds, Stock Books, Day Books, Ledgers, Price Lists, Etc. Write for Estimates.

THE LUMBERMAN JOB DEP'T.



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SHANTY COOK STOVES

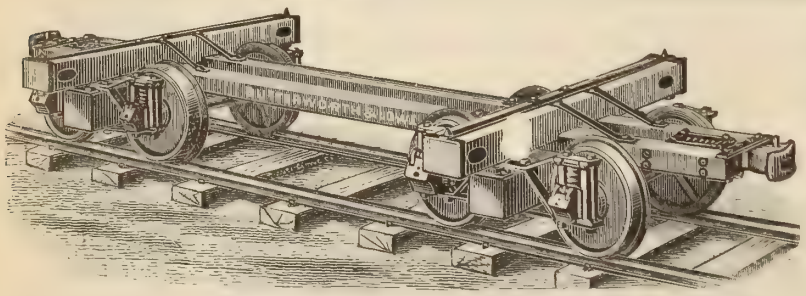
The BEST ARTICLE Ever Offered to the Trade.

I have much pleasure in drawing attention to my Wrought Iron Cooking Stove, for Shanty, Hotel and Boarding House use. These stoves are made of heavy sheet iron, the top and lining of the fire box being of heavy cast metal, and all the connecting parts of heavy wrought iron work. The dimensions of these Stoves are as follows :—Top surface contains six 10-inch holes, fire-box 28 inches long, and one oven 28x24x16.

EVERY STOVE GUARANTEED.

All the necessary TINWARE and CUTLERY for Shanties supplied at the Lowest Prices.

Adam Hall, Peterboro'.



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Grand Rapids, Mich., U.S

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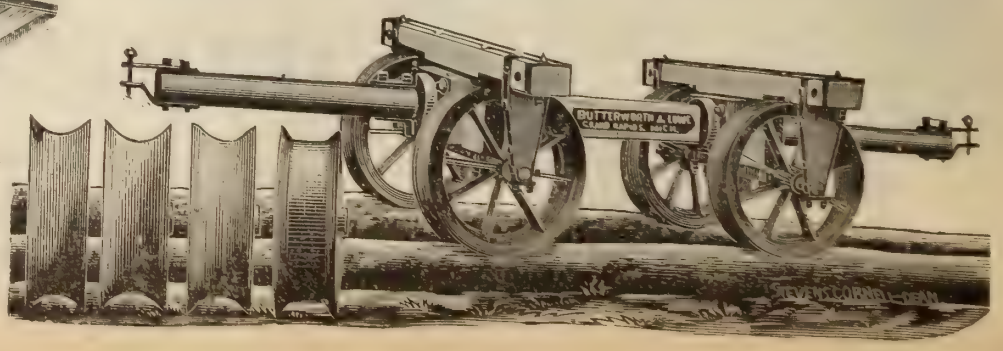
Send for Circulars and Mention this Paper.



IMPORTANT NOTICE TO THE PUBLIC.

I am patentee and owner of Canada patent, No. 42,357—Improvement in Band Saw Mills—which covers a Band Mill with two columns. I am also patentee and owner of Canada patent, No. 42,377—Improvement in Band Saw Guides—which covers wheel guides for a Band Saw. I am informed that a Band Mill is being offered to mill men in the Dominion, containing two columns which is an infringement of the above patent. The public is hereby warned against purchasing such Band Mill, as I shall hold the purchaser responsible for the infringement of my said patents, and for all damages which I may have, or may hereafter sustain, on account of any unlawful use of said patents.

The WM. HAMILTON MANUFACTURING CO., Peterborough, Ont., is authorized to build and sell Band Mills under my patents.

[A TRUE COPY.]
FRANK W. WHEELER,
SHIP BUILDER,
Specifications and Estimates Furnished on application.

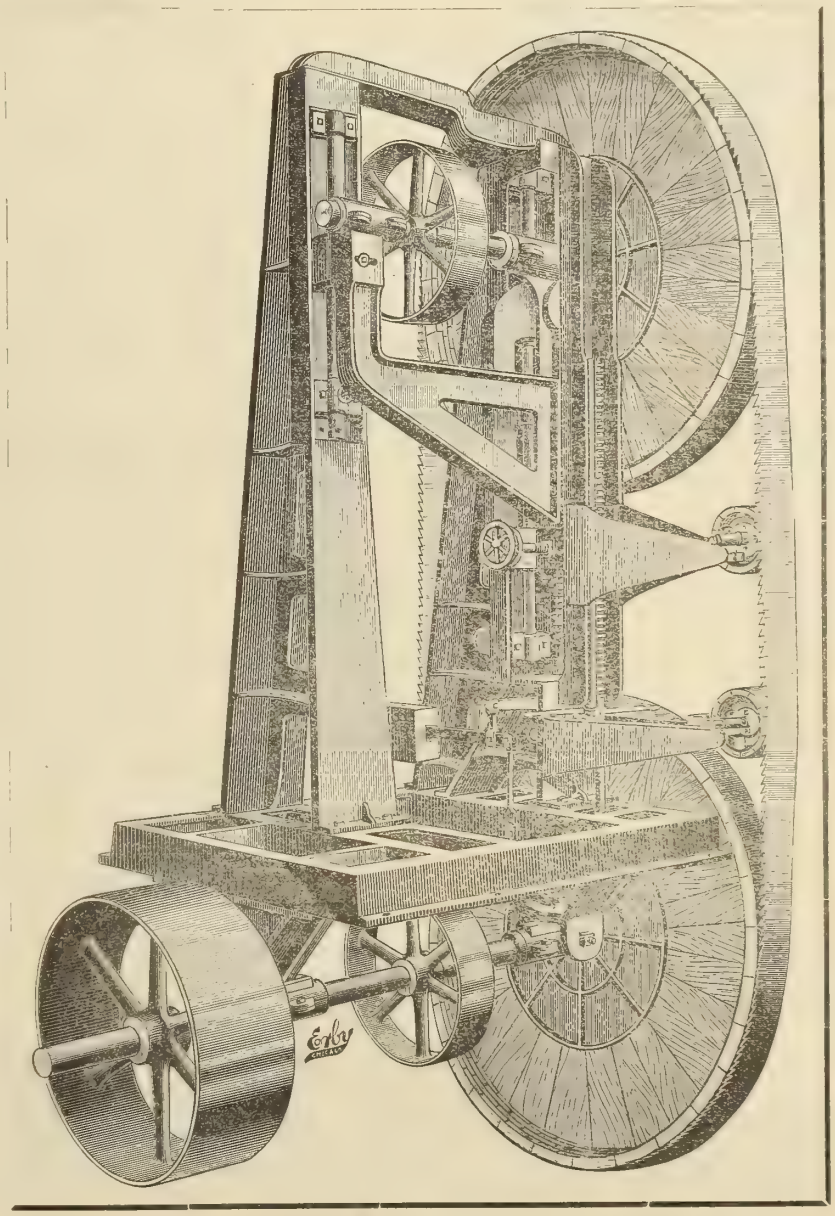
WEST BAY CITY, Mich., June 26th 1886.

Mr. D. K. Allington, East Saginaw, Mich.

I have been running your Pat. Band Saw Mill in my new ship yard mill for over one month, squaring up large and long hewn oak timber which has been hewn a sufficient time to be dry and hard on the surface, and sawing long plank from same kind of timber. The timber, or Keelson's squared, was laid up in a vessel, one on top of the other, and fitted as well as could be done by hand, it being square straight and out of wind. I have had a large amount of this plank and timber sawn, and have not yet found a bad cut. I have squared timber where the saw here and there barely cut the thickness of the saw kerf, yet the saw did not deviate the least from a straight line. From the nature of my work I cannot give any idea of the amount cut in a given time, but the speed of cut should be satistactory to any one. The most difficult part of my work is in sawing tamarac ship knees, yet the machine has given me entire satisfaction in this respect, sawing a root having a cut of from 2 to 4 feet, making in every case a true cut.

I do not believe that a saw has been put on the machine in good order, as I have not a sufficient number of saws to give time to dress them well and keep the mill running, yet there has not been one broken or disabled, in fact, a saw must be in bad order that will not run in a straight line when run over your guide wheels.

Yours, truly,
F. W. WHEELER.



[A TRUE COPY.]
F. W. WHEELER'S SHIP YARD.
WEST BAY CITY, Mich., June 25th, 1886.

Mr. D. K. Allington, East Saginaw, Mich

DEAR SIR:—I have been engaged in running band saws for the past [illegible], and I never before found anything equal to the [illegible] Mill built by you, that I am now filing for. I must say that it is almost impossible to make a bad line if the saw is in any kind of order. We are cutting hardwood, principally long oak, and on account of being scarce of water we have run our saws for five hours and cut as fast as we could conveniently handle, without making any perceptible variation in the cut. I have run various kinds of mills, but never before saw anything to equal it. There has been quite a number of millmen examining it, and all give it up to be the best and truest cutting mill they ever saw.

Respectfully yours,
JOHN A. GREGG

[A TRUE COPY.]
BAY CITY, Mich., Nov. 15th, 1887.

Mr. D. K. Allington, Saginaw, Mich.

DEAR SIR:—Having had considerable experience with Band Mills, I consider myself competent to judge the merits of the same. I started and run one of your Band Mills at Victoria Harbor, Ontario, which was manufactured by the Wm. Hamilton Manufacturing Co., of Peterborough, Ont. I also erected and run your two Band Mills at Wilkes' Peters' mill, at Bay City, Mich., and must confess they are superior to any Band Mill I ever seen, for quality and quantity of lumber produced.

Respectfully yours,
W. A. McCLENATHAN, Fil[illegible]

[A TRUE COPY.]
F. W. WHEELER'S SHIP YARD.
WEST BAY CITY, Mich., June 24th, 1886.

Mr. D. K. Allington, East Saginaw, Mich.

DEAR SIR:—I have been sawing on your Band Saw Mill for the last month, making plank from long square oak timber, partly seasoned, and being short of saws, have had time to have them put in in the best of order, and have to run them five hours without changing, yet I have not broken a saw or made a bad cut, the machine running smoothly, and not having cause to stop for any reason but to change saws, and cutting as fast as other band saws I have run.

Yours truly,
THOMAS GRAHAM.

D. K. ALLINGTON,

MANUFACTURER OF IMPROVED BAND SAW MILLS

No. 24 Hoyt Block, East Saginaw, Mich., U. S.

THE * MONTREAL * SAW * WORKS.

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Manager.

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*** SAWS ***

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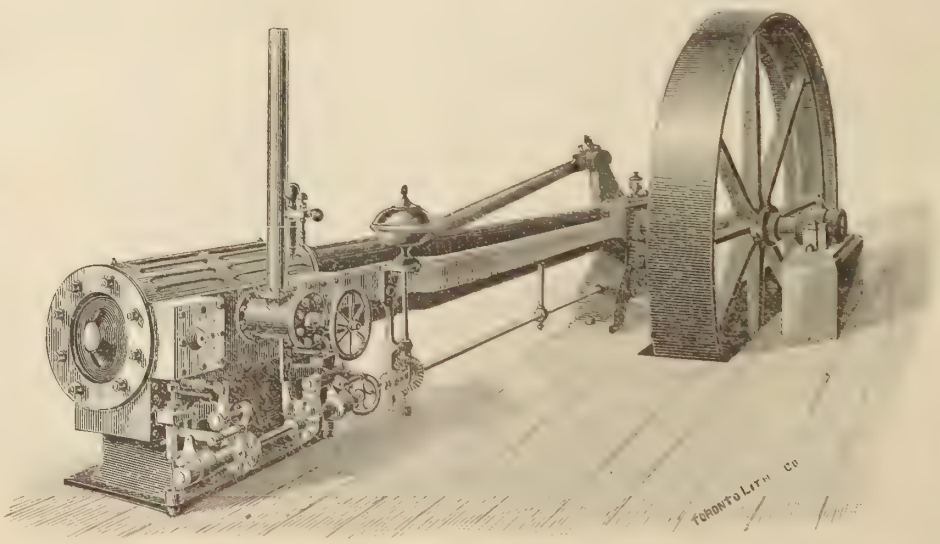
AND BOILERS.

STATIONARY and VERTICAL
ENGINES.

BOILERS
Of Every Description.



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Toronto, Ontario.

THE CANADA LUMBERMAN.

VOLUME VIII. NUMBER 6. PETERBOROUGH, ONT., JUNE, 1888. TERMS, $1.00 PER YEAR. SINGLE COPIES, 10 CENTS

THE CANADA LUMBERMAN

PUBLISHED MONTHLY BY

ARTHUR G. MORTIMER,

OFFICE: SIMCOE STREET, PETERBOROUGH, ONTARIO.

TERMS OF SUBSCRIPTION:

One Copy one Year, in Advance, - - - - - $1.00
One Copy six months, in Advance, - - - - - 50

Advertising Rates Furnished on Application.

THE CANADA LUMBERMAN is published in the interest of the lumber trade and of allied industries throughout the Dominion being the only representative in Canada of this foremost branch of the commerce of this country. It aims at giving full and timely information on all subjects touching these interests, discussing these topics editorially and inviting free discussion of them by others.

Especial pains are taken to secure the latest and most trustworthy market quotations from various points throughout the world, so as to afford to the trade in Canada information upon which it can rely in its operations.

Special correspondents in localities of importance present accurate report not only of prices and the condition of the market, but also of other matters specially interesting to our readers. But correspondence is not only welcome but is invited from all who have any information to communicate or subjects to discuss relating to the trade or in any way effecting it. Even when we may not be able to agree with the writers we will give them a fair opportunity for free discussion as the best means of eliciting the truth. Any items of interest are particularly requested, for even if not of great importance individually, they contribute to a fund of information from which general results are obtained.

Advertisers will receive careful attention and liberal treatment. We need not point out that for many the CANADA LUMBERMAN with its special class of readers is not only an exceptionally good medium for securing publicity, but is indispensable for those who would bring themselves before the notice of that class. Special attention is directed to "WANTED" and "FOR SALE" advertisements which will be inserted in a conspicious position at the uniform price of ten cents per line for each insertion. Announcements of this character will be subject to a discount of 25 per cent. if ordered for three successive issues or longer.

Subscribers will find the small amount they pay for the CANADA LUMBERMAN quite insignificant as compared with its value to them. There is not an individual in the trade, or specially interested in it, who should not be on our list, thus obtaining the present benefit and aiding and encouraging us to render it even more complete.

BELL & CO., of Guelph, Ont., organ manufacturers, have discovered that British Columbia spruce when properly seasoned is admirably adapted for sounding boards for their instruments. A large order was recently given by that firm to the Royal City Planing Mills, New Westminster. British Columbia cedar finds its way to Montreal for finishing work in first class residences, as well as to Ohio for railway carriage purposes.

THE miles of completed railways in Canada on the 30th June last were 12,292; that the tons of freight carried in the year amounted to 16,367,987. The passengers carried in the year numbered 10,685,508: that the receipts from passenger traffic were $11,861,597 and from freight traffic $24,581,047. The receipts per train mile were $1.15½ and the expenditure 82 1-10c. The percentage of gross receipts expended in working the railways was 71.12 per cent. The passengers carried were equal to two and one-fifth passengers per inhabitant. The freight to three tons and thirty-five one hundreths of a ton per inhabitant, and that the total earnings were $38,841,609 and the total expenses $27,624,683.

NEW BRUNSWICK lumbermen are greatly troubled over the stream driving prospects. They say that stream driving has not been so bad for years as it is this Spring. The little snow that fell during the past winter dissolved so gradually that it did not swell the waters in the streams, and from present appearances there will be very little stream driving this season. It is expected that the quantity of logs which will be hung up at the brows will be very large unless there should be a big rain-fall within the next week or two. On the Miramichi and its tributaries the driving is not good. In the main river there is fair water for driving and rafting, but the smaller streams are quite low. There is, however, a good deal of snow in the woods and a few days of warm weather will make a freshet.

THE improvements which the Montreal Harbor Commissioners have contemplated for some time will now it is understood be rigorously pushed forward. Work will be begun at Hochelaga, where a new shore wharf and five piers will immediately be put under construction. The increase of frontage for sea-going vessels will be about two miles. For the present an extension of 1,500 feet from the cotton factory, for the accommodation of the lumber trade, and about 1,300 feet with a pier for the sugar refinery will be built. It is estimated that between $250,000 and $300,000 will be expended during the present season.

ATTENTION is directed to two very important communications in this issue of THE LUMBERMAN, both touching upon questions affecting the lumber trade. The article on the Jamaica Trade, from the pen of Mr. A. Spencer Jones, of Ottawa, will, no doubt, be read by many with interest, and we hope with profit also. To the lumber trade closer trade relations with the British West India Islands would prove of incalculable benefit. "Pinus" in another column makes some pertinent suggestions particularly adapted to the lumber trade of the Queen City. We freely invite a full discussion of the *pros* and *cons* of this important controversy.

THE case of St. Catharines Milling & Lumbering Company will be before the Privy Council early this summer. This is the case involving the title of Ontario to land and minerals of the territory formerly in dispute between the Province and the Dominion. Judgments in favor of the Province have already been given in the High Court of Justice, in the Court of Appeal and the Supreme Court, and it is probable that the Privy Council will give judgment on the same side. Hon. O. Mowat has gone to England to prosecute this case and on other public business.

OUR Buffalo contemporary, the *Lumber World*, in reproducing an extract from an article on Commercial Union from THE LUMBERMAN, inadvertently changes a single letter which misconstrues our meaning entirely. The extract referred to, as it appeared in this paper, read; "Nothing, we think, would benefit the lumber trade *of* Canada so much as the passage of a commercial union measure". Our contemporary, by substituting the letter "r" for an "f" makes the sentence read: "The lumber trade *or* Canada". Now while we are strongly of the opinion that the lumber trade of this country would be benefitted by C. U. we do *not* think that Canada, as a whole, would benefit by such a change. A single letter sometimes when used in the wrong place causes a serious blunder.

FROM our exchanges we learn that the American lumber trade while not very active, presents a satisfactory outlook for the future. In most of the Western markets stocks of lumber in pile have been considerably reduced. In the East the late warm weather has stimulated building operations, and it is believed that the consumption of lumber in this way will equal and perhaps surpass the record of previous years. Manufacturing has begun in a lively manner, although in some places high water has interfered with the operation of the mills. It is probable that railroad building will be carried on this year on an extensive scale, and thus afford an outlet for a large amount of lumber. Generally speaking the condition of the trade may be characterized as healthy and encouraging.

THE very important question of an international exhibition for Canada is now under discussion, and is evidently meeting with favor from all classes of the Canadian people. The Dominion in the past has always proved one of the foremost participants in events of this kind, and native products and manufactures have been exhibited with the greatest success throughout Europe and the United States. Several such enterprises have been conducted in Australia with the most gratifying results, and there is no reason why Canada, possessing as she does a location so much more central and accessible in every respect, should not enter upon a similar project under infinitely brighter auspices. The more the idea is looked into the greater seems the cause for surprise that an effort has not been formulated at a much earlier date. An exposition, lasting for several months, could hardly fail to attract thousands of visitors to our shores, and the practical knowledge of the country thus disseminated would perform more good in one day than all the emigration literature ever published. Mr. Stevenson, secretary of the permanent exhibition in Quebec, who has been associated with all the Dominion exhibits in other lands, is one of the foremost advocates of the scheme, and he suggests that the summer of 1892 would be the most appropriate time for such an enterprise, as it would prove the 250th anniversary of the founding of Montreal—where such an event would in all probability take place—and the 400th anniversary of the discovery of America. This at first sight may seem a somewhat lengthy period to look forward to, but enterprises such as this require plenty of time to mature and become published abroad, and when the enormous duties and responsibilities associated therewith are taken into consideration, it will become generally recognized that the present is none too early a date to commence the agitation. Once the country and the several Governments take the matter in hand there need not be the slightest fear as to an ultimate and unbounded success.

SENATOR CLEMOW is bringing up two very important matters in the Senate, in asking for information regarding the allotment of water-power at the Chaudiere, and the deposit of sawdust in the Ottawa from the saw mills there. The impression seems to prevail that the water power at the Chaudiere is not utilized to a reasonable extent for manufacturing purposes, as its availibility seems quite limited. At the present time there are six or seven saw mills and a flour mill run by the Chaudiere power. The Ottawa is the only river into which lumber mills are allowed to discharge sawdust, but there is no other river which has such enormous lumber interests on its banks, and the Government has so far permitted the sawdust nuisance out of deference to the great interests concerned. If the report of the Government engineers who were sent out last year to examine the effects of the sawdust on river interests should take the view that the nuisance is not a very serious one, the public, it is said, will be content to let the matter go.

THE recent investigation by the Department of Public Works relative to the sawdust nuisance in the Ottawa river, has resulted in the discovery that the refuse is blocking up the river to such an extent that the channel is in many places gradually filling up, rendering navigation uncertain and perilous. Sawdust islands are forming, the rufuse already fills the principal bays, and a stretch of sawdust extends about all the way from the Chaudiere Falls to Grenville, sixty miles below the City of Ottawa. Mr. Henry A. Gray, assistant chief engineer, who was appointed by the Government to make investigations, reports that the river is in a clogged condition between a point below the Chaudiere to the mouth of the Gatineau, a distance of two and a-half miles. Surveys of this portion of the Ottawa were made in the years 1857, 1858 and 1874. The soundings taken by Mr. Gray enabled him to observe the marvellous growth of sawdust deposits in the river during the past thirty years. Sawdust fills the bed of the river below the island, opposite Parliament Hill, and at one point in the middle shows a depth of forty feet. The same state of affairs seems to exist, to a greater or less extent, for many miles. Some idea of the sawdust deposits can be gained when it is learned from official figures that last year's cut at the Chaudiere aggregated 365 million feet board measurement. This return is said to be some fifteen per cent. under the amount of previous years. It is estimated that at least ⅛ of the amount of material is cut in sawdust. Now taking the whole figures this cut equals 4,380,000,000 cubic inches equal to 2,534,722 cubic feet or 93,578 cubic yards, allowing that more is cut from the log than returned, and also that the above return is 15 per cent. under the amount of former years, there is at least 100,000 cubic yards of sawdust alone deposited into the Ottawa river every year from the Chaudiere mills in the process of cutting up the logs. The above is only sawdust. To this may be added slabs and edgings. Much of the slab wood is broken up by "hogging machines" and this increases

its damaging effect upon navigation. This operation causing it to be the sooner water-logged and consequently to sink. If the stuff was allowed to go into the river as slabs it would be picked up for firewood, now it is useless and sinks to the bottom, forming with the other materials a mattress, which in course of time cannot be broken up or lifted by dredging.

THE Chaudiere lumbermen, says the Ottawa *Journal*, are up in arms over the proceedings of the sawdust committee. They held a private meeting and decided to lay their views on the matter before the public. A deputation of lumbermen, headed by Messrs. J. R. Booth, and Ald. Henderson representing Messrs. James McLaren & Co., waited on Sir Hector Langevin, Minister of Public Works, on the subject. What transpired all parties declined.to say, but it is said that Sir Hector was informed that the channel of the Ottawa was not affected by sawdust deposits, that the prohibition by the Government of the use of the river as a dumping facility would probably force some of the lumbermen to remove from the Chaudiere, as the facilities there for disposing of refuse by burning were anything but satisfactory.

NOTWITHSTANDING a determined opposition the Upper Ottawa Improvement Company succeeded in securing an extension of their charter during the session of Parliament just closed. This company is composed of the leading saw mill men of the Ottawa Valley, and it evidently does not enjoy the good-will of outside lumbermen, who claim that extending the charter was simply taking from the Government the control of a great natural highway, and handing it over to a monopoly. The company also applied to the Government to purchase the Cheneaux boom, through which all the saw logs above the Calumet, some sixty miles above Ottawa, have to pass, and which was originally built by the Government ; but so determined was the opposition to the bill that the minister of public works declared in committee that the Government had no intention to sell or otherwise dispose of any of the government works to any company. This declaration caused a quietus to another scheme which was under way. The government has made extensive improvements, slides, dams, booms, etc., on the Madawaska river, one of the largest tributaries of the Ottawa, which have cost upwards of a quarter million dollars. Finding that the government would not extend the works sufficiently far up the stream to guarantee the sure driving of the river from the higher limits, a company was recently organized to construct the necessary works, for which purpose a charter was secured from the Ontario Government, and last winter considerable money was expended on the work. Owing it is said to the economical manner in which the Upper Ottawa Improvement Company handle the logs on the Ottawa. The new Madawaska company considered that if they could purchase the government works, and by this means obtain the control of the stream, they could handle the logs and timber to greater advantage and at a much smaller cost than the 4⅓ cents per log now charged by the government for the use of their works. This scheme failed to mature, however, through the opposition of lumberman who, although invited to do so, refused to take stock in the company, and the declaration of the Minister of Public Works was stated above.

THE British Consul at Vera Cruz, in Mexico, Mr. Gordon, speaks in his official report of portable wooden houses as a profitable article of import. Though there is a high tariff in Mexico, ready made houses of wood or iron are so much required that they are admitted free of duty. The wooden houses are, however, far preferable to those of iron on account of the heat of the climate. So great is the present difficulty in obtaining what is wanted in this respect that we are told one may often see well-to-do and decently dressed artisans and peasants living in rough board houses, or huts constructed of rafters and sugar-cane. Evidently they would be glad of something a little better. Mr. Gordon says the houses best adapted for supplying this great want would seem to be two-roomed dwellings with spacious porticos and overhanging caves and roofs high enough at the ridge to give adequate ventilation. All the parts should be so constructed as to be easily put together, and easily carried to the selected site either by rail or by road, the windows not too large, and fitted flush into the panels so as to be easy of transport and safe without much packing. Mr. Gordon says that the roof is a difficulty, as owing to the great heat of the sun corrugated iron is found to be too hot, while unprotected wood is apt to warp and shrink, but he suggests that a wooden roof might be thatched, the material being cheap, if so constructed as to render thatching easy while maintaining a decent appearance on the inside. Another suggestion he makes is that it would be a great advantage if the wood employed could be impregnated with some chemical making it capable of resisting water, fire and vermin without increasing too heavily the cost of the house. This may be considered authoritative and trustworthy information, being embodied as it is in the official report of a gentleman in Mr. Gordon's responsible position. But it is not only in Mexico that these ready-made houses are required. There would also be a demand for them in some parts of South America and no doubt in some of the West Indian Islands. Once well introduced and carefully adapted to the local requirements an extensive and profitable business might soon spring up. One of our young lumbermen with a taste for travel and some aptitude for designing might do worse than take his holiday in the south this year and see for himself just what is required, also learning at the same time what there is in it. Perhaps in Canada we are a little slack about manufacturing to the most profitable stage, being content to ship the roughest goods and leaving to others the greater profit of further manipulation. In the matter of these ready-made wooden houses Canada ought to be able to compete with advantage against any other country.

LUMBERMEN'S WAGES IN NEW BRUNSWICK.

Five members of the Dominion Labor Commission visited Chatham, N.B., recently and examined several witnesses. We extract the following from a local paper, having special reference to the lumber trade.

Ernest Hutchinson, am in the lumber business ; employ about 85 or 90 men and boys in the manufacture of deals, shingles, box shooks, etc. ; gangmen are paid $1.50 to $1.75 ; tailmen, $1.30 to $1.40 ; patent edger men, $1.50 ; lath sawyers, one man, $2 and others lower ; bedmen, $1.20 ; surveyors, $1.50. Pay of log scalers at the booms is regulated by law, but I think they get 10c. to 15c. per M. The buyer pays the scaling fee. Our men are employed from 6 to 7 months a year at the mill and I employ some of them all winter ; some of them go to the woods, where they get from $14 to $18 a month and found. Our millmen are paid every two weeks. In the woods they are paid as they require pay, and balance, if any is due, at end of season. Perhaps half of the laboring men of Douglastown, where I live, own their dwellings. I do not think wages have increased of late ; rather decreased ; 10 hours comprise a day's work. Lumber manufacture has decreased here of late. I think this is due to decrease of price. I don't think the high stumpage has anything to do with the depression of the lumber trade. The decline of shipments has been very marked during the last few years. They amounted to 150 millions feet in 1877, 155 millions in 1880, 149 millions in 1883, 87 millions in 1885, 72 millions in 1886, and 68 millions in 1887. The decrease is on account of the limited demand. What affects other parts of the country in the lumber trade affects us. Money was made here some years ago in the lumber trade.

Theophilus Desbrisay, foreman in Mr. Snowball's business ; we have between three and four hundred men employed ; about three quarters of them live in Chatham ; gangmen (head) get from $1.50 to $1.60 ; tailmen, $1.30 and $1.10 ; head circular men, $1.40 to $1.50 ; bedmen, $1.10 and $1.20 and $1.00 ; filers, $2 ; engineers, $2 to $2.50 ; lathmen (highest) $1.30 ; we make palings, chiefly, rather than laths. The men work 10 hours a day. We work day and night for part of the season. Some of the men go to the woods in the winter and some fishing. Shipmen (outside) get $1.20 to $1.40. Stevedors (inside) $2.00. The price for loading is about $1.25 per standard ; some vessels are loaded for $1 a standard because it is a part of their charter. The vessels are principally loaded from the wharf in Chatham. Steam is used sometimes in loading. We pay our men once a fortnight ; some families get advances in the form of orders on the store. If anything is coming to the men on pay day they get it in cash if they want it. The orders given are in the way of an accommodation for those who wish to anticipate their wages. We start at half past six for night work and run to 6 a.m.—working 10 hours.

A PROGRESSIVE COMPANY.

The Rathbun Company, says a Brockville paper, have been making extensive improvements in their premises on William street. The large planing mill and sash and blind factory has been further enlarged by an addition 25 by 102 feet and several large sheds have been built. These sheds, which enclose two sides of the property, are in all 300 feet in length with a storage capacity of 250,000 feet of lumber. Thus all dressed lumber is kept under cover. Wagons can drive through the mill, through the yard and all the sheds without leaving the plank roadway. On the William street part of the property a fine two storey office, 22x40, has recently been built, the interior arrangements of which are very convenient and handsome. A very handsome counter with wire railing divides the main room and part of the front is taken up by the manager's private office. The finish is ash and cherry, giving a very pleasent effect. The mill itself is splendidly equipped, both as a planing mill and sash and blind factory. The dry kiln is one of the best in the country and with some of the latest scientific arrangements as to carrying off the moist air not usually found. A side track of the C. P. R. is being constructed through the large yards on the east side of William street, where a very heavy stock of lumber and bill timber is kept. Altogether the capacity and equipments of the Rathbun Co.'s Brockville branch is excelled by few if any similar establishments in the country.

The company has been fortunate in the selection of its staff. Mr. V. R. Marshall, of the late firm of Kearns & Marshall, is the agent in charge and no more able, honorable or popular man could be found to fill the position. Mr. R. C. Calhoun, in charge of the office, has been only about a year in Brockville but he has already established an enviable reputation. The shipping and yard is in the charge of Mr. Sam. J. Geash, who occupied the same position with Kearns & Marshall, and who is well and favorably known to our citizens. The factory is managed by Mr. Fred. Kearns, who though a comparatively young man, has already a good standing as a thorough business man. The business done here is a very large one. Besides the wholesale trade in car lots several teams are kept busy delivering goods in town.

AMONG THE MANUFACTURERS.

We understand the Canadian Rubber Company through their Toronto agent, Mr. J. H. Walker, have secured the contract to supply Messrs. Gooderham & Worts with all the belting necessary for their large new elevator now nearing completion in Toronto.

We are in receipt of a copy of a new 16-page Sectional catalogue of B. F. Sturtevant's Steel Pressure Blowers, which illustrates these well known machines with all their latest improvements. Mr. Sturtevant's catalogues have always been celebrated for the valuable tables relating to the properties of air in motion, and in this are to be found a number which render this catalogue of great utility to foundrymen, blacksmiths and iron workers of all classes. A copy will be mailed upon application to B. F. Sturtevant, Boston, Mass. Ask for catalogue 33.

The late shipment of belting to the Lake of the Woods Milling Company's new mill in Manitoba, is perhaps the most extensive ever turned out in Canada for a single concern. The well-known manufacturers, Messrs. Robin & Sadler, of Montreal and Toronto, filled the order throughout and in accordance with their usual custom have given entire satisfaction. Included in the shipments were about 7,000 feet of all sizes, ranging from two inches to two feet in width. One piece was a double leather driving belt 24 inches wide, and 360 feet long, weighing about 1,400 pounds.

The Hart Emery Wheel Co., limited, of Hamilton, report business very brisk, their sales this year so far, exceeding those of the same period in any year since they started. The demand for the Hart Wheel is steadily on the increase. A strong wheel—quick, cool, cutting and durable — it is a great favorite amongst lumbermen. They advertise this month a line of saw-filers that is attracting the attention of saw mill men. The Rogers' filer, made in three sizes, takes the place of files on the one hand and of the large expensive automatic saw filer on the other. So far they have not been able to keep up to the demand, but they are increasing there facilities and will soon be in a position to largely increase their output.

NEWS NOTES.

—The new pulp mill at Ottawa is expected to commence operation about June 1st.

—The Emery Lumber Co., of Parry Sound, recently lost several dwelling houses by fire.

—Andrew Boudreau has commenced operations on his new sash and door factory, at Chatham, N. B.

—The Vancouver B. C. *Herald* says :—In the boom of logs which the Beaver brought in on Friday were two logs of immense size. One was 100 feet long, 4 ft. 9 ins. in diameter at the small end and 9 feet at the big end. Another log 24 ft. long has been cut from the same tree, and like the former was entirly free from knots or flaws. The tree contained 18,000 feet and weighs 40 tons. Two "hand" loggers felled this giant of the woods after which it was taken to the water's edge by means of jack screws.

—The shingle mill of W. P. Christie, of Severn Bridge, was totally destroyed by fire, on the 12th May. The mill was only newly built, and fitted with the latest requisite machinery. The fire originated in the engine-room, when all the employees were away to dinner, with the exception of the foreman, who was busy filing the saws, and did not observe the fire until it was beyond control. Although every possible assistance was rendered, in twenty minutes the structure was a smoking ruin. Mr. Christie intends to rebuild at once, and has the most of the building material on the grounds, and the carpenters busy framing a new and larger mill.

—Alfred McGrath, while working in Laurent LeBranc's saw mill at Chockfish, near Buckingham, had his right hand cut off by a circular saw.

—Mr. D. E. Sprague is rebuilding his planing mill, in Manitoba, that was recently removed to make way for a building of the Northwest Navigation Company.

—Mr. Walter Beatty, of Pembroke, who had his planing mill destroyed by fire last October, has just completed the erection of a new and larger edifice, fully equipped with the best wood-working machinery. He will commence active operations again shortly.

—The St. Lawrence Lumber company has been registered in London to carry on in Canada and Liverpool, the business of timber merchants and dealers, with a capital of £50,000. Kennedy Burns, of Bathurst, is a director.

—Chas. R. Palmer, with a crew of nearly 100 men, is at work upon his drive of 7,000,000 on the west branch of the Meduxnekeag, N. B. W. H. & J. Rourke's drive, containing three and a half millions has arrived at St. Martins.

—The Lindsay *Post* says that Mr. John Dovey had a narrow escape from death whilst looking after some of his logs at Kinmount. The logs were being run through the slide at that point and in some way Mr. Dovey lost his footing and was precipitated into the water and was carried over the chute amongst the logs. He was under the surface for a considerable time, and the spectators even lost all hopes of seeing him again, when a log running underneath him ran to the top, and he was pulled out insensible. A doctor was summoned and after considerable labor he was revived but was unable to stand the journey home until Tuesday. He is improving slowly. The old adage that "misfortunes never come single" has been amply verified in Mr. Dovey's case. On Wednesday, the day after he was conveyed home from Kinmount, his son George, aged about 21, who works in his father's mill here and who had last October several fingers of his left hand cut off at the second joint by coming in contact with a saw, again met with a similar accident to the hand, this time amputating the four fingers clean. A mitt, worn on account of the fingers still being tender, caught the jointing saw and drew his hand in.

—We learn that some large rubber belts, ranging in width from 20 to 48 inches, five, six and seven ply thick, one of them weighing six tons, have recently been supplied to elevators in different parts of Canada by the Canadian Rubber Company, of Montreal and Toronto.

The following letter speaks for itself:

ROCKLAND, ONT., May 29th, 1888.

The Wm. Hamilton Mfg. Co., Peterboro', Ont.

DEAR SIRS:—We will say this that unless we are very much mistaken you have built us a Band Mill that will do you credit. So far it has gone right on cutting up whatever comes along, rough logs or smooth, without any hitch or delay of any kind. How long would it take to get up another shingle machine if wanted? Yours truly, (Signed) W. C. EDWARDS & Co.

The above was an Allington Band Mill.

Railway Construction.

The prospectus of the Ontario, Manitoba & Western gives an estimate of $25,000 a mile for the whole 580 miles of road, or about $15,000,000 for the whole. The road will run through an exceedingly rich agricultural, mineral and timber region.

A private despatch from Minneapolis says, on the authority of Mr. Pillsbury, that one thousand shares more than the controlling interest in the "Soo" road has been sold to officials of the C. P. R.

HENRY PORTER

MANUFACTURER OF

Leather Belting

VISITATION STREET,

MONTREAL, QUE.

Mill Owners will do well to write for estimates before placing their orders.

MACHINERY FOR SALE

JOSEPH HALL MACHINE WORKS, OSHAWA

Circular Saw Tables; Wood Turning Lathes; Morticing Machines.
Car Morticing Machine; Wood Benches; Wood Shapers.
Large Surface and General Purpose Wood Planing Machines.
Graining Machines; Tenoning Machine; Sand Belt Machine.
Swing Sawing Machine. Testing Machines for Threshing Machines.
Horizontal Boring Machines; Upright Boring Machines; Facing Machines.
Iron Turning Lathes; Iron Column Drilling Machines.
Iron Punching Machine; Punching and Shearing Machine.
Key Seat Cutting Machines; Cutting and Shearing Machines.
22 Spindle Gang Drilling Machine; Power Shears.
Large Iron Shaper, English Make; Milling Machine.
Schlenker Patent Bolt Cutting Machine.
No. 6 Northey Steam Pump; Large Heavy Tumbling Barrels.
Steam Heater, 51x72 inches.
Bradley Cushioned Trip Hammer; Iron Boring Lathe.
Foundry 3 Legged Drop, 35 feet High 1,100 pound Drop, 37 inch Gear Wheel.
Steel Boiler, 68x168 inches.
Horizontal Engine, Cylinder 18x36.
Turret Head, Brown & Sharpe, Mill Screw Machine.
Leffel Water Wheels; Portable Engines.
Fairbank's Platform Scales; Steam Pipe and Fittings.
Fire Extinguishers; Sand Blast for sharpening and cleaning Files.
Belting, Shafting, Hangers, Pulleys, Couplings.
Wrought Iron Heater for Glue and Wood; Circular saws.

JOSEPH HALL MACHINE WORKS,
OSHAWA.
JOHN LIVINGSTONE, Trustee.

H. W. PETRIE'S list of Sawmill and general Wood-working Machinery, for quick delivery.

ONE new 2 or 3 block sawmill with 61-inch saw.
ONE sawmill with timber limit, in Parry Sound.
ONE 2-block mill, small portable size.
ONE automatic sawing machine, Bayley make.
ONE 66-inch inserted and one 64-inch solid saws.
TWO stave cutters with parts.
ONE gang lath mill, new.
ONE Waterous self-feed lath mill and bolter.
ONE Goldie & McCulloch Hall self-acting shingle machine.
ONE self acting shingle machine, Green Bros.' make.
ONE Waterous self-acting shingle mill and jointer.
ONE Eureka self-acting shingle machine and jointer, I. Frenchette, maker, St. Hyacinthe, P.Q.
TWO Doherty hand swing machines.
ONE upright swing with 40-inch saw.
EIGHT wheel jointers, various makers
THREE drag saw machines.
ONE 24-inch planer and matcher, Rogers' make.
ONE new eclipse planer matcher and moulder, Galt make.
ONE 24-inch planer and matcher, Picton make.
TWENTY-INCH planer and matcher.
EIGHTEEN-INCH planer and matcher.
LITTLE Giant poney planer and matcher.
NEW Economist 24-inch planer and matcher.
ONE 27-inch revolving bed double surfacer. Galt make.
ONE 24-inch surfacer, McKechnie & Bertram.
ONE 24-inch poney planer, Frank & Co. builders.
ONE 20-inch poney planer, Frank & Co. builders.
TWENTY-FOUR-INCH surfacer, Kennedy make.
TWENTY-FOUR-INCH surfacer, hardwood bed.
TWENTY-TWO-INCH surfacer, wood bed.
EIGHTEEN-INCH surfacer, all iron and steel.
SIXTEEN-INCH buzz planer, Galt make.
THREE-SIDE moulder, all brass heads, Rogers' make.
THREE-SIDE moulder No. 2 Cant Gourlay make
TWO one-side moulders, McKechnie & Bertram make.
ONE one-side moulder, wood frame.
NEW 2-side moulder, Cant Bros.' make, Galt.
TENONING machine, double cope, Goldie & McCulloch.
ONE J. A. Fay tenoner, small size.
TWO Ross tenoners.
ONE double cope tenoner, McKechnie & Bertram.
BLIND slat tenoner, Cowan build.
POWER morticer, Goldie & McCulloch make.
TWO power morticers for heavy work.
LARGE stock of foot morticers, new, at $15 each.
UPRIGHT boring machine with column.
SIX power scroll saws, various makes.
ONE 34-inch band saw, Hamilton Tool Co.
TWO new band saws, Galt make.
NEW 34-inch pedestal and 24-inch bracket band saw.
ONE upright Goldie & McCulloch shaper.
NEW iron top shaper, Cowan make.
SHARPER, heavy iron column, Cant Bros.' make Galt.
ONE wood frame shaper and counter shaft.
ONE velocipede foot power shaper, Barnes.
ONE automatic handle lathe, Sheldon Bros.
ONE handle or gauge lathe, Bailey.
ONE axe handle or spoke lathe, new.
ONE Blanchard spoke lathe, Fay make.
ONE broom handle lathe, wood frame.
NEW wood splitting machine Send for photo.
BOBBIN lathe with cutters for cotton and woolen mills.
ONE iron bowl machine, American make.
SET of hoop machines, Goderich make.
SET match machinery for round matches.
LOT of lumber and log cars for sawmill use.
FOUR pole road cars, 7 feet 10 inches gauge.
SANDPAPERER, new, Galt make.
FOOT mitering machine, Cant Bros.' make.
ONE choir mortising and boring machine.
ONE set spoke machines, Fay make, Cincinnatti.
ONE knife grinder, Galt make.
SIX saw benches, cut off and ripping.
ONE hand wiring machine
TWO new wood turning lathes with rests, etc.
ONE beading and moulding attachment for planer and matcher.
LOT of moulding and matcher cutter heads.
SEND for list 13 and 14 and mention wants.

Address H. W. PETRIE, Brantford, Ont.

RARE BARGAINS
—IN—
MACHINERY

1 Yankee Gang and Slabber.
1 Circular Rig to cut 45 feet.
3 Large Log Dogs and Steam Canter.
1 Double Edger.
1 Slash Table.
2 Siding Saws.
1 Sett Butters.
1 Lath Machine.
1 Emery Trimmer.
1 Press Punch.
1 Filing Table and Saw Anvil.
7 Large Circular Saws.
16 Small Circular Saws.
56 Gang Saws.
2 Mulay Saws.
1 Pony Planer.
1 Shaper.
1 Swing Saw.
1 Rip Saw.
1 Matcher.
Belting, Shafting, Tools, etc.
1 Fifty-Horse Power Waterous Engine and 3 Boilers.
1 Twenty-Horse Power Waterous Engine and Boiler.
1 Four-Horse Power Engine and Boiler.
1 Seventy-five-Horse Power Marine Engine and Boiler.
1 No. 2 Heavy Circular Saw Mill with Prescott's Direct Acting Steam Feed to cut 30 feet.
1 No. 2 Heavy Circular Saw Mill, to cut 20 feet. (Rope or Steam Feed).

We have received instructions to close out the above Machinery, all of which is in good running order, without reserve, To any one building a Mill this is a rare chance.

PAXTON, TATE & CO.,
PORT PERRY.

TO LUMBERMEN.

J. K. POST & Co.,
LUMBER MERCHANTS
And Shipping Agents
OSWEGO, N. Y.

THE BALL ELECTRIC LIGHT Co. LD.
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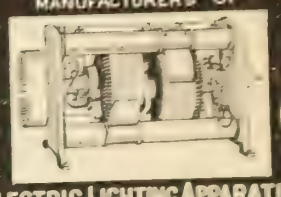

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J. L. JONES
WOOD ENGRAVER
10 KING ST EAST
TORONTO
SEND FOR PRICES

NOTICE.

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for Supplies," will be received at this office until noon on THURSDAY, the 28th inst., for delivery of supplies required for the year ending with June, 1889, viz.: Groceries, Ammunition, Twine, Oats & Flour, Blankets, Clothing, &c., required at various points in Manitoba, the North-West Territories, and British Columbia.

Forms of tender, containing full information relative to the Supplies required, the quantities, &c., may be had on application at this office, or at the Indian Office, Winnipeg, Man.

Parties may tender for the supplies required at any one of the above-mentioned points separately. Samples of the articles required to be delivered under the Contract, Schedules, and the Regulations governing the Contract, may be seen at the Indian Office, Winnipeg, Man., where tenders will be received. The Department does not bind itself to accept the lowest or any tender.

Each tender must be accompanied by a certified cheque on a chartered bank, for the sum of One hundred dollars, which will be returned to the party tendering if his tender is not accepted. If the party tendering declines entering into a contract when called upon to do so, or fails to complete the work contracted for, the amount of his cheque will be forfeited to the Crown as liquidated and ascertained damages for such neglect or refusal; but if he completes the contract in a satisfactory manner, the cheque will be returned to him after the expiration of the contract.

The lowest or any tender will not necessarily be accepted.

This advertisement must not be inserted in any newspaper without the authority of the Secretary. Printers inserting it without such authority will not be paid for the same.

L. VANKOUGHNET,
Deputy of the Superintendent General of Indian Affairs.

Department of Indian Affairs,
Ottawa, May, 1888.

Lumbermen
SHOULD SEND FOR A COPY OF
Scribner's Lumber & Log Book.
OVER ONE MILLION ALREADY SOLD.
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ADDRESS
A. G. MORTIMER, PETERBOROUGH, ONT.

THE NEWS.

ONTARIO.

—17,000 railway ties await shipment at Stayner.

—Waubaushene mills run ten and a half hours a day.

—F. Baechler, saw mill, Ben Miller, is offering to compromise.

—An addition of 200 feet is being put to the mill wharf, Waubaushene.

—The demand for band saws at the present time seems to be increasing.

—A new saw mill is to be built at the head of Kempenfeldt Bay, Lake Simcoe.

—The Rathbun Company have made great improvements in their docks at Rossmore.

—Peters & Cairn's mill at Midland is expected to cut 4,000,000 feet during the season.

—Mr. W. C. Harrison, Norwood, is putting a 50x15 foot addition to his sash factory.

—William Ellis had two fingers cut off in Shire's mill, Bracebridge, a few days ago.

—Bronson & Weston, of Ottawa, have placed a band saw in their mill at the Chaudiere.

—C. Young, of Young's Point, has increased the capacity of his shingle mill to 25,000 daily.

—Large shipments of lumber from Parry Sound to Oswego, N.Y., are being made this spring.

—Mr. John Shaw, of Forest, has disposed of his retail lumber business to his son, Fred W. Shaw.

—Extensive alterations and additions are being made to Mr. W. Sparling's planing mill, at Pembroke.

—All the mills at the Chaudiere are running full time day watches, but as yet no night work is being done.

—The Rathbun Co., of Deseronto, have purchased Thompson & Avery's cut of ash lumber of over 300,000 feet.

—Mr. Singleton Brown's new shingle mill at Bracebridge is running and has the prospect of a prosperous season.

—A young man named Fox had all the fingers of one of his hands cut off by a saw in the Gilmour lath mill, Trenton.

—The Rathbun Co., are driving briskly over the Scott limits. They have over 20,000 logs coming down a new and improved stream.

—A Hamilton firm is about to erect a mill at Falkenburg this summer. The firm will buy and ship cordwood, stove wood and tanbark.

—The sawmill of Messrs. Troup Bros., at Sherkston, near Welland, was destroyed by fire April 21. Messrs. Troup will rebuild immediately.

—Mr. Wm. Parker, of Stevenson, has taken out a million feet of logs this winter. They will be manufactured at his mill in that township.

—Mr. John Munro and his staff are busy at work on the new planing mill, at Midland. It is expected to be ready about the end of May.

—Casey Bros., a planing mill firm, of Hamilton, have made an assignment for the benefit of their creditors. Liabilities about $8,000; assets, $3,500.

—The Rathbun Company, of Deseronto, have now three thousand men in their employ. This will give some idea of the magnitude of their operations.

—Vigars Bros., of Port Arthur, have doubled the capacity of their mill by the addition of new machinery. They will cut about 3,000,000 feet this season.

—The Dickson Company, of Peterborough, have purchased from Mr. D. Ullyott the balance of his interest in the pine timber limits of the township of Anson.

—H. Sherman, aged seventy-eight, died at Windsor. He was a wealthy lumberman and cheese manufacturer. One of his sons is professor of mathematics at Dartmouth college.

—Ottawa builders say that lumber of all kinds has risen $1.50 a thousand feet, caused no doubt to some extent by the large amount of building that is being done at the capital this year.

—The Blind River Lumber Company has made a great improvement in their mill this spring and now have it running and intend doing a large business this season in lumber, lath and shingles.

—A. & P. White, of Pembroke and Deux Riviere, have taken out a full supply of logs and dimension timber this season and are now busily cutting. They anticipate a brisk season's business.

—John Ashcroft's cabinet factory at Wiarton was burned May 16th. The fire started in the drying kiln. Loss $5,000; insured. The small G. T. R. hand engine did good service, saving the adjoining property.

—A drive of logs, consisting of 300,000 pieces, is now on its way down the Trent river. It is said to be as large as any one drive that has ever run over these waters, and will take two or three weeks to pass any given point.

—Mr. A. M. Dodge, of New York, President of the Georgian Bay Consolidated Lumber Company, has made extensive improvements to his summer residence at Waubaushene, and will reside there for some months.

—Messrs. Hurdman & Co., of Ottawa, have commenced running their new circular saw mill. The firm expect that the little mill will get through a large amount of light work, leaving the gang saw free for heavy cutting.

—Mr. John Church has sold his saw-mill at West Point to the Neebing Lumber Co., who will take it to the neighborhood of Fort William. The company is composed of Messrs. McCuaig, Low, Carter, Richards, Lingham and others.

—Messrs. John Craigie & Son have opened up a box factory and planing mill at Penetanguishene, Ont. They will manufacture upwards of a million feet of lumber in their factory this season, and will give employment to about ten men.

—The Messrs. Brown Bros., Toronto, have sold all their standing pine and oak timber at Limehouse station, near Acton and Georgetown, to Messrs. Taylor Bros., of Toronto, who have erected a steam saw mill, and work will be proceeded with at once.

—Ice fourteen inches thick and covering an extent of 1,500 feet on the Ottawa river at Hull, was thrown high up in the air with a terrific report the other night. Gas generated in sawdust beds at the bottom of the stream is supposed to have caused the explosion.

—The pumping and engine house, the property of the Collingwood Dry Dock and Ship Yard Company, situated at the dry dock, was totally destroyed by fire May 17th. Loss, probably $1,500; insured for $600 in the Royal, $300 in the Royal Canadian.

—Belleville dealers will this year bring from Ottawa upwards of one million feet of lumber. In the past this city has been considered an important lumber manufacturing point, but the quality of the cut has of late years deteriorated very greatly and the best lumber is all bought for the United States market.

—Messrs. White & Son, proprietors of the flour and sawmills at Orwell, met with a serious loss some days ago when, without warning, the saw-mill dam gave way, and half a million feet of logs and twenty thousand feet of lumber were swept into the lower dam, which also gave way. The loss is estimated at $20,000.

—The *Intelligencer* says that all the saw logs of last year's drive are now below the lower bridge at Belleville and will be passed through the boom by Saturday. The first of this year's logs will reach Belleville in ten days, as the first of them have passed Stoco Lake and the tail is below High Falls. The water in the Moira is keeping up satisfactory.

—Messrs. H. L. Lovering & Co. have been making large cutting records in their saw mill at Coldwater this spring. Last winter the mill was thoroughly refitted, the machinery being in a large measure replaced by new, and several improvements made by which the mill will now cut more lumber for the number of hands employed than any small mill in the district.

—The shrill note of the steam whistle, and the hum of the buzz saw are now heard in the land, and everywhere signs of the season's busiest operations present themselves. The roll of the truck, the voice of the dockwholloper, the familiar tread of the lumber gang, and various other signs of activity fall on the ear, and all betoken the sway of spring. So says the Penetang. *Herald.*

—The Canada Atlantic railway is making a bid for the lumber carrying trade from Ottawa to New York. They offer to carry it to the latter city for $35 a car, or about fifty cents a thousand feet less than boat rates. This, it is said, will not affect forwarders very much this season, as they have had their contracts made some time ago, but the business of American boat orders will suffer.

—The demand for good, clean square timber seems unusually keen this season. Agents of buyers have been everywhere in the woods viewing the timber on the rollways, and many sales have been made. Indeed it is rumored in well posted circles that of the entire cut of the Upper Ottawa only a couple of lots remain unsold. Figures are not obtainable, but they will doubtless soon leak out.

—Application for letters-patent is made by the Western Lumber company, limited, capital $300,000, for the purchase of timber, limits and real estate of every description, and the manufacture of timber into logs and of articles to be made into firewood, etc. The operations of the company are to be carried on in Ontario, Manitoba and the Northwest Territories. The chief place of business is Toronto.

—The Maganetawan river, at Burk's Falls, has overflowed and risen to the highest mark attained for years. Wood and lumber piles have been thrown down, houses floating turned over or floated off. The old hull of the "Ada," thought to be high and dry, was carried by the current down the river. A family living near the river have been compelled to remove to the second storey, and get to and from by boat.

—Hardly a week passes by without one or more accidents occurring in one or other of the large mills at Deseronto. In one issue of the local paper of that town we are told that one man was struck in the stomach by a knot hurled from a saw and severely bruised; another, while removing a piece of wood stuck a tie-hook through his great toe; one had three fingers of one hand cut by a jointer in the cedar mill; another had his fingers jambed between the couplings of two cedar cars; and still another had the heel of his boot caught in a piece of machinery, and but for timely assistance he would have been torn to pieces. The people of Deseronto had better get an ambulance wagon and a hospital right away.

—A correspondent writing from French River, says: The Victoria Harbor Lumber Coy's and McLean Bros'. drives are down. One of the Ontario Lumber Coy's drives, in charge of J. Brennan, which was hung up last season, is reported to be in safe water, and all the other drives likewise. Tugs have been running on the French for the past two weeks and rafting is already begun. There is every indication of a busy season here, as both the large mills have been refitted and enlarged, and will commence cutting in a few days. There is also a large fleet of fishing boats now stationed here. Shipping has already commenced and the American steamer "Remora" arrived to-day with a full list of passengers.

—Many people in the District of Nipissing, says a local paper, are enquiring why the proceeds of the recent sale of timber berths should not be, at least to some extent, expended in subsidizing the North Bay and James' Bay Railway. They think that the expenditure connected with the opening up of this new territory is a legitimate claim on the proceeds of such sales. The sums appropriated for roads and bridges in this District by the Provincial Government recently, are proper outlays in this direction, but the amounts granted are insignificant in comparison with the income which the Provincial Treasury receives from the sale of our pine timber. Nipissing calls for a subsidy for the North Bay and James' Bay railway, and its people will press the claim.

—Large quantities of spruce timber in blocks four feet long and not less than six inches thick, are being shipped by the Northern railway from Trout Creek station to the paper mills of Ontario, where it will be reduced to pulp and mixed with cotton fibre in the manufacture of paper. The *Nipissing Times* suggests that the people of that district should enquire how far they can utilize their spruce and poplar woods for this purpose. There may be money in this thing. Another important industry has arisen in this vicinity since the completion of the Northern railway. Hardwood lumber, birch and maple chiefly, is being shipped from the south side of the lake by the car load to Winnipeg, for the manufacture of furniture, and satisfactory returns are being realized.

—The total cost of construction of slides and other works to facilitate the descent of timber and sawlogs on the Ottawa river and its tributaries, up to the 30th of June last, has been close on a million dollars, as shown by a return submitted to the House, the figures for each being as follows:

Ottawa River	$370,002
[illegible]	67,077
Madawaska	104,573
[illegible]	[illegible]
[illegible]	[illegible]
Petewawa	77,000
Riviere des Prairies	13[illegible]
South Nation	1,188
General expenditure	232,459
Total	$942,257

Of this amount, $719,247 was expended prior to confederation.

QUEBEC.

—A new saw mill is being erected at Sawyerville.

—Lumbering operations will be brisk at Buckingham this year, nearly all the mills having already commenced sawing.

—A dynamite explosion in the logging camp of King Bros., at St. Pascome, county L'Islet, is reported. Sixteen men are reported as badly injured.

—We learn that several sales have been made by Quebec shippers to London importers, 3rd and 4th quality, chiefly the latter. Prices are understood to be about the same as last year.

—The Quebec Timber Company's accounts are said to show a debit to profit and loss at the close of last year of £7,706:

the balance of loss from 1886 to 1887 brought out in the revenue accounts in £314.

—Mr. J. Fish, Lachute, has sold his grist mills to Mr. Peter Campbell for $20,000, and his sawmills to Mr. John Campbell for $8,000. There is talk of two sawmills being built at Lachute the coming summer.

—Messrs. Mercier & Dudley, of Lake Megantic, have shut down on birch, as they think they have as much as they can handle for this year, and it will not answer to allow birch in the round log to lay over. They have taken out in spruce, pine, birch and ash, nearly nine million feet.

—The leading Quebec houses have lately made extensive purchases of new rafts for European ports about August next; the prices are in some instances reported to be an advance of about 5d. per foot on last year. The estimated manufacture from the Ottawa is put at 2,000,000 feet of square pine, waney pine 700,000 feet. There has been a good demand for first class square in the Clyde during last winter, and considerable sales of this class of timber have been made.

—Several sales of Quebec spruce lumber have been made lately at very good prices; in some cases $11 per 1,000 feet for mill cut, culls out. This is about $1 better than last year. Pine lumber, however, is quite a drag both here and in the United States market. There seems to be a feeling in the United States markets that things are more likely to become worse than better; the effects of the strikes now so prevalent in the States are beginning to be most seriously felt, and large operators are getting very cautious when buying for future delivery. There is a fair demand for spruce lumber for the United States' market, and also for common grades of pine boards, otherwise business is very dull.

NEW BRUNSWICK.

—Messrs. J. & J. H. Titus, Smithtown, are making extensive repairs at their mill. About twenty-five feet of an addition is being constructed for the purpose of putting in a lathing machine.

—Haley Bros. & Co., who have been operating a planing mill at St. John, have dissolved partnership. The business will be continued as usual.

NOVA SCOTIA.

—The great timber ship which the New York man, Robertson, intends to tow from Nova Scotia to New York is now more than half completed at Joggins, and it is expected that she will be launched early in June, and start on her voyage immediately afterwards.

MANITOBA AND THE NORTH-WEST.

—The machinery for a new saw mill at McLeod has arrived, and the mill will soon be running.

—Mr. Blanche, of Springbank, is putting up a portable steam saw mill on the Elbow River about fifteen miles from Calgary.

—Dick Banning & Co., of Winnipeg, will cut this year from 8 to 9 million feet of their own, and three million additional from Minnesota. They report prospects for business very good.

—In consideration of a vigorous protest on the part of Winnipeg lumber dealers against the use of British Columbia cedar for block paving purposes, the City Council will use pine grown within the Province.

—It is said that Mr. John A. Christie is about to open up the saw mill at Brandon. He visited Birtle recently to make arrangements regarding logs, which he intends floating down the Assiniboine River to this point.

—A planing mill at Brandon, which has been standing idle for some years, was destroyed by fire a few days ago. The property was owned by a Mr. Griggs, of London, Ont. The loss will be light, without insurance.

BRITISH COLUMBIA.

—Vancouver is coming to the front as quite an important lumbering centre.

—Leamy & Kyle, who have a saw mill at Vancouver, have lately formed a partnership with George Cassady, of New Brunswick, for the establishment at Vancouver of a sash and door factory on an extensive scale. It is understood the factory will be supplied with the most modern machinery. The main building will be 60x75 feet, clear of boiler room, drying rooms, etc.

—Twenty cargoes of coal, lumber and merchandise were exported from ports in this province during the month of April. The aggregate quantity of lumber taken is: Burrard Inlet, 3,555,075 feet; Chemainus, 1,038,000 feet; total, 4,593,076 feet. Seven cargoes of coal were exported from Nanaimo, aggregating 25,310 tons; and from Departure Bay, 16,470 tons; Port Moody, 2,250 tons; total, 34,030 tons. The coal was valued at $209,000; the lumber at $39,709; total value of lumber and coal exported during the month of April, 268,709; total tonnage engaged in carrying the above cargoes 29,185.

—Mr. C. D. Rand, of the well-known firm of Rand Bros., has been the medium through which a large transaction in timber lands in British Columbia has been effected, the sum involved being stated on reliable authority to be in the neighborhood of $40,000. Mr. James McLaren, late of Perth, Ont., who takes a leading place in the lumber interests of that province, is the purchaser. The purchase consists of over 2,000 acres of timberlands along the coast district, and belonged to Messrs. J. C. Prevost, of Victoria, and W. J. Goepel, and it will probably not be long before Mr. McLaren with his great enterprise will commence operations on his property and thus give an impetus to the lumber trade.

—At the last session of the British Columbia Legislature lately adjourned, a new land act was passed which is of special interest to lumbermen. By an act passed in 1887, the sale of timber lands was prohibited, and such lands were only permitted to be leased. After a short trial, this regulation is now abolished. The new act permits the lease of Government timber lands for a term of years for the purpose of lumbering at an annual rental per acre, and a royalty on all lumber manufactured. Lands so leased will be held for a sale by pre-emption, for settlers, but pre-emptors will not be allowed to cut timber on leased lands, excepting what they may require for their own use. Special licenses will be granted to cut timber on an area not exceeding 1,000 acres, and for a period not exceeding one year.

AMERICAN NOTES.

—In the forests of New Hampshire the snow is still three feet deep.

—Alpena has shipped 1,160,000 feet of lumber and 370,000 pieces of lath this season.

—The log cut in the Duluth district, Minn., is reported as aggregating 230,000,000.

—The saw mills throughout the Mississippi valley are suffering from too much water.

—Reliable estimates show that 8,000,000 hoot calks are used by the lumber trade annually.

—The English trade papers report a good business doing in walnut logs, and prices for them are fully maintained.

—The firm of John McLennan & Son, of Bay City, have about 7,000,000 feet of hardwood to handle this summer.

—Ten to thirteen million feet of lumber was burned at Big Rapids, Mich., May 3rd. Loss $120,000; insurance $100,000.

—At Muskegon the lumber shovers' union is still resolute and refuse to make any cut on their demand for $5 per day for loading vessels.

—Some of the Southern papers are raising their protest against the extensive purchases being made by Northern capitalists in timber lands.

—The outlook for the season just commencing would seem to be more than ordinarily favorable for every branch of the lumber trade, including shingles.

—La Crosse (Mich.) mills employ large numbers of girls in edging or knot-sawing and packing shingles. Bay City millmen are about adopting a similar practice.

—The John Spry planing mill at Sault Ste. Marie, Mich., has been sold to J. B. Sweath, of Marquette, who will enlarge and increase it into a $50,000 sash and blind factory.

—During the past two years sawing capacity to the extent of 80,000,000 feet per annum has been destroyed by fire in the Saginaw valley, Mich. Only two new mills were put up in that period.

—A writer on saw mill building says: "Put a corrugated iron roof on your mill. It won't cost much and you won't have to keep a man on the roof with a pail of water, putting out fires that are bound to start." That is good advice.

—A couple of Michigan men have taken out patents upon a band mill carrying two saws, which is designed to cut in both directions, so that no time is lost in the process of gigging back. A board is cut from the log in running one way by one of the saws, and another by the saw in returning.

—There is such a demand for Maine spruce gum that there are fears expressed that the trees are giving out. A correspondent suggests that they may be coaxed to give more if treated as the gum trees of the East are. The natives hack the bark with their hatchets, and in due time the tree weeps gum.

—Vermont is the first state to announce the result of the maple sugar season of 1888. The output is estimated at 15,000,000 pounds, the value of which is $1,250,000. To obtain that amount of sugar 5,000,000 trees were tapped. It utilized, the sugar production would be 50,000,000 pounds—150 pounds to every inh

—Hemlock has been for some years working into an established position in the western lumber trade, and although it does not get very much notice, there is no doubt but that it is making material progress all the time. It has become a regular item of stock with leading western dealers, mainly in the shape of dimension, but occasionally as boards. It does not yet rank up with pine, generally selling from $1 to $1.50 below for similar stock.

—A singular circumstance exists in connection with the lumber business in the Saginaw valley this season, which places very many operators in a quandary. The water in the lakes is pronounced a foot lower than the ordinary stage; this naturally affects the streams emptying into the lakes, and the result is that great difficulty is already being experienced in "log running," and it is predicted and greatly feared that it will result in hanging up a considerable portion of the anticipated stock for the mills.

—Some months ago, says a Michigan paper, a party working in the lumber camp of Wm. Coach, on the Sturgeon river ordered 31 tenth ticket in The Louisiana State Lottery. One of these was a tenth of ticket No. 71,573, which won the first prize of $150,000, in the drawing of the 7th of February, giving the handsome sum of $15,000 to be divided. There were sixteen in the club, the tickets being sent to Geo. J. Johnson, of Baraga. Three of the holders were of one family, being John Bowen, his wife and child, who thus secures a good share.

EUROPEAN NOTES

—Pitch pine cargoes to the Thames are arriving freely.

—Imports to the London market begin to show a marked increase especially from the Norway ports.

—Reports from shipbuilding centres are encouraging, and the majority of yards are well occupied with work.

—Somewhat more animation is noticeable in the free-on-board trade, both in London and on the coast.

—Denny, Mott & Dickson's London circular, under date of May 2nd, reports nothing doing in Canadian timber, pending fresh season's arrivals.

—Liverpool reports state that the first arrivals of pine deals, boards and sidings, from Montreal and Quebec, by the regular steamship lines came in during the month just closed. Business, though quiet, is steady, and a fair consumption seems to be going on.

—The *Globe's* London cable says: "The Glasgow Exhibition was opened May 8th by the Prince and Princess of Wales. The weather was lovely. The Canadian exhibit, in charge of Captain Clark and Thomas Graham, includes cereals, timber, minerals, natural history, paintings and photographs. The exhibition promises to be the most successful ever held in Scotland.

CASUALTIES.

George Metcalf lost a third finger from his left hand the other day while working a circular saw at a Penetang. saw mill.

John Hearty, a shantyman, was drowned in Trout Lake some days since. The body was taken to Vinton where he formerly resided.

A workman named Wilson, employed in a saw mill at Deseronto, had one of his thumbs torn off by a sawdust carrier. Amputation of the arm below the elbow was found necessary. The injured man lives at Campbellford.

About a fortnight ago, W. J. Brown, while working a large shingle press in Toronto, had his left hand caught in the machinery and crushed to a jelly. It is said that the poor fellow bore his agony manfully until released. He was taken to the hospital, where the hand was amputated, and he is now doing well.

A young man named Ernest Grant was instantly killed in a Warsaw (Ont.) mill some days ago. The employees were engaged in siding railway ties when by some means the saw caught a tie after the dog holding it on the carriage had been loosened and throwing it back struck the young man on the temple. He immediately sprang to his feet, put his hands to his head and dropped over dead.

Henry Jones, employed in Graham's planing mill, Brantford, Ont., got under the floor to adjust a belt. Somehow his clothes caught in the revolving shaft, and when he climbed up into the shop again he was attired only in his socks and boots the rest of his clothes being whirling around the shaft at the rate of two hundred revolutions to the minute. He was only slightly bruised, so that after borrowing some clothes he was able to walk home.

HARDWOOD LUMBER AND ITS MANUFACTURE.

If the manufacturer of hardwood lumber would pay the same attention to his business as the pine man does his, there would be less dissatisfaction about the inspection of his lumber. If he learned the requirements of this or any other market he would know that to please, he must send his product in good condition. There are too many sawyers of hardwood who have merely "picked up" the "trade," the result is that many a No. 1 log which if handled as a pine sawyer would handle it would turn out valuable lumber, but instead it is not sawed with judgment and the result is one-half its value is gone, and even the good is not extra. To know how to properly put a "carriage" and its foundation so that it will run true; to know how to set a saw with just enough "set" to cut smooth, even lumber; to know how to put a log on the carriage to cut as few "heart" boards as possible; to know when to "turn" a log—in short, to know how to get the best results out of logs is not in the power of him who has merely "picked up" his trade, and the sooner this is learned by the manufacturer of valuable lumber, the better for the credit side of his bank account.

The prevailing custom of paying a stated price per thousand feet for sawing, is another cause of much poorly sawed lumber. The sawyer may know his business thoroughly, but to work up to his knowledge may require more extra time than he is willing to devote to "the other man's" interests, and the result is he does a good day's work in the number of feet he has sawed, but the man for whom the work was done doubly pays for it. How much better it would be for both mill owner and the man who is having the work done, could they agree on a stated price per hour. It may seem a broad assertion, but I venture to say that by this arrangement the man for whom the sawing is done—providing the logs sawed be valuable timber—will gain enough to pay for the whole day's saw bill even though he has a third more thousand feet, than though he has paid a stated price per thousand feet. By this plan the sawyer can see advantages to be taken of a log which never would have occurred to him if quantity instead of quality were taken into consideration. The mill owner who saws his own logs, need not be told that care must be taken, and yet many will "butcher" their own timber as though they were not sawing money out of their own pockets every hour they run their mill. These are the men who want the lumber buyers from the large markets to pay them the same price that the careful sawyer gets for his products, and will think he has not been fairly dealt with if he is made to pay for his own mistake.

I have tried many ways for getting the most good lumber out of logs, and find this is best: first take off a slab, turn the slab side down upon the carriage, and saw the log through past the heart until you get a clear face, if the log be a good one, then turn it over against the head blocks until you have a wide, clear face, which may leave a plank two, three or four inches thick, owing to the size of a log. Then take the sawed boards or plank, and after running the head blocks back 24 or more inches, place the boards or planks, whichever you have sawed, so that the saw will edge them properly. To determine just where the saw will come may be done by sighting, or better still by the man at either blocks using a two foot measure, which placed across the board, back to the block, will show how far out to place it (at board); treat the other edge the same way, and if the heart runs straight enough not to cut away two much lumber, saw it out. A better way to edge lumber, but requiring extra machinery, is to have attached to the mill an edging saw mill. In this way the lumber can be edged as fast as the log is sawed, and where a mill can be so provided the result will show that it pays well.

Of course when the logs are poor so much care is not necessary, but one thing I have paid dearly to learn and that is, no log can be too poor to neglect to saw full thickness. Thousands of dollars have been lost in not urging upon the sawyer the great importance of sawing full. There is a double loss in thin lumber. It drops one grade if inch, and will often be refused altogether, while on the other hand, if a car load of lumber be plump, but really a little inferior, its thickness will often sell it, so that a manufacturer can not urge too emphatically upon his sawyer to be liberal in thickness. A stout 1-16 for ⅝, and one inch and a scant ⅛ for inch and a quarter and inch and a half, and full ⅛ for two-inch; for three and four-inch 3-16 is not too much; better too thick than too thin.

A careless sawyer will often allow his log to "cant" out, making one edge of the board plump while the other edge may lack just enough to spoil the board for the grade into which its quality would place it. This same result more often occurs from the carriage not being properly set in place; or again, the saw may heat and "run." A good sawyer will see that everything is kept in perfect order, and stop at once to adjust his mill at the first mis-cut board.

Not a mill man in the country, but who can tell just how to properly stick lumber, and when to stick it, and yet when the lumber is marked, it shows that some of the many have made a grave mistake, especially so in the case of poplar and other light colored lumber. In sawing poplar, when it is green with sap, it should be stuck up at once, as if left piled together it will "sap color" in a few hours. "Haven't time," will not answer! If you care to get the full value of your lumber, you *must* stick it up as fast as sawed. This is true of oak, and in fact of all lumber affected by sap. Lumber manufacturers often wonder why their stock is not as bright and nice as some they have seen. If these same men continue to saw their lumber and pile it close together, and leave it until they have *time* to stick it up, then I can assure them they will spend the rest of their days wondering. This should be the order in importance with them, first how to keep the lumber bright, then how to saw it properly.

Use narrow strips, and under no circumstances may they be green, as they will most certainly color the wood wherever they touch, and if left too long will rot it. If you have no dry sticks and are on a railway line, buy a car load and run them to your mill; it will be money well spent, and the first sawing you do let it be on a good supply of sticking lath, which will soon be dry enough to use.

Walnut should be piled together as soon as sawed, and will receive no injury if not stuck up for some time after sawing. The sap seems to dry out faster when finally the lumber is put on sticks, than if stuck right from the saw.

If you have plenty of mill yard room, pile your lumber thus: Set the piling blocks at least a foot from the ground, and with sufficient fall to let the rain run off readily when the pile is finished and covered. Begin by laying the first course with the boards say six inches apart, if wide and narrow ones, put two together, and build the pile in this order, so that when finished the spaces started in the first course will run to the top of the pile. The openings will be so many chimneys, drying out the lumber more in one month than in three months the old way. Start the next pile at least 20 inches away, and so continue covering your yard, and you will be surprised how soon you can begin shipping dry lumber. One point more in the sticking of lumber in which there are sappy boards; instead of placing these boards away in the center of the pile they should be put on the outside as far as possible so that they will get the more air; and again these boards should be laid the sap side down. (I am indebted to one of our large dealers for this last point. Until recently he has been one of the most extensive manufacturers of poplar lumber in the west. He fully sanctions all I have said on the sticking of lumber.)—*New York Lumber Trade Journal.*

THE JAMAICA TRADE.

To the Editor of The Canada Lumberman.

SIR,—Gen. Laurie's motion for all correspondence relating to the official visit to Ottawa in 1885 of the Jamaica commissioners is, I trust, the unostentatious beginning of a most important movement. Few persons, not directly concerned, are aware that the resolutions of the Jamaica Legislature authorizing the appointment of the commissioners empowered them to discuss with the Canadian Government the admission of Jamaica into the Dominion as well as Commercial Reciprocity on a basis somewhat similar to that of the Elgin Treary of 1854 between Canada and the United States. Fewer still are aware that within a few days of the unanimous passage of these resolutions the Jamaica Legislature, the Legislature of the Leeward Islands, also passed unanimously resolutions couched in almost identical terms. The visit of the Jamaica commissioners being temporarily, and from no fault of theirs, a failure. Those delegates from the Leeward Isles were not sent, though the resolution authorizing their appointment is still unrescinded. Two of the Jamaica commissioners hold Cabinet positions in the Government, the third, Hon. C. S. Farquharson, is a Legislative councillor of the island, and the fourth, Mr. Charles Levy, is a wealthy sugar planter and the head of a large London firm of merchants and ship-owners, which for over a century has traded extensively with Jamaica. Their high culture, polished manners and intimate knowledge of the questions they came to discuss created a more favorable impression among those who met them in Ottawa, Toronto, Montreal, Halifax, and St. John, in which cities they were warmly received and welcomed by the Boards of Trade, thus sowing the seeds of closer relations between the continental and insular portions of British America, of which Gen. Laurie's motion is, let us hope, the first little spring blade, the modest forerunner of a great and abundant harvest.

The temporary failure of the mission of the Commissioner was due to a despatch of Lord Derby which, with colonial office ignorance of colonial affairs, stipulated that any arrangement entered into between Canada and Jamaica should be open to acceptance by the other British West Indian Islands. The products and circumstances of Jamaica are so different from those of the other islands, that the absurdity of such a stipulation would strike anyone having the least knowledge of the West Indian archipelago. Indeed, had the [illegible] reached Jamaica a few hours sooner the commissioners would not have sailed. At this distance of time there is no impropriety in mentioning that Mr. Levy assured me, when meeting him at the Ottawa station, that he feared its being fatal to the success of the negotiations. And so it proved. The Dominion Ministry very properly declined to abandon the entire revenue (about $3,000,000) derived from sugar which the Jamaica proposals—if opened to acceptance by the other islands—would have necessitated, and the commissioners have returned home unsuccessful and greatly disappointed. Until Lord Derby's obnoxious proviso is rescinded it is safe to predict that reciprocity in natural products between Canada and Jamaica will not be attained. As for political union, it was, I believe, never formally discussed between the commissioners and the Dominion Ministry. The time is unsuitable for such a discussion. The expiring embers of the Riel rebellion were still aglow and the first duty of the hour for those to whose hands were entrusted the destinies of Canada, was not to enlarge the bonds of the Dominion, but to restore peace and prosperity to the vast domains already acquired. Of the admission of Jamaica into the Dominion I shall in this letter say nothing, though I hope shortly if granted space in your columns, to publish something on a subject which I firmly believe will, in the early future, become a most important issue in Canadian politics. In the present letter I shall restrict myself to giving a few statistics, showing the value of the trade that, without any special treaty and under the present heavy tariff of the island, can be done with Jamaica, and will also endeavor to point out how that trade can best be developed. My arguments will apply to a large extent to the development of our trade with the other islands, but I confine myself for the present to Jamaica, it being by far the largest, most populous, and also the most varied in productions and resources of the British group.

By the last census (1881) the population of Jamaica was 580,804, of whom 14,432 were whites, 11,115 East Indian coolies and Chinese, 554,132 black and colored and 1,125 not stated. In 1886, that year being the latest of which I have statistics, this population consumed of imported food stuffs a total value of £539,116; being from Great Britain, £50,007; from the United States, £319,831; from Canada and other British colonies, £168,267, and from other countries, £1,010. Of household furniture, £21,039 worth was imported; being from Great Britain, £10,958; the States, £1,722; Canada, etc., £9, and other countries £351. Of clothing and shoes the total imports were £351,186; of which Great Britain sent £337,551, the States, £11,468; Canada and other colonies, £1,204; and other countries, £984. Building materials, including lumber, amounted to £49,232; being from Great Britain, £8,143; from the States, £34,541; from Canada, etc., £6,500; and from other places, £47. The total value of estate machinery and supplies imported—other than foodstuffs and liquors—was £24,324; Great Britain sending £12,541; the States, £10,185; and Canada, etc., £1,598. Other machinery and tools amounted to £15,052; of which there came from Great Britain, £13,070; from Canada, etc., £11; from the States, £1,592; and from other countries, £378. Coals and coke, chiefly for steamers and gas, came to £38,277; being from Great Britain, £37,145; from the States, £615; from Canada, etc., £166; and from other places, £531. Books and other printed matter reached a total of £9,534; the value from Great Britain being £8,275; from the States, £1,207; from Canada, etc., £14; and from other places, £38. The total value of hardware and iron mongery imported was £68,545; of which Great Britain supplied £53,261; the States, 14,328; Canada, etc., £503; and other countries, £93. Of liquors, the total value imported was £47,443; of which our temperance friends will be glad to learn that the share of Canada and the other colonies was only £175; Great Britain sending £44,091; the States, £1,103; and other countries, £2,074. Jamacia, although tobacco is grown there quite equal to that of Cuba, imports £11,226 worth of the manufactured article, of which Canada sends none; the States, £9,631; other countries, £1,291; and Great Britain, $314, probably for troops and fleet. The miscellaneous imports—so classed in the returns—came to £150,618; of which there came to from Great Britain £82,695; from the States £50,170; from Canada, etc., £4,403; and from other countries £13,350. The total imports of the island for 1886 amounted to £1,325,603, or in round numbers about $6,500,000, of which Great Britain supplied a percentage of 5.13; the States, 34.1; Canada 11.1; and other countries, 3.4. The total export of Jamaica were £1,280,118, or about $6,400,000, of which the percentage sent to Great Britain was 39.7; to the States, 44; to Canada, 3.5; and to other countries, 11.8.

Now what is this miserably small—and I may almost call it—shamefully insignificant volume of Canadian trade with our

greatest tropical island colony chiefly, if not solely, due to? Our dairy products, our flour and our fish are equal in quality to those of the United States, and yet Canada's export of foodstuffs to Jamaica is not quite one half of that of her Southern neighbors. Of household furniture, how comes it that the energetic and tasteful manufacturers of Montreal, Toronto, and a dozen other places have only been able to sell $43 worth, while the American sales reached $8,500, and the British $43,500. Of the million and three quarters of dollars spent on imported clothes and shoes, surely Canada might secure more than $6,000. Of building materials, including lumber, Canada ought certainly to supply Jamaica with as much as the United States does. She now sends not quite a fifth of the quantity furnished by her rival. She ought, too, to send as much coal as the States, instead of only a fourth; and the same may be said about manufactured tobacco and cigars, of which she does not send a dollar's worth, while the American trade in this commodity amounts to $48,000. As to hardware, tools, ironmongery and machinery, etc., I have given the figures, and people will readily see that our export to Jamaica of many of the articles enumerated ought, at least to be trebled, and would be, were suitable steam communication provided. The steamers should be fast and should be fitted with Blackman's patent exhaust or other similar apparatus for the preservation of fruit on the return voyage. Though mails and passengers should be carried, freight should be the chief object aimed at. If of sufficiently light draught, some of the smaller ports of the island might, in time, occasionally be visited with advantage. From the shape of Jamaica, long, narrow and intersected through its entire length by a high mountain range, the traffic of the island will always be chiefly coastal. Jamaica has but one short railway, and the ordinary roads across the island are steep and rugged. Coastal steamers now ply round the island every ten days conveying freight and passengers between the smaller ports and Kingston. A line of subsidised steamers would probably at first only be able to touch at Kingston, as other West India islands would have to be visited, and would be supplied by these coasters with fruit and other homeward freight. But with increased facilities of transport the Jamaica trade would speedily require steamers exclusively devoted to it, and then the smaller ports might be called at, and the cost of transhipment saved. We Canadians scarcely know even by name many of the tropical luxuries, such as yams, guavas, pawpaws, shaddoeles, etc., which a steam line would bring cheaply to our tables, and for which a large demand would speedily be developed among us. A line of steamers traversing the 1,700 miles that separate us from Jamacia would take our lumber, our staves and our fish, our boots and shoes, our dairy produce, oats and hay, our furniture and agricultural implements, our paper, glass, wire fencing, nails, cordage, cottons, tweeds, soaps, candles, canvas, carriages, apples and potatoes, and would bring in return, cheap enough for ordinary use on the tables of our farmers and mechanics, the bananas and oranges, the limes and guavas, the yams and plantains of the tropics. The growth of trade that steam communication would secure for us is no merely fanciful speculation. In the three years (1880-83) that the Cunard service between Kingston and Halifax was subsidized by the Imperial Government the trade from Jamaica to Canada increased from 6.2 per cent. of the whole export in 1880-81 to 16.66 in 1882-83, when as being inconsistent with Free Trade theories—the subsidy was discontinued, and the trade to Canada at once fell, amounting in 1885-86 to only 3½ per cent. of the total export trade of Jamaica. This is pre-eminently a farmer's and working man's question. Steam communication with our fellow subjects in the tropics means better markets, increased work and wages, and cheap luxuries for the Canadian masses, whether ploughing the soil, toiling at the loom or the forge, or wielding the axe in the snow clad forests of our northern or eastern wilderness.

Yours, etc.,

A. SPENCER JONES.

Ottawa, May 10th.

BRITISH COLUMBIA.

Mr. J. S. Chase of this city, who has spent the major part of the past eighteen months on the Pacific coast, returned only last month, has again taken his departure for that section, which he will make the scene of his further labors. In many respects Mr. Chase thinks that the Pacific coast, and particularly the Puget Sound country, is one of the finest sections of the globe. Its business advantages, in their rapid development, offer inducements to men of energy and capital (and to energetic men of small capital as well), unsurpassed by any section of the land. There is money in its timber and its minerals. In some sections of the mountains gold and silver lays around loose on the surface of the ground. Unfortunately for the seeker, it is not minted to his hand, and like all other valuable commodities, takes time, patience and a considerable expenditure of money to separate from the rock with which it is amalgamated. In one of his trips through the mountains Mr. Chase came across a vein of mineral of which he picked up a half dozen specimens from the surface and submitted them to the government assayer at Victoria, obaining the following report: No. 1 assayed at the rate of 29 ounces of silver and 13 ounces of gold to the ton; No. 2, 37½ ounces of silver and 2½ ounces of gold; 3, 43 ounces of silver and eight-tenths of an ounce of gold; No. 4, 27 ounces of silver and 1½ ounces of gold; No. 5, 35 ounces of silver and 5 ounces of gold; No. 6, 49 ounces of silver and half an ounce of gold. These were surface pickings, and but tend to indicate what might be the result of a close research. In our own wanderings in the mountains of British Columbia, we became perfectly satisfied that the whole country was auriferous, and that the time would come when machinery could be so economically availed of that in connection with improved facilities of transportation, the precious metals would be developed to an extent never exceeded in gold or silver mining. The coal of British Columbia is another mine of wealth, its quality being superior to even the highly esteemed bituminous coal of Pennsylvania. Iron and copper mines are found upon Vancouver Island of great richness, awaiting a larger population for utilization. The yellow cedar of the coast is almost, if not fully, equal in closeness of grain to the Holly of the South. It is one of the most difficult woods to find, there being but few tracts of land upon which it grows in any quantity. In fact, one tract of 160 acres on the main land of the Gulf of Georgia and a few scattering forties on Vancouver Island is all that is known to exist in bodies of any extent. It is worth $60 per M in sawed lumber on the coast; as a trimming for contrasts in fine work it is not equalled by any timber known. The fir of the coast has not been exaggerated either for size or quality. Its extent is not so great as is by many supposed, as the large and good timber is confined to a territory west of the coast range of mountains and mainly on a belt of not more than from one to fifteen or twenty miles in depth, largely in a broken and mountainous region where the cost of lumbering would exceed the profit. The timber of the interior does not compare for size or quality with that of the coast, unless we except the red cedar, of which an occassional tract of comparatively small extent is to be found, and when found shows trees of enormous proportions.—*Lumber Trade Journal.*

THE HEMLOCK.

This, which has hitherto been one of the most abundant trees in the forests of Maine, as in those of the maritime provinces of Canada, is fast disappearing, as well beneath the axe of the woodsman, as from the results of the destructive effect of forest fires, to whose action it is very susceptible.

There are two varieties of this tree known to eastern woodsmen—the sapling, or white, and the black, or coarse-barked hemlock. The former is usually the smaller tree, attaining, however, a greater altitude in proportion to the size of its trunk. Its bark is also smoother and whiter. It seems very commonly to follow the banks of rivers and streams, or rather the sides of ridges adjacent to the shores of streams and lakes.

One of the best localities for this wood is to be found on the shores of the Avon river, and its branches, in the vicinity of Windsor, Nova Scotia. It occurs also in many other parts of the interior of that province, as well as in New Brunswick and Maine. In the two places last mentioned, especially in New Brunswick, vast forests, chiefly consisting of rough-barked hemlock, were overthrown, some twenty years since, by a storm, which is locally known as the "Saxby gale," from the fact that the date of its occurrence had been predicted by Lieut. Saxby, of the Royal Navy of England. The destructive effects of this gale, which extended a distance of more than 90 miles up the St. John river from its mouth, may be estimated from the fact that shortly after its occurrence the writer was called upon to examine and report upon some timber land which had been subjected to its influence. Two days were spent in such inspection, during which time he failed in traveling to exceed a distance of from three to four miles a day, the roots, tops and trunks of blown trees meeting him at every few steps, presenting formidable obstacles to anything like a rapid advance.

The gale had been more destructive to this than to any other forest tree, on account of its heavy and spreading top, which offered great resistance to the wind. As the roots ran along near the surface of the ground, where the trees were blown down, they brought with them masses of earth, which formed one of the chief obstacles mentioned above.

The wood of the black hemlock is nearly always more or less shaky, these shakes sometimes extending from the base of the tree to the limbs.

Hemlocks which grow on wet land, as well as those which are found on the low, sandy ridges of carboniferous rocks which occupy the central part of the province of New Brunswick, are usually very shaky, while those which are found on the boulder district of that province, which covers probably 1,100 square miles of its area, are especially good. Excellent trees may be seen standing where [illegible] puzzle one to secure a shovelful of earth, and where [illegible] one might walk for a long distance by stepping from rock to rock, without ever once setting foot to the ground. [illegible] a place the writer has counted, without moving from where he stood, ninety full-grown hemlocks, standing within a very limited radius.

The boulders which cover the extensive district [illegible] Brunswick now alluded to, are composed of granite in nearly all cases. These are frequently porphyritic, enclosing [illegible] of feldspar of large size. The cause of the [illegible] this tree, and of the good qualities of its wood in so unpro[illegible]ious a locality, may perhaps be the result of the [illegible] ition of this feldspar, under the action of changes of temperature and atmospheric agencies which by mechanical and chemical means combined, may have set free from its silica and alumina the 16 or 17 per cent. of potash which the feldspar of [illegible] granite contained, to be thus rendered soluble and fitted to be drawn up by the roots into the body and limbs of the tr[illegible]

In the maritime provinces of Canada, no attention is being paid to the protection of this tree on the property of [illegible] government; on the contrary, settlers are invited to occupy the poor and sandy ridges on which it grows, with the result of poverty to them and their families, and destruction of the surrounding forests from the spread of fire from the clearings.

Several large manufactories have been erected in the province of New Brunswick, for the purpose of ext[illegible] the [illegible] from the bark of the hemlock, the result of w[illegible] that whole forests of this valuable wood have been [illegible] for the bark only, while the tree itself has been left to rot or act as fuel for the fires which every now and then rage in spring or autumn among the forests of this country.

The supply of hemlock of the eastern state[illegible] provinces of Canada will in all probability fa[illegible] of the spruce, from the fact that while the hem[illegible] thickly in certain localities, these are limited in exte[illegible] the contrary, spruce trees are found scattered [illegible] country. The hemlock also is much more easily dest[illegible] fire than the spruce, and does not replace other forests which may have been destroyed nearly as readily as the spruce.

The young hemlock is a remarkably pretty tree; as it g[illegible] older, however, its branches frequently die and the dead and often barkless top of the aged tree gives a by no means agreeable appearence to it and its surroundings.—*Edward Jack, in New York Lumber Trade Journal.*

EXCHANGE ECHOES.

Quebec Chronicle.

From some of the Quebec lumbermen who have lat[illegible] returned from England, it is understood that altho[illegible] the condition of the European markets is not perhaps [illegible] as promising as it was a couple of months ago, there is no reason to anticipate anything but a fairly prosperous season. The demand for Quebec oak at the principle shipbuil[illegible] centres has apparently been satisfied. The anxiety and rush to sell during the boom in prices of the month of Febr[illegible] last, produced the natural result of lower prices, and the then existing demand was satisfied in a shorter time than had been anticipated. Even the shippers, whose interests on this side never permit them to paint the condition of affairs in England in very bright colors, admit the present prospects on the other side are rather more promising than they have been for the past few weeks. Prices of deals are now at least ten per cent. higher than they were at this time last year, and stocks in England are known by the Canadian manufacturers to be much lower than they have ever been before, at least for many years back. This should be one of the most promising features of the present outlook. The American demand for boards continues to be more satisfactory than was anticipated, and is fully equal to that of last year, notwithstanding that the Presidential election year is generally most unfavorable to business with the United States.

London Timber Trades Journal.

The placing of lumber on the free list by the United States government will be—should such a measure pass—an immense stimulus to the Canadian timber trade, with a consequent all-round advance in values, through the introduction of United States capital, in the shape of numerous mills, and a large absorption of Dominion forest limits by the lumber manufacturers from Chicago and Michigan. As far as relates to the wisdom of this step towards free trade by the United States legislature we cannot say much, the tendency of such a measure being to divert capital from their own side to that of the neighboring country, and though, perhaps, the interest on it might return in the shape of cut lumber specially manufactured in the States, the principal would be lost for all time, sunk in lending its assistance in the furthering of Canadian

prosperity. We might just as well argue that capital leaving this country and taking their money with them for carrying on trade abroad were doing so for the benefit of the British empire, but it would not take long before the results disproved our reasoning. Capital has been too fond laterly of leaving our shores, and we have felt the ill effects in the long interval of paralized trade under which the country has groaned. Canadians may pretend what they like, but we question very much if they would not welcome with open arms the new men and money which directly the bill passed, would hasten to bestow themselves upon her. The Southern trade, including the immense range of coast line in the Gulf of Florida, would be neglected for more profitable and better paying fields, and the capital which would otherwise have given spirit to the pitch pine trade be distributed over a foreign land. We can hardly believe that the bill will be carried by the free-traders, who form a very small minority of the United States legislature, though in the interest of Canada we trust that by some accident the measure may pass into law. There is an immense amount of unemployed capital in America, which would speedily be brought into use, buying up farest limits in Canada, where labor and plant are so much cheaper than in the States, and standing pine more plentiful and acceptable in the neighborhood of navigable streams.

Mississippi Valley Lumberman.

The consolidation of the Minneapolis, Sault Ste. Marie and Atlantic, the Minneapolis and Pacific, and the Aberdeen, Bismarck and Northwestern railway brings under a single management about 950 miles of track. It extends the influence of the Sault as a distinct factor in the world of railway traffic, not only across Wisconsin and the upper peninsula of Michigan, but across Minnesota and carries it into the very heart of Dakota. It is easy to foresee what further extension and additions will naturally be made, as time progresses, to the main line now completed. The announcement of the consolidation is coupled with the further statement that very close relationship has been established between the "Soo" and the Canadian Pacific. There is in this statement more of importance even than in the announcement that the consolidation of the line has been effected, because it bears out the assurance that the Canadian Pacific system is to be supplemented by a series of feeders stretching into the states, upon much the same plan as the Northern Pacific has provided its main line with feeders. It is difficult to predict just what significance this consolidation and traffic arrangement will have for the lumber trade. The manufacturers along the "Soo" will undoubtedly be provided with a double outlet—an eastern outlet for their upper grades, and a western field of distribution for their common grades. But should the duty on Canadian lumber be removed it is easy to foresee as direct competition with Canadian lumber in this, and some of the Winconsin markets, as is anticipated at Chicago and at some Lake Erie points. On the same theory upon which Chicago bases some of her hopes for continued supremacy and greatness as a lumber market, when the barrier of duty is removed, St. Paul and Minneapolis can, thanks to the Soo, reasonably anticipate some addition to the volume of their growing importance as a point for the distribution of lumber.

Ottawa Journal.

The Chaudiere lumberman have, it is satisfactory to note, opened the season's campaign under fairly satisfactory auspices. They are in good heart to their prospects, in proof of which extensive improvements and additions have been made to the mills. It is true the mill owners are a little anxious about the lowness of the water this spring, and it is feared that trouble may be experienced. It is very important that no delay occurs to the log drive, as the reserve of logs from last season is very small and may not be sufficient to keep the mills busy till the drive logs arrive at the Chaudiere. The cut this season by Messrs. Booth, Perley & Pattee, Bronson & Weston, Hurdman & Co., Pierce & Co. and E. B. Eddy Manufacturing Company, is estimated by the lumbermen at about 375,000,000 feet, if no delay occurs from low water.

Lumber World.

While "trusts" are multiplying on every side, it may be proper to suggest that it is time to form a "trust" of woodworkers. There is room for a "trust" of sawyers, of machine builders and of manufacturers of all lines of wooden wares. Who will start the ball rolling? The "lumber trust" should be the greatest on the list. Strike while the iron is hot.

—We extract the following from a letter recently received from a London lumber firm:—Prospects for trade here this season are not very encouraging. Sales are slow with a great scarcity of money. Though prices in other places are apparently advancing our people here are cutting and slashing. Where there is sure pay prices are cut so low that to find the margin one has to look through a microscope.

SOME PERTINENT SUGGESTIONS.

Editor Canada Lumberman.

In these days of combines, public morality has received so many shocks that any abuse, except of the most startling kind, fails to arouse indignation. In the name of business, practices, by no means honorable, are resorted to for the furtherence of ends which in and of themselves are laudable. That monstrous doctrine: the end justifies the means, is firmly believed in and acted upon by men who affect to feel great regard for the morals of the public.

A disagreement, relating to the use, or rather the abuse, of the N. R. yard, has arisen between the wholesale and retail dealers of lumber, or, to put it more correctly, an old grievance has at last found expression. The wholesale-retail dealers have for years made this yard their piling ground and retail yard, rent and taxes free, in which they transact their business, thus coming into competition with the retail men. The retail men are extremely desirous that this order of things should be done away, and that no lumber be piled off for the purpose of being sold in small quantities, or in other words, retailed.

When we consider that the retail man is working at a great disadvantage compared with the quasi wholesale dealer, it is not at all surprising that he wishes such unfair competition stopped. It is unjust to the dealer who has his yard in the northern, eastern or western part of the city, that a consumer can go down to the R. R. yard and buy lumber at $1.00 per M lower than the retailer, with the necessary expenses of a yard, is able to sell.

Rent, taxes, insurance and other expenses and losses such as breakage are heavy items in the course of the year, and have to be added to the cost of the lumber, from all of which except $1.00 per car unloading charges, the wholesale-retail man is exempt.

There exists no reason whatever that any firm or firms should be in possession of so valuable a privilege. The demands of the trade do not require it, the growth of the city does not depend on it, the R. R. Co. does not profit by it, the development of the lumber industry of this country is not advanced, in fine it is a privilege which none should possess, not even by purchase. To do business on what may be called public property, like vendors of pea-nuts, is not at all creditable to our wholesale lumber dealers.

What is wholesale dealing? A car of 10,000 feet? Twenty-five or thirty years ago this quantity might possibly have been so imagined, but not at this date. No man in making such a statement, except his ideas are small, very small, can reasonably expect to be understood seriously. A quantity to be considered as a wholesale transaction must be commensurate with the volume of trade done, and we think in this case that the quantity ought to be not less than 100,000 to 150,000 feet if not more.

Another matter in connection herewith, is that some of the lumber billed to the docks, which means a lower rate of freight, is disposed of in the city. For this an excuse might possibly be found, but the point is—was the regular rate of freight paid on removal? Would an investigation into this matter be productive of a dividend to the shareholders of the absorbed N. & N. W. R.?

All and any use of the docks should be prohibited except the one for which they were originally built, that is for shipping; and the right to ship permitted to all so desiring. Not one, two or three firms should enjoy a monopoly, else the time will soon arrive when these lumber firms will raise the plea of vested rights and claim compensation when required to surrender the Company's property. Squatter sovereignty and all that implies, would be practically illustrated in Canada.

That such a state of affairs should been tolerated says very little for the efficiency of the officials of the quondam N. & N. W. R. Granting privileges to one set of men as against others in the same line, the latter contributing largely to the revenue of the Co. requires explanation of no ordinary kind.

We confidently expect now that the G. T. R. has absorbed the N. & N. W. R. that these exclusive and prejudicial privileges will be withdrawn. By far the greater quantity of the lumber sold is carted to the outlying districts or suburbs, and comparatively little sold in the city proper.

The necessity does not exist that the N. & N. W. R. yard should be converted into a market for the especial benefit of a few men who are not enterprising enough to establish first class yards, of which Toronto does not possess one, but one satisfied to exist on sufferance and at the expense of others in the same line of trade. It is, to say the least, a most beggarly way to do business.

Toronto, May 15. Pinus.

—Letters patent of incorporation are asked for by the R. H. Smith Co., limited, to manufacture saws of all descriptions, files, mechanics' tools and implements of all kinds. The chief place of business is St. Catharines, capital stock, $75,000, and the applicants are all St. Catharines men.

THE WESTERN MACHINERY DEPOT.

The Brantford *Telegram* of a late date contains the following reference to the business of Mr. H. W. Petrie, an old-time advertiser in The Lumberman:

Nothing shows the steady growth of Brantford better than the continued solid growth of her institutions. Brantford has always been known as an emporium for iron goods of every kind, and the firms which handle that class of wares have obtained a world-wide celebrity. Foremost among those firms which handle machinery exclusively is that of H. W. Petrie. Last fall Mr. Petrie was compelled by his ever increasing trade to erect a substantial three-storey brick addition to his already large warehouse on Dalhousie street. In the front of this addition is the general office, and immediately behind is Mr. Petrie's private office. The offices are fitted with the latest conveniences for assisting office work, while a large Goldie & McCulloch vault insures the safe keeping of valuables. Through a door in the general office one enters the shipping room, which will in a few days be fitted with a complete set of steam hoisting machinery, so that the heaviest machinery may be brought in, unloaded from the drays, and whisked off to the second or third storey, or put in any desired position in the show room, without the need of a hand being laid to it. Next to this is the show room, extending the full depth of the building. Here is gathered together machinery from all parts of the Dominion, the greater part on this flat being perfectly new, and ready at any moment to be shipped away. Besides handling new machinery of every description, Mr. Petrie probably buys, refits and sells more second-hand machinery than any other dealer in the province. Back of the show room is the repairing shop, in which every second hand machine that comes in receives a thorough overhauling. The machinery on the ground floor is mostly of the heaviest description, planers, saw mills, engines, boilers, and lathes for wood and iron. In the shipping room are boxes of machinery waiting to be shipped to different parts of the Dominion. Here is a saw mill which will shortly be engaged in waging a battle against the Douglas fir of the Rockies. It is addressed to Lillooet, B. C. Beside it is another addressed to Stittsville, among the pineries of the Ottawa valley. Another lot is designed for the Muskoka district, and still another for Richibucto, N. B. These, with a host of others intended for places nearer home, show the extent of Mr. Petrie's trade. Upstairs the woodwork and painting is carried on. Here, spread out on the floor, are the parts of two saw mills which are being arranged before being shipped away. Near them is a broom handle machine which will turn out finished, tapered handles at the rate of six hundred per hour, and beside it is another of still newer pattern, which turns out a continuous stream of handles. On this floor is a collection of small engines designed for running a row of sewing machines and turning coffee mills. These compact little engines run from half a man power to four horse power, and are one of the most interesting features of the immense collection. Here also is an axe handle machine which will turn out thousands of axe handles per day, all moulded to pattern. Passing to other rooms on the same flat we find an immense collection of leather and rubber belting, and rubber hose of every description. Next to this there is a collection of several thousand drills for iron work. Back of this again is another room crowded with all sorts of light machinery. Here are machines that the uninitiated never dreamed of. For instance, here is a green corn cutter for the purpose of cutting green corn for canning factories. This machine removes the soft kernels from the corn as careful as the most fastidious housewife would require, and at the rate that would astonish the average housekeeper. Here is a machine for drawing by suction sawdust and shavings, a quarter of a mile if needs be, through pipes to the furnace of some vast saw mill. There is a machine for cutting barre heads, this one husks, and that one grinds cob and kernels at once into meal for cattle. This contrivance of wheels and bars cuts out spools almost by the bushel, while over against the wall is the pilot wheel and anchor of a steam yacht; hence the expression "from a needle to an anchor," may be applied correctly here. The third flat is a repetition of the first and second, except that the machinery there is somewhat lighter than that below. One of the rooms on the second flat gives us an insight into the methods that have enabled the proprietor to build up this magnificent trade. From top to bottom of the room are shelves fitted with illustrated catalogues, in which every machine in the building is exactly described and numbered. Advertisements are inserted in all the great papers of Canada, and a number of those of the United States, and when a query is received as to some particular piece of machinery, off goes a copy of the catalogue, giving the illustration and description. Last year 20,000 of these catalogues were printed, which proving insufficient, a further supplement of 5,000 was obtained. The majority of the buyers never see Mr. Petrie, the buying being done by letter, and it speaks volumes for the integrity of the proprietor

that he has thus been able in every case to satisfy his customers.

At the Market street station the firm has another large warehouse, where the heaviest kind of machinery is stored. A switch runs right alongside this warehouse, so that boilers, engines, etc., weighing many tons can be handled to and from the cars with the greatest ease. Inside the warehouse as we enter there is a hundred-horse power engine, which in a few days will be shipped to Colpoy's Bay, to run one of the giant saw mills that are to be found in that region. Outside on the platform is the fly wheel for this engine some ten feet in diameter, and weighing some four or five tons. Near this is a biscuit making machine, fitted up with all the devices for turning out every kind of biscuit known to the trade. Further down in the shed is a hand fire engine, which has just come in from some village that has become ambitious enough to buy a steam engine. Near it are several threshing machines with their complement of traction engines to draw them about in the fall. There are also here a number of portable engines on skids, which are intended to run saw mills, stone crushers, etc. Near the door is a planer and matcher, which will shortly be shipped to Hastings county, and near it is a stave cutter intended for the north-western part of the province. Outside are a pair of hydraulic rams, quiet enough now, but powerful lifters when put in action. Water wheels of every kind, size and description are piled up around, while a part of the yard is especially devoted to boilers of the largest kind. On the platform near the south is a hundred-horse power boiler, ready to be shipped to the north, where it will keep the saws of a monster mill in motion. Smoke stacks of all sizes and lengths are piled up, ready to go out with the engines and boilers. On the platform, too, are several large drills and planers for heavy iron work, and near them is a curious machine that will turn out a steady stream of barrel hoops. By its side is a solid, grim looking machine of iron and steel, whose ravenous jaws will shortly be put to work grinding cinders for the asphalt sidewalk of the city.

Altogether this is one of the most bustling and busy establishments of our city, and as for the rest, Mr. Petrie's name is synonymous for reliability and square dealing throughout the Dominion.

TEACHING A NOVICE.

"Will you kindly advise me if I can get any book giving instructions by which a novice may acquire proficiency in estimating stumpage, or number of feet per acre of standing timber. What is the best and cheapest work, and where can it be had?"

We do not know of any such book outside of a good lumber journal. Aside from these, a book about five feet six high, weighing from 150 to 175 pounds avoirdupois, capable of swallowing about four pounds of salt pork a day, and rivaling the pedestrians who recently walked 100 miles a day in New York, in point of endurance. A book written upon the brain of a man who has made his home in the wild woods, is the only work of any reliability of which we have knowledge. Our advice would be: 1st. Get such a book (?) 2nd. Go yourself. 3rd. Send a boy. If you adopt the second or third propositions, you will first need an outfit. This is not to be found in the parlor of a $4 a day hotel, nor in smoking 25 cent cigars. Get a pair of army blankets and a picking strap, a frying pan and a tin pail, a big chunk of salt pork or bacon, a few quarts of beans and a bag of flower (some land lookers carry their flower in a bottle, claiming superior virtue in the extract.) Don't forget a plug of black tobacco and a briarwood pipe. An axe and a rifle come handy. If you are a novice with the axe don't take a double barreled (beg pardon, double bitted) one, lest when you come to use it, you find it making more time in your leg than in a tree.

Thus provided, with a folding rule, a log book and a memorandum book in your pocket, you start for the forest. You strap the goods, made up into a pack weighing 75 to 100 pounds, upon your shoulders. If you have no suitable packing strap, take off your drawers and pass the legs through the ropes and over your shoulders; it makes a good substitute. Thus equipped you are ready for an exploring trip. Calfskin boots and morocco slippers are not recommended for woods wear, and kid gloves are out of place. First find a section corner to make sure you are on the right land. Look the ground over for awhile, pick out an *average* spot of timber. pace off 72 paces square, and cut down an *average* size tree. If you don't manage to lodge it in another, and it don't kick back and knock you down, measure it off into 16 feet lengths, and by your log tables find out how many feet there is in it. Count the trees on the acre, and you can figure out how many feet they will probably scale. If there are punk knots in sight or any other defects which will make the lumber cost more than it will sell for, it is not advisable to count the tree. By the time you have tramped over 40 acres your "novice" will probably enjoy his pork and no less his "dudeen." When the shades of night fall about him, he will be a fit subject for gathering up a handful of pine spines for a feather bed, and after hunting up a soft rock or a pine log for a pillow, say his prayers and enjoy the sleep of the just. We would not care to buy stumpage on the estimate of a novice from the results of one day's experience, but if he sticks to it long enough, he in the course of a few years would be likely to become an adept if he has the stuff in him that land lookers are made of.

There is another way in which estimating is often done, borrowed from methods often adopted by United States surveyors, but it has its drawbacks, and these sometimes culminate in a drawback toward the penitentiary, and is therefore not to be recommended to "novices." By this method a pleasant room, well lighted, a large table and plenty of writing material and requisite. A large map of the territory to be estimated or surveyed is spread out, and the lines laid out dividing it from other lands, then it is the easiest thing in the world to mark off section lines, which can never be found, and to estimate quantities of timber that never existed. There has been too much of such surveying and estimating, and the outcome has never been satisfactory. Concisely to answer our correspondent's question, timber estimators are born rather than educated, and must learn from experience rather than from books.—*Chicago Lumber Trade Journal.*

PRACTICAL MILLING.

It has been the policy of "the country saw mill" owner to buy that which was cheap. We have reference more particularly to their first plant—their mill, engine and boiler. Let a man want to engage in the saw mill business, nine cases out of ten he counts the profits first, then the costs, and, as he is "a little short," he tries to economize by buying his outfits second-hand. He starts out on a cheap plan, and scours the country for some mill that has passed through the fire, or whose owner has found it far more profitable to let it lay up than to attempt to run it.

He visits the city and looks through the second-hand machinery stores. He looks at one or two new mills, gets completely muddled, and, disgusted, starts off home and buys "Jones' old mill." It has not been run for two or three years, but he can save one hundred or possibly two hundred dollars in this his first purchase. He is told that it is a little behind the times, but then it will do him.

Now all that is wanted is to secure an engineer and head sawyer who is in keeping with the mill, and we have a full-fledged mill to help him cry "hard times," and although gradually, it will soon cause him to feel that saw milling is not what they crack it up to be.

At last he finds an engineer who has done almost everything. He comes along, or, rather, "turns up," and wants a job. He has been used to large mills, big pay and his fireman, but has had a "streak of bad luck" and will take hold of this mill, put it in order and show what can be done. In not a few cases our engineer imparts "his bad luck" for he knows nothing of engineering, and but very little of firing. Our new proprietor is new at the wheel, and does not discover that his engineer is second-hand until reminded of it by repeated accidents and mishaps that suggest something wrong. A broken ring is looked upon as a necessity, hot wrists result from the mill laying up, steam escaping from nearly every joint of pipe, the piston rod, valve rod, and the several conditions soon suggest that something is not what it should be.

Strange as it may seem, hundreds of men start out thus, holding a penny so close to their eyes as to lose sight of a dollar with their reach. Poor tools make poor workmen, and a more fallacious policy was never pursued than economizing in the plant—getting something cheap regardless of worth. The best is the cheapest, applying this both to tools, mill and labor.

The older mill men, even some who have been looked upon as "full-fledged," have erred to their sorrow, in moving too soon from a good site. They have cut out certain qualities of timber that they have depended upon largely for their run, and without fully investigating whether it would pay to cut other lumber, have hunted up other sites and moved; and in not a few cases to their detriment. It has come under our observation of late, to note where several mills have moved back to their original sites, re-buying timber that they had passed over unnoticed at their first sitting, and, where the strange part comes in, paying for this second cutting a little more than they originally paid for the first, land and all. A little forethought could have saved them money, trouble, time, and expense of two moves.

It takes experience. The practical man studies not only the present but tries to anticipate his future wants. The practical miller counts nothing too good for him, and looks upon the best as the cheapest. He wants good tools, good saws, good files, the best of lacing and belting, and good, steady, experienced men. He knows how to keep them, and they recognize in their employer a man who masters and understands his business. It's a satisfaction to them to work for such a man. It is rarely such a man fails; success is too near the surface. *George Fisher, in the Woodsworker.*

SPRUCE LUMBER.

There is no lumber growing in America to-day, which [illegible] at so low a price in comparison with its intrinsic value as spruce. We know of no wood that could fill its place for light frames or for general building purposes where strength, stiffness and lightness are to be combined in one kind of lumber. Spruce lumber has always been supplied so cheaply to builders that its real value has been underestimated or perhaps overlooked. It is a lamentable fact that the grand spruce forest of northern and eastern New England have been largely sacrificed without any corresponding gain [illegible] operators, mill men or even to lumber dealers.

The principal growth of spruce in America is confined to Maine, New Hampshire and Vermont, the Adirondack region in New York and to Lower Canada, including New Brunswick and Nova Scotia. There is little spruce west of New York state and of the Ottawa river in Canada. Spruce is in much smaller supply on this continent than either pine or hardwood, and is of much slower growth than sapling pine. A scarcity of spruce, which is not likely to occur this generation, would, however, prove a most serious inconvenience to builders.

The supply of pitch pine in the southe[illegible] than the aggregate growth of spruce in the northern states, and for many purposes in heavy mills, bri[illegible] and warehouses the former is the better wood. On the other hand, in the construction of ordinary dwelling houses, roofs and light work, spruce is preferable. It is light, strong and easily worked. When spruce can be used it is much more economically handled and framed than southern pine. A carpenter would hardly take the gift of southern pine for the plates, girts and posts of an ordinary frame house if he could buy spruce at present rates. Norway pine has only about two-thirds the transverse strength of spruce; sapling pine is deficient in strength in comparison with spruce, although easily worked.

The great development of southern industries has infused new life and enterprise into the lumber manufacturing of that section. Northern capital and machinery, tram railways, improved logging, manufacturing and freighting facil[illegible] have reduced the cost of southern pine lumber delivered in northern markets. Again, during the past few years the pitch pine business has been overdone, and many a cargo has sold at less than cost. Yet a singular fact has developed during the last year or two, and that is that in New York and Boston markets the price of large-sized spruce dimensions has reached within a very few dollars per thousand feet of wholesale rates on ordered lots of southern pine. This shows that dealers and builders will have spruce lumber even when its cost nearly approaches that of the southern lumber. The days of extreme low prices for spruce have gone, never to return. The demand now fully equals the supply, and timber land owners and mill men are beginning to appreciate the situation and to act accordingly.

RUNNING THE RAPIDS.

The first man to accomplish the daring feat of running the Arnprior slide on a stick of timber, says the *Chronicle*, was Alexander Oram, foreman for Conroy Bros. It was shortly afterwards performed by our Mr. James Havey, Jr., and "Chain Lighting Stewart," who went through safely on the same stick. It was a very common thing for Stewart to do, and many a time he did it, just for amusement. Stewart was a remarkable man, and it is said that he did many daring acts on the river. He could handle a log or stick of timber, as fast as any one, and it was a common thing for him — in the shanty, during the winter season—to mount the grindstone and have the boys run it as fast as they were able, so as to give him feet practice for the spring drive. He came very near losing his life several times through his fool-hardiness. Once, I think it was on a slide somewhere in the vicinity of Black Donald Creek, Stewart undertook to run through on a stick of timber. It was a rough place, and the logs were very often broken after they got through, so steep was the pitch at the end. Stewart was warned by his companions not to make the attempt, but warnings were not new things to him, and, watching for a good piece, he jumped on it and was soon sliding along the narrow passage at a lightning speed. His comrades shouted at him to jump for they well knew that to go over that frightful pitch was certain death. At the end of the slide was a projecting beam, and when Stewart neared it, his well trained eye measured the distance, and making a bound, alighted safely on it. It was well he did, for if he had struck the timber his reckless career would certainly have terminated there and then.

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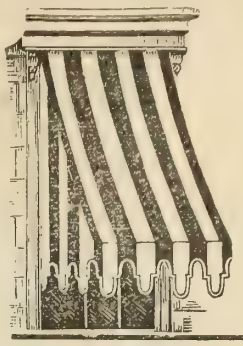

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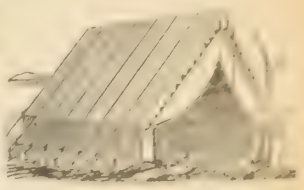

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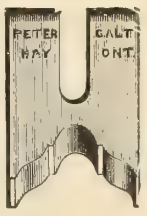

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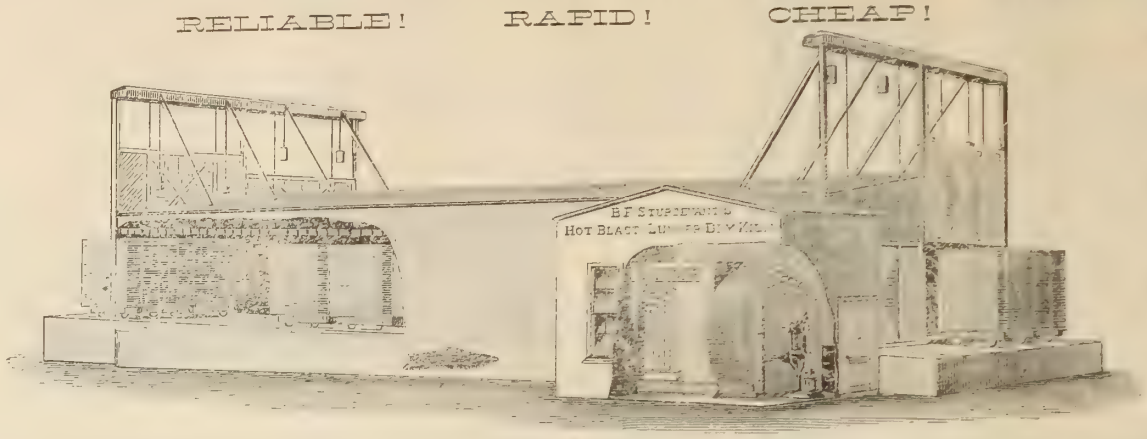

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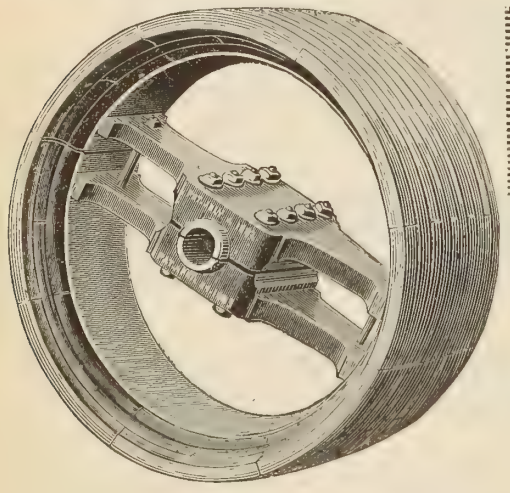

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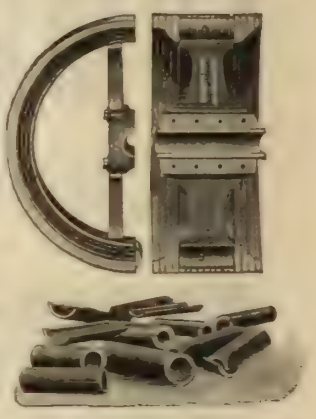


With our Patent Bushing System

Every pulley will fit 22 different sizes of shafting, and guaranteed to give from 30 to 60 per cent. more power from same belt and like tension than any iron or steel pulley. Every pulley a split pulley, 70 per cent. lighter than cast iron and 50 per cent. lighter than wrought iron or steel. Strong enough for any power required. Made in any size from nine inches to sixteen feet diameter.

As a material for pulleys wood is better than iron from the fact that it holds a belt much better. Most good mechanics are aware of this fact, but it may not be generally known how great is the difference, and for the benefit of our readers we give the result of two tests made and published by two of the most eminent mechanical authorities :

Portion of Circumference embraced by Belt.	Rel. value of leather belt On Wooden Pulleys.	Rel. value of leather belt On Iron Pulleys.	Portion of Circumference embraced by Belt.	Rel. value of leather belt On Wooden Pulleys.	Rel. value of leather belt On Iron Pulleys.
.20	1.80	1.42	.20	1,90	1.40
.30	2.43	1.69	.30	2.40	1.70
.40	3.26	2.02	.40	3.30	2.00
.50	4.38	2.41	.50	4.40	2.40
.60	5.88	2.87	.60	5.90	2.90
.70	7.90	3.43	.70	7.90	3.40
Morin.—Appleton's Encylopedia of Mechanical Arts.			Haswell.—Engineers' and Mechanics' Pocket Book.		

A Dodge Patent Wood Pulley is better than iron from the fact that it can be made very much lighter and thus save weight on the line shaft and bearings, thereby saving in expense from a saving in friction.

The advantages of the separable pulley are very apparent. By its use the necessity of taking down shafting already up for the purpose of putting on additional pulleys when needed, or to be changed, is avoided, thus saving time, trouble and expense, while their first cost is much less than any other pulley made not having these advantages.

The Compression Fastening whether used with keys in iron center or compression alone, keeps the pulley always in balance as the compression on the shaft and key is always towards the center.

The most perfect balanced iron pulley fastened with set screws or key, is invariably out of balance by being thrown from the centre, this fact is obvious to all mechanics.

The advantages of our mode of fastening over any other are : It is the only absolutely true fastening for a pulley. A pulley once properly balanced cannot be thrown out of balance in securing with this fastening. A pulley fastened with key or set screw in the ordinary way, cannot be screwed without lifting the pulley from the shaft at that point where the key or set screw is placed, thus throwing the pulley out of balance.

Manufacturers should carefully avoid any pulley with a set screw fastening for shaft ; also a key unless the pulley is compressed on it. The Dodge Patent Bushing system is a great convenience to manufacturers and also to agents who carry pulleys in stock, as with the aid of the patent bushings every pulley will fit 22 different sizes of shafts.

Haswell the acknowledged authority and most quoted by American mechanics, summarizes thus : The ratio is friction to pressure of leather belts, when worn over wooden pulleys is 47, over turned cast iron pulleys, 24, thus showing the average advantage of a wood pulley over iron to be 50 per cent.

We also manufacture GROOVED HARD WOOD PULLEYS FOR TRANSMITTING POWER BY MANILLA ROPES (tallow laid) by the Dodge Patent System of applying the ropes and taking care of the slack.

Illustrated catalogues of belt pulleys and the rope transmission system will be furnished on application to

The Dodge Wood Split Pulley Co., 89 Adelaide St. W., Toronto.

BOWDEN & CO.

A. GOODBY, Manager.

Lubricating Oils.

Sole consignees of Southwick's Celebrated Cylinder, Engine and Machine Oils

MANUFACTURERS OF HIGH GRADE OILS.

Millmen requiring Oils of uniform quality and high grade should write us. Sole makers of **Crown Lubricant and Crown Crank Pin Grease,** the greatest thing in existence for Shafting and Engines, cups supplied. Note our address :

BOWDEN & CO., 59 Adelaide Street, East, Toronto, Ont.

TRADE REVIEW.

Toronto, Ont.

TORONTO, May 30th, 1888.

CAR OR CARGO LOTS.

1¼ and thicker clear picks, American inspection	$34 00@35 00
1¼ and thicker, three uppers, American inspection	40 00
1¼ and thicker, pickings, American inspection	30 00
1X10 & 12 dressing and better	20 00 22 00
1X10 & 12 mill run	15 00 16 00
1X10 & 12 dressing	14 00 16 00
1X10 & 12 common	12 00 13 00
1X10 & 12 spruce culls	10 00 11 00
1X10 & 12 mill culls	9 00
1 inch clear and picks	24 00 26 00
1 inch dressing and better	18 00 20 00
1 inch siding mill run	13 00 15 00
1 inch siding common	12 00 13 00
1 inch siding ship culls	10 00 11 00
1 inch siding mill culls	8 00 9 00
Cull scantling	8 00 9 00
1¼ and thicker cutting up plank	22 00 25 00
1 inch strips 4in to 8in mill run	14 00 15 00
1 inch strips, common	11 00 12 00
1¼ inch flooring	14 00
1½ inch flooring	14 00 15 00
XXX shingles, sawn	2 40 2 50
XX shingles, sawn	1 40 1 50
Lath, Sawn	1 80

YARD QUOTATIONS.

Mill cull boards & scantling	$10 00	Dressing stocks	14 00@15 00
Shipping cull boards, promiscuous widths	12 00	Picks Am. inspection	30 00
" stocks	13 00	Three uppers, Am. inspect. B. M.	40 00
Scantling & joist, up to 16 ft	13 00	1½-in. flooring, dres'd	25 00 30 00
" " 18 ft	14 00	1½ " " rough	14 00 15 00
" " 20 ft	15 00	1¼ " " dres'd	23 00 25 00
" " 22 ft	16 00	" " undres'd	14 00
" " 24 ft	17 00	" " dres'd	16 00 20 00
" " 26 ft	18 00	" " undres'd	12 00 14 00
" " 28 ft	19 00	Beaded sheeting, dressed	18 00 20 00
" " 30 ft	20 00	Clapboarding, dres'd	12 50
" " 32 ft	21 00	XXX sawn shingles per M	2 75 2 90
" " 34 ft		Sawn Lath	2 25
" " 36 ft	22 50@22 50	Red oak	20 00 25 00
" " 38 ft	24 00	White "	25 00 30 00
" 40 to 44 ft	27 00	Basswood, No. 1 & 2	18 00 20 00
Cutting up planks 1¼ and thicker dry	30 00	Cherry, No. 1 & 2	50 00 60 00
" board	25 00 26 00	White ash, 1 & 2	18 00 20 00
		Black ash, 1 & 2	25 00 30 00
			20 00 25 00

Ottawa, Ont.

OTTAWA, May 28th, 1888.

Dimensions, Inches.	*Per M.*
Mill culls 10 x 1	
" 12 1	$8.00
" 12 1½	
" 12 2	
" selected 16 ft. long, above dimensions	8.50 to 9.00
Cull strips, 1 in. thick, 5 to 7 wide	7.00 to 8.00
Mill cut outs 12 x 1	
" 11 1½	4.00 to 5.00
" 12 2	
Scantling 2 4	
" 3 4	12.00
" culls 2 4	
" " 3 4	7.00
Laths	1.25
Stock shorts, 12 x 1	10.00
1 inch siding outs, 1¼, 1½, 2	15.00
" outs from shorts, 1¼, 1½, 2	6.50 to 7.00
Outs from stocks 12 x 1	
" 12 1½	10.00 to 12.00
" 12 1½	
Shingles, X	1.25
" XX	2.00
" XXX	3.00
" cedar, No. 1	2.00 to 2.75
" cedar, culls	1.25
Difference in planed lumber, in waste and planing	5.00
Ditto, on average good stock	20.00 to 25.00

Hamilton, Ont.

HAMILTON, May 28th, 1888.

Mill cull boards and scantlings	$ 9 00@10 00	Dressing stocks	$ 6 00 18 00
Shipping cull boards, promiscuous widths	10 00 12 00	1¼ flooring, rough	16 00 18 00
Shipping cull stocks	13 00	1½ flooring, rough	16 00 18 00
Scantling and joist up to 6 feet	13 00	1¼ flooring, dressed	25 00
do up to 18 feet	13 50	1 flooring, dressed	32 00
do up to 20 feet	14 00	Beaded sheeting 1	28 00 30 00
do up to 22 feet	15 00	Picks, Am. inspection	30 00
do up to 24 feet	16 00	Three uppers Am. In.	40 00
do up to 26 feet	17 00	XXX sawn shingles	2 60 2 70
do up to 28 feet	18 00	Sawn Lath	2 25
do up to 30 feet	20 00	Red Oak	20 00 25 00
Cutting up plank 1¼ and thicker, dry	20 00 25 00	White Oak	25 00 30 00
Cutting up boards	20 00	Basswood No. 1 & 2	18 00 20 00
		Cherry No. 1 & 2	50 00 60 00
		White Ash No. 1 & 2	25 00 30 00
		Black Ash, No. 1 & 2	20 00 25 00

St. John, N. B.

St. JOHN, May 29th, 1888.

Deals, Boards, Scnatlng, etc.

Spruce deals	$12 00	Spruce boards	12 00
Pine "	15 00	Pine "	12 00@40 00
Deal ends	6 00	Oak "	40 00
Scantling	10 00	Ash "	15 00@25 00
		Hemlock "	7 50

Shingles.

Spruce, extra	$3 50	" No. 1	1 25
" clear	3 00	Pine	1 25
" No. 1 extra	2 25		

Clapboards.

Pine, extra	35 00	Spruce, extra	24 00
" clears	45 00	" clears	23 00
" 2d clears	35 00	" " No. 1	15 00
		" " No. 2	10 00

Flooring, Dressed.

6 in., No. 1	12 00	4 in., No. 1	12 00
" No. 2	10 00	" No. 2	10 00

Miscellaneous.

Shingles	3 00@ 4 50	Laths	1 80
Pickets, 4 ft. 17 in. per pr.	04	Pickets	6 50@15 00
" 6 ft. 13 in. "	04½ 05½	Railway ties	15
" 6 ft. 22 in. "	04½ 06		

Goderich, Ont.

GODERICH, May 28th, 1888.

PRICES IN CAR LOTS.

1 inch Mill Culls	$8 00@ 8 50
1x6-8-10 & 12, common	12 00
1x6-8-10 & 12, dressing	16 00
1x14, and wider, common	12 00
1x14, " " dressing	16 00
1¼ dressing	16 00
1½ "	16 00
1¼ Norway pine flooring	14 00
1½ " " "	14 00
1 inch clear and picks 4 to 9 inch	25 00
1 inch " " 4-in. and up	26 00
1 inch " " 9-in. and up	27 00
1¼ and 1½ clear and picks	35 00
Lath 1½x4 feet	1 80

Montreal, Que.

MONTREAL, May 28th, 1888.

Pine, 1st qual'y ₱ M	$35 00 40 00	Basswood, run of log culls out per M	$13 00 20 00
Pine, 2nd "	22 00 30 00	Oak, per M	40 00 50 00
Pine, shipping culls ₱ M	14 00 16 00	Walnut, per M	60 00 95 00
Pine, 4th quality deals ₱ M	10 00 12 00	Cherry, per M	80 00 100 00
Pine, mill culls, ₱ M	8 00 10 00	Butternut, per M	30 00 40 00
Spruce, per M	10 00 13 00	Butternut, per M	30 00 40 00
Hemlock, per M	9 00 10 00	Birch, per M	15 00 25 00
Ash, run of log culls out per M	13 00 18 00	Hard Maple, per M	20 00 25 00
		Lath, per M	1 75 2 00
		Shingles, 1st, per M	2 00 3 00
		Shingles, 2nd, per M	1 25 2 00

Saginaw, Mich.

SAGINAW, May 26th, 1888.

CARGO LOTS.

Uppers	36 00@38 00	Norway	9 00 10 50
Common	15 00 20 00	Box	10 00 10 50
Shipping Culls	8 00 10 50	Straight measure	12 00 23 00
Mill Culls	6 00		

YARD QUOTATIONS—CAR LOTS DRY.

Drop Siding.			
Clear, ⅞ in	46 00	C, ⅞ in	30 00
A	41 00	D	19 00
B	36 00		
Flooring and Siding—Dressed.			
Flooring, clear, d & m	46 00	Siding, clear, ½ in.	22 00
No. 1	31 00	A	20 00
No. 2	30 00	B	17 00
No. 3	20 00	C	14 00
No. 4	13 00	D	12 00
Finishing Lumber—Rough.			
Three uppers, 1 in.	43 00@45 00	Fine common, 1 in.	28 00 31 00
1¼ & 1½	44 00 46 00	1¼ & 2 in.	32 00
Selects, 1 in.	35 00 36 00	C, 7, 8 & 9 in.	25 00
1¼ & 2 in.	36 00	Base, 2 to 9 in. No. 1	40 00
		No. 2	30 00
		No. 3	20 00
		Coffin boards 16 in. and over	16 00
Joist, Scantling and Timber.			
12 to 18 feet	10 00	22 feet	12 00
20 feet	11 00	24 feet	13 00
Plank and timber, 12 inches wide, $1 extra.			
Wide Select and Common—Rough.			
C (No. 1 com.) 13in. and up	28 00	D (common) 14 in. and up	16 00
Lath, Shingles and Pickets.			
Lath, No. 1	1 40	Country brands XXX	3 25 3 35
No. 1	1 25	Clear butts	2 25 2 35
Shingles, river brands		P'kts, 2 to 2½ in rough	12 00 13 00
XXX	3 40@ 3 50	Dressed	20 00
Clear butts	2 40 2 50	1¼ in. square, dressed	14 00 19 00

Philadelphia, Pa.

PHILADELPHIA, May 28th 1888.

White Pine.

Mich. uppers, 1 to 2 in., dry	$50 00@52 50	1¼ to 2 in. plank, barn quality	22 50@25 00
2½, 3 & 4 in	55 00 60 00	Common plank	20 00 22 00
Selects, 1¼ to 2 in.	42 50 45 00	⅞ box boards, wide	14 00 16 50
2½ 3 & 4 in	41 00 43 00	⅝ siding, selected	27 50 30 00
12 in. flooring quality	30 00 32 50	Culls, 12 in.	15 50 17 00
barn	19 00 23 00	Wide	15 00 16 00
Edge barn, all widths	18 00 20 00	Narrow	12 50 14 00
		No. 1 moulding	36 00 38 50

Cargo Lots.

Yellow pine edge bds	14 00@16 00	Scantling and plank	20 00 22 00
Heart face boards	19 00 21 00		

Hemlock Boards and Scantling.

Edge boards	10 50@11 50	Scantling, 2x3 & 2x4, 16 & 18 ft	12 00@13 00
12 in. stock	11 00 13 00	3x4, to 12, 12 to 20 ft.	11 50 12 00
Fencing, 6 in., 16 ft	11 00 13 00		

Shingles and Posts.

Cypress shingles, 24 in. heart, d & b	13 00@18 00	Cedar shingles, 30 in. hand dressed	35 00 40 00
24 in. sap, d & b.	10 00 12 00	Chestnut posts, 9 ft.	32 00
		7 ft.	28 00

HARDWOOD.

Walnut.

Nos. 1 & 2, 1 in., good dry, Indiana	$87 50@ 95 00	Reject or common, 1 in., 1¼ and up	60 00 65 00
1¼ & up	92 50 100 00	Culls, 1 in.	35 00 37 50
Nos. 1 & 2, ⅝ in.	72 50 77 50	1¼ in. & up	35 00 40 00

Poplar.

Nos. 1 & 2, ⅝ in. good wide, Indiana	25 00@27 50	Nos. 1 & 2, 1¼ in. & up, good wide, Ind.	32 50 36 00
1 in.	28 00 32 50	Columns, 5x5 & up clear	35 00 35 00

Oak.

Nos. 1 & 2, 1 in., good western, straight	32 50@35 00	Nos. 1 & 2, 1¼ in. & up, good western, straight	35 00 37 50
quartered	49 00 50 00	quartered	52 50 55 00

Ash.

Nos. 1 & 2, 1 in., good western	35 00@40 00	Nos. 1 & 2, 1¼ in. & up, good western	32 50 42 50

Yellow Pine—Yard and Wholesale.

Sc'tlg, 2x4 to 12x14	22 00@23 00	Flooring, 1 in., Va.	17 00 19 00
Plank, 1¼ to 2 in.	23 00 27 50	1 & 1¼ in., Ga. & Fla. cargo run	22 00 24 00
Fl'g, 1 & 1¼ in. No. 1	27 50 30 00		

Cherry.

Nos. 1 & 2, 1 in., good	62 50 70 00	Nos. 1 & 2, 1½ in. & up, good	65 00 75 00

New York City.

NEW YORK, May 28th, 1888.

Black Walnut

⅝ in., all clear	$75 00@ 82 50	Culls, 1 inch	$35 00@ 37 50
1 and 1¼ inches	92 00 97 50	Culls, thick	37 00 38 00
1½ and thicker	98 00 105 00	Counter tops	150 00
Rejects	52 00 55 00	and over	115 00 150 00

Ash.

⅝ in. 10 inches and over	22 00@23 00	1¼ to 2 inch	29 00@30 00
¾ in. coffin boards	27 00 28 50	2½ and thicker	31 00 32 00
1 inch, 10 inch and over	28 00 30 00	Common 1 to 2 inch	21 00 22 50
1 inch, 8 in. and over	2	Saps, 1 inch & thicker	22 00 25 00
		Culls, all thicknesses	15 00 18 00

Pine.

½ inch panel	24 50@25 00	¾ in. clg. 4 to 6 in	21 00@21 50
⅝ inch panel	27 00 28 00	½ in. clg. 4 to 6 in	24 00 24 50
¾ inch panel	29 00 30 00	¾ in. clg. 4 to 6 in	27 00 28 00
4, 5, 6 inch casing	30 00 31 00	¾ in. clg. 4 to 6 in	29 00 30 00
7, 8, 9, 10 inch casing	32 00 33 00	¾ in. clg. 4 to 6 in	30 00 31 00

Ash.

1 inch, white	37 00@39 00	Strips, clear	20 00@22 00
1½ to 2 inch	38 00 40 00	Black ash, good	26 00 30 00
2½ to 4 inch	40 00 41 00	Black ash, culls	10 00 12 00

Oak

1 inch plain sawed	37 00@39 00	inches and over	49 00@51 00
1½ to 2 inch	37 00 40 00	Thicker	51 00 53 00
Thicker	38 00 42 00	Strips under 6 in.	38 00 40 00
Quarter-sawed, white, all clear, 6			

Cherry

⅝ in., white & clear	65 00@70 00	2½ and thicker	85 00@90 00
1 inch	76 00 80 00	Counter tops, 18 in.	
1 inch strips	40 00 42 00	and over	100 00 115 00
1¼ to 2 inch	80 00 83 00	Culls, all thickness	18 00 20 00

Miscellaneous.

Chestnut, clear	35 00@38 00	Hickery, old growth	50 00 60 00
Chestnut common	20 00 23 00	Hickery, 2nd growth	70 00 80 00
Basswood white	28 00 32 00	Elm	20 00 22 00
Basswood common	20 00 23 00	Sycamore	24 00 27 00
Maple, clear	25 00 30 00	Sycamore quartered	35 00 40 00
Birch, clear	32 00 36 00	Gum	36 00 41 00
Birch, 1s and 2s	26 00 30 00	Butternut	45 00 50 00
Cottonwood	20 00 22 00		

Boston, Mass.

BOSTON, May 29th, 1888.

Western Pine—by car load.

Uppers, 1 in	$50 00@52 00	Fine com., 3 & 4 in	46 00 50 00
1¼, 1½ & 2 in	52 00 53 00	No 2, 1 in. Fine com.	29 00 30 00
3 & 4 in	55 00 60 00	1¼, 1½ & 2 in	31 00 33 00
Selects, 1 in	42 00 45 00	No. 1 strips, 4 to 6 in	41 00 43 00
1¼, 1½ & 2in	44 00 46 00	No. 2	37 00 38 00
3 & 4 in	48 00 52 00	No. 3	25 00 27 00
Moulding boards, 7 to 11 inch clear	37 00 41 00	Cut ups, 1 to 2 in.	26 00 30 00
60 per cent clear	35 00 37 00	Coffin boards	22 00 26 00
Fine common 1 inch	37 00 39 00	Common all widths	20 00 25 00
1¼, 1½ & 2 inch	40 00 42 00	Shipping culls	16 00 19 00

Eastern Pine—Cargo or Car Load.

Nos. 1, 2 & 3	40 00@43 00	Clapboards, 4 ft., sap	
4	28 00 30 00	clear	40 00 42 00
5	23 00 26 00	Sap, 2nd clear	30 00 32 00
Ship'g bds & coarse	16 00	Heart extra	55 00
Refuse	12 00	Heart clear	50 00
West'rn pine clapbds 4 ft. sap extra	43 00 45 00		

Spruce—by Car.

Scantling and plank, random cargoes	13 50@14 50	Coarse, rough	9 00 12 00
Yard orders, ordinary sizes	14 50 15 50	Hemlock bds., rough	10 00 11 00
Yard orders, extra sizes	15 00 16 00	" dressed	12 00 12 00
Clear floor boards	18 00@18 00	Clapbds., extra, 4 ft.	28 00 30 00
No. 2	16 00 16 00	Clear, 4 ft.	26 00 28 00
		Second clear	20 00 22 00
		No. 1	12 00 15 00

Lath.

Spruce	1 90@ 2 00

Shingles.

Spruce	1 40@1 50	Cedar, sawed, extra	3 30@3 60
Pine, 18 in. extra	4 00 4 20	Clear	3 00 3 15
Pine, No. 1	3 50 3 70	Extra, No. 1	2 00 2 20
		Cypress, No. 1, 18 in.	5 00 5 25

Oswego. N. Y.

OSWEGO, May 30th, 1888.

Pine.

1¼, 1½, 2 and thicker uppers	$40 00@43 00		
" " " pickings	30 00 33 00		
" " " No. 1 cutting up	22 00 26 00		
" " " cuttings up pickings and uppers as run	30 00 35 00		
1 inch selected sidings	25 00 30 00		
1¼ " " "	30 00 35 00		
1 & 1½ box or No. 2 culls	11 00 12 00		
1 & 1¼ sidings No. 1 dressing and better	17 00 25 00		
1x10 & 12x12 to 16 feet dressing and better	17 00 25 00		
" " " shipping culls	14 00 17 00		
" " " No. 2 "	11 00 12 00		
1 & 1¼ in. strips 4 to 7 wide selected	20 00 30 00		
" " " dressings	16 00 17 00		
" " " box	9 00 12 00		

Brown Ash.

1 1¼ 1½ 2 & 3 in. 1st & 2nd quality	17 00	21 00	
" " " culls	9 00	11 00	

Basswood.

1 & 1¼ 1st & 2nd quality	20 00	21 00	
" culls	9 00	12 00	

Shingles.

XXX 18 inch pine standard thickness to 2¼			$4 25
XX " " " " "			3 25
X " " " " "			1 10
XXX " cedar " " "			3 40
XX " " " " "			2 25
XXX 16 " pine " " "			3 20
XX " " " " "			2 20

Lath.

No. 1 1⅜, 1½	2 00	2 10	
" 2 "	1 25	1 50	

EXAMINE THE LINE OF

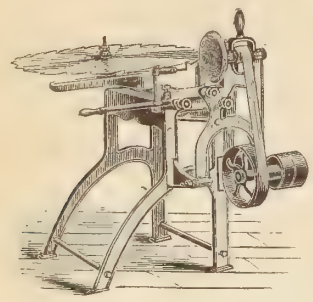
ROGERS' SAW FILERS

AS ILLUSTRATED IN THE MARGIN.

THEY ARE ENDORSED BY LEADING LUMBERMEN

HART EMERY WHEEL CO. LIMITED.

SAW FILER No. 3.



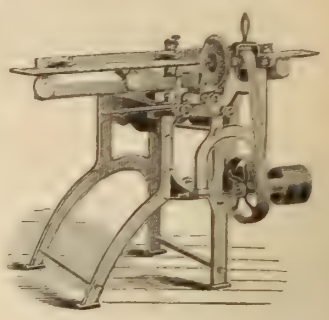
Set for Rip Saws.

Complete with 3 Emery Wheels

Price $75 net.

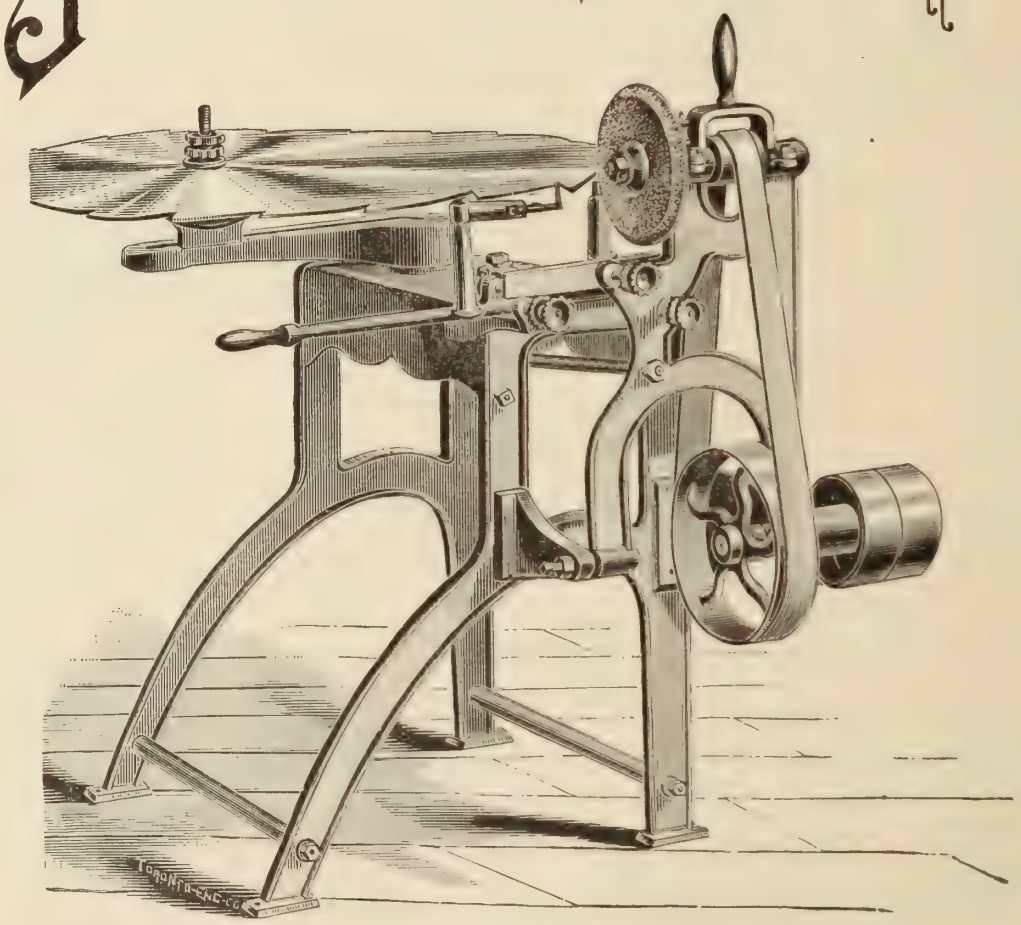
For Saws from 10 to 72 in.

SAW FILER No. 3.



Arranged with gang attachment.

Price $10 extra.



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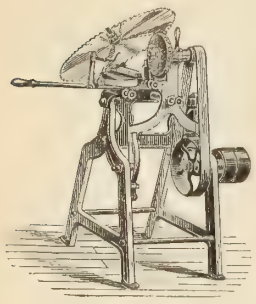


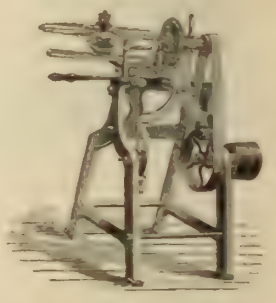
Set for Cross-Cut Saws.

Complete with 3 Emery Wheels

Price $65 net.

For Saws from 10 to 48 in.

SAW FILER No. 2.



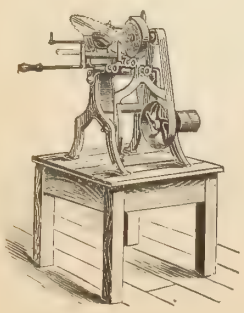
Set for Rip Saws.

Price $65 net,

For Saws from 10 to 48 in.

HAMILTON, ONT.

SAW FILER No. 1.



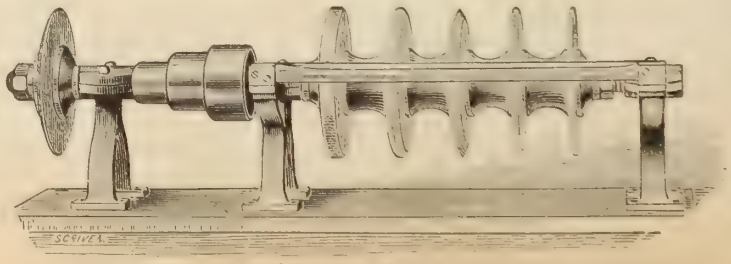
Set for Cross-Cut Saws.

Complete with 3 Emery Wheels

Price $50 net.

NO. 2 PLANING MILL GRINDER.

For Sharpening and Grinding Mouldings, Bits, etc.



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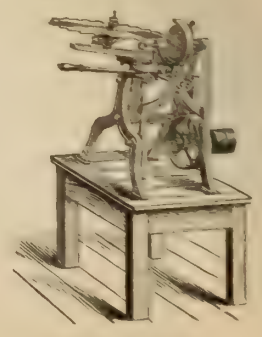

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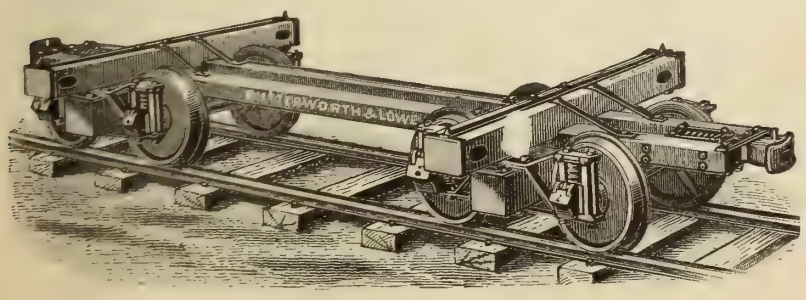
G. F. BOSTWICK, REPRESENTATIVE.



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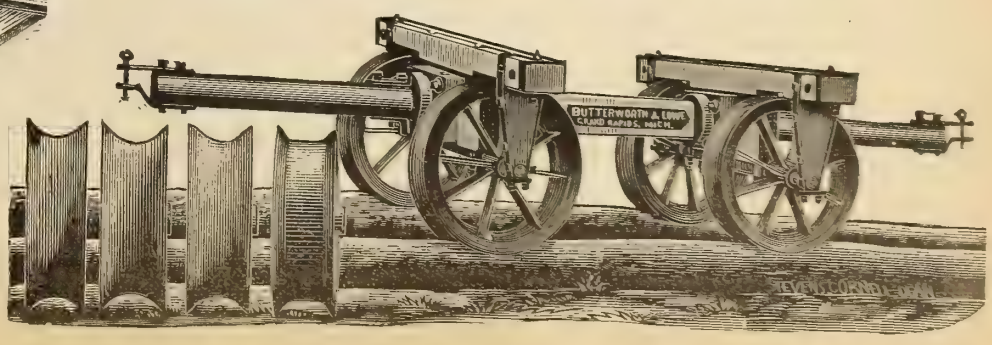

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Announcements in this department will be inserted at the uniform rate of ten cents per line, each insertion, payable in advance. For three or more consecutive insertions of the same advertisement a discount of 25 per cent. will be allowed. Eight words should be counted as one line.

DRY LUMBER FOR SALE—30 M 1¼ IN. maple flooring for sale, 10 M 3½ in. maple, 15 M 1, 1½ and 2 in. elm. Box 60, Uxbridge.

CHEMAINUS SAW MILL, B.C.—FOR SALE —a saw mill; nearly new; fully equipped, with water-power and steam-engine, a powerful steamer, scows, large real estate and timber leases; also hotel, store, manager's and workmen's houses; capacity 50,000 feet per day. Apply to Croft & Angus, Victoria, British Columbia.

FOR SALE—CHANTLER'S MILL—SHINGLE and lumber mill; never been run, owing to death of owner; will be sold cheap, and liberal terms will be given; good chance for party with small means; this mill is situated five miles from Bracebridge, on Lake Muskoka; logs can be had from any point on the lake with excellent booming ground. Apply to S. C. Kanady & Co., 18 Wellington east, Toronto, or G. W. Taylor & Co., Gravenhurst, Ont.

ATTENTION, LUMBERMEN—FOR SALE—at a sacrifice—new saw mill and one thousand acres pine timber; Parry Sound district. Geo. Coote & Son, Dundas.

SAW MILL—IN WESTERN TOWN—WITH woodworking machinery, mostly new; suitable for furniture or planing mill; a bargain; lithograph of buildings and particulars on application. Box 504, Globe office, Toronto.

TO MILLERS, LUMBERMEN AND OTHERS having capital awaiting good investment; splendid chance to purchase A 1 patent process flour mill, together with saw mill and timber limits on easy terms. Apply for particulars to Drawer 9, Minnedosa, Manitoba.

FIRST-CLASS LUMBER AND SHINGLE mill doing large trade; also, timber limit and large number of logs; for Toronto real estate. J. Huggard, 162, Dundas street, agent.

A LARGE PLANING FACTORY—WITH lots of power—adjoining our summer storage yard. William Leak & Co., Dundas street, Toronto.

1,000,000 —FOR SALE—ONE million lath. F. O. B. cars at Gravenhurst, Donogh & Oliver, Lumber Dealers, Toronto.

FOR SALE—STEAM SAW MILL—IN GOOD repair; Lowmoor boiler, 30 h.p., and inspirator; engine 25 h.p., saw rig and carriage, edger, butter, shafting, belting, saws, patent canter and bull wheel; would take part lumber or city lots. Box 60, Uxbridge.

LUMBER INSPECTOR WANTED—IMMEDIATELY—one thoroughly up in inspection of pine and hardwood lumber, and who has a good general knowledge of the business. Apply by letter only to T. W. Walker, No. 4 Imperial Bank Buildings, Toronto.

TIMBER LIMITS FOR SALE.

TIMBER LIMITS FOR SALE IN ONTARIO, Quebec and Manitoba. W. J. FENTON & Co., 50 Adelaide Street, East, Toronto.

FOR SALE CHEAP.

A WATERPOWER CIRCULAR SAW AND Shingle Mill with ten acres of cleared land, log house and stable situated on South river, about 4½ miles from Trout Creek Station on the Northern Pacific Junction R. R., convenient to School, Church and Post Office and s large settlement in Hainsworth. Also about 30,000 feet of dry Hardwood lumber, cut and piled about two years, and about 50,000 feet of Hardwond sawlogs, principally Birch. If not sold sooner, will cut to order this coming summer. For information apply to

THOMAS CORKERY,
Barrett, Ont.

SAW MILL FOR SALE.

FOR SALE, IN THE VILLAGE OF BELmore, Sawmill in first-class running order. Will be sold with or without stock. For terms, apply to

H. R. PERKINS,
Belmore, Ont.

PINE TIMBER LIMITS FOR SALE.

Two choice Timber Limits in Northwest Territory, Canada, 100 square miles each; great bargains. Also, limits in Georgian Bay, Algoma and Muskoka districts for sale. JOHN SCULLY, Toronto, dealer in Pine Lands and Lumbermen's plant and supplies, Light iron and steel rails in stock.

LOCOMOTIVES FOR SALE.

Three second-hand locomotives in working order, rails and other equipment. One locomotive boiler suitable for saw mill purposes.

JOHN J. GARTSHORE,
49 Front Street West, Toronto.

CHARLES A. BRAMBLE, D. L. S.

Frederickton, New Brunswick.

SURVEYS AND REPORTS UPON TIMBER Lands in any section. Can effect sale of properties occasionally if desired. References from former employers.

Our readers will confer a favor by mentioning this Journal when writing to Advertisers.

IN THE MATTER OF

GEORGE BAPTIST, SON & CO.,

— OF THE —

CITY OF THREE RIVERS

LUMBER MERCHANTS,

INSOLVENTS.

TENDERS will be received by the undersigned JOINT CURATOR until

SATURDAY, 30th JUNE, 1888,

AT NOON.

for the purchase of the following ASSETS belonging to above Estate. Tenderers may offer for the whole *en bloc* or for each lot separately.

1. TIMBER LIMITS

	Miles
Nos. 1, 2, 3, 4, 6, 8, 10 and 12 West St. Maurice	328
No. 2, Rear West St. Maurice	36
Nos. 4 and 5, East St. Maurice	100
No. 11, South St. Maurice	30
Part of Caxton	15
No. 1, South Rat River	40
No. 1, East Shawenegan	24
Nos. 1, 2 and 3 North, 1, 2 and 3 South, 1 and 2 Rear South, 2, 6 and 7 Rear North, West Half Rear A, D and C, Mattawin	434
A, B, C and D, Wessonneau	185
East and West Couisacouata	60
Nos. 1 and 2, North and South Flamand	137
No. 1, West, and 1 West Rear Milieu	86
Nos. 1 East and West, and 1 West, Rear Lac Long	95
No. 3 East and West Lac Clair	65
Nos. 4 and 5 North and 5 South, and Nos. 4 and 5 North Rear Vermillion	235
Total Miles	1,870

2. ISLAND MILL PROPERTY

This property includes Islands at mouth of St. Maurice River, known as Baptist Island, Isle Margot and one-third of Isle aux Cochons, and 12 arpents front by half arpent deep of lots fronting St. Maurice River in the Parish of Cap de la Madeleine. On Baptist Island are the remains of a Steam Saw Mill, Workshop, Office, Dwelling Houses, Stables, Wharf, etc., etc.

3. THE GRAIS PROPERTY,

comprising the "Poste of Les Gris," with Saw Mill, Stores, Workshop, Stables, Dwellings, Barns, etc., containing in all 731 8-9 acres of land more or less.

4. RAT RIVER FARM,

at the junction of the Rat and Wessonneau Rivers, in the Township of Turcotte, in the County of Portneuf, containing 5,110 acres, more or less, with Store, Dwelling Houses, Barns, Stables and other buildings thereon erected.

5. IMPROVEMENTS AT MATTAWIN RIVER

Buildings erected on South Bank of the Mattawin River at its confluence with the St. Maurice River.

6. PROPERTY IN CITY OF THREE RIVERS

(*A*)—Lot No. 2, 194 St. Ursule Ward, fronting on Notre Dame street, known as "Old Fuel Yard," containing 34,178 feet.

(*B*)—Lot 2,195 St. Ursule Ward, fronting on Notre Dame street, known as "Office Property," with brick office and other buildings thereon erected, containing 33,258 square feet.

(*C*)—Saw and Planing Mill, and Sash and Door Factory, on corner of Notre Dame and Rene streets, known as lot 598, St. Phillipe Ward.

(*D*)—Beach Lot and Wharf, known as "Dean's Wharf," with store and other buildings thereon erected, Lot No. 597, St. Phillipe Ward.

(*E*)—Two-storey Wooden House and Lot No. 10 St. Julie street, No. 1,459, Notre Dame Ward.

(*F*)—Wooden House and Lot, N.E. side of Gervais street, No. 154, St. Phillipe Ward

(*G*)—Wooden House on Notre Dame street, known as Lot 548, St. Phillipe Ward.

7. FARM LOTS, ETC.

71.—Lots 159 and 160 in the Parish of Mont Carmel, Rang les Gres.

72.—Lots 73, 77, 78 and 18 in the 1st Range of Township of St. Maurice, known as "The Gabelle Property."

73.—Lots 133, 134, 135, 136, S.W. part 137, 138 and part lot 137, Parish of Mont Carmel.

74.—Lot 148 in the Parish of Cap de la Madeleine.

75.—Lots 2, 3 and 4 in the Township of Caxton, Parish of St. Mathieu; 300 acres.

8. SHIPPING

Steamer "Arthur," 9 Batteau, 1 Cordwood Chaland, and 2 Jolly boats.

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Plans showing location of Timber Limits may be had on application to the undersigned.

The lowest or any Tender not necessarily accepted.

Further terms and conditions and all other information can be obtained by applying at our Office.

JOHN MACINTOSH, } Joint
GEORGE HYDE, } Curator.

Montreal, 29th March, 1888.

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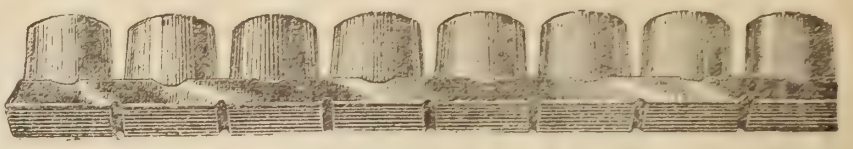
COPPERINE.



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PURCHASERS IN ONTARIO AND QUEBEC OF

BLACK ASH, RED BIRCH, RED OAK,

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MANUFACTURERS OF

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PETERBOROUGH, ONTARIO.

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CANOES

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THE CANADA LUMBERMAN.

VOLUME VIII.
NUMBER 7.

PETERBOROUGH, ONT., JULY, 1888.

TERMS, $1.00 PER YEAR
SINGLE COPIES, 10 CTS.

THE CANADA LUMBERMAN

PUBLISHED MONTHLY BY

ARTHUR G. MORTIMER,

OFFICE: SIMCOE STREET, PETERBOROUGH, ONTARIO.

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One Copy one Year, in Advance, - - - - - $1.00
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Advertising Rates Furnished on Application.

THE CANADA LUMBERMAN is published in the interest of the lumber trade and of allied industries throughout the Dominion being the only representative in Canada of this foremost branch of the commerce of this country. It aims at giving full and timely information on all subjects touching these interests, discussing these topics editorially and inviting free discussion of them by others.

Especial pains are taken to secure the latest and most trustworthy market quotations from various points throughout the world, so as to afford to the trade in Canada information upon which it can rely in its operations.

Special correspondents in localities of importance present accurate report not only of prices and the condition of the market, but also of other matters specially interesting to our readers. But correspondence is not only welcome but is invited from all who have any information to communicate or subjects to discuss relating to the trade or in any way effecting it. Even when we may not be able to agree with the writers we will give them a fair opportunity for free discussion as the best means of eliciting the truth. Any items of interest are particularly requested, for even if not of great importance individually, they contribute to a fund of information from which general results are obtained.

Advertisers will receive careful attention and liberal treatment. We need not point out that for many the CANADA LUMBERMAN with its special class of readers is not only an exceptionally good medium for securing publicity, but is indispensable for those who would bring themselves before the notice of that class. Special attention is directed to "WANTED" and "FOR SALE" advertisements which will be inserted in a conspicious position at the uniform price of ten cents per line for each insertion. Announcements of this character will be subject to a discount of 25 per cent. if ordered for three successive issues or longer.

Subscribers will find the small amount they pay for the CANADA LUMBERMAN quite insignificant as compared with its value to them. There is not an individual in the trade, or specially interested in it, who should not be on our list, thus obtaining the present benefit and aiding and encouraging us to render it even more complete.

The tenth annual Industrial Exhibition, which is to take place in Toronto this year, from the 10th to the 22nd of September, promises to eclipse all previous efforts in this direction. We have received a copy of the prize list and programme of attractions, both of which are complete in every particular. Any of our readers who may desire a copy of this prize list can readily obtain one by dropping a post card to Mr. W. J. Hill, the secretary, at Toronto. The prospects for the success of this year's show are very promising, and the directors have set apart a more than usually large amount for special attractions.

THE great Joggins raft seems always to be in some fresh trouble. Some wire rope imported for it in the expectation that it would be admitted free as being for a ship and which was entered accordingly has been seized by the Customs authorities who do not recognise the raft as a ship. And then the question as to whether some of the piles are not really sawlogs and subject to export duty has not been definitely decided. Obstacles by sea and land seem to be in the way of the third attempt of trying to carry out this singular venture. There ought to be a good profit on the first successful trip if all the preliminary expenses are to be covered. There has certainly been a display of great perseverence.

A DECISION of importance has been given in the Supreme Court of California. The Santa Clara Valley Mill and Lumber Company owns three saw mills in Santa Cruz County, where there are also other millowners. To limit the cut and keep up prices the Company leased the other mills, or when that could not be done made contracts with the owners to limit the output. One of these contracts bound the millowner to make and deliver to the Santa Clara Company two million feet of lumber at $11 per thousand and not to sell any other lumber in that or adjacent counties under penalty of $20 per thousand so sold. The contract was broken and the Santa Clara Company sued for damages. These were refused by the Court and on appeal the Supreme Court of California has sustained this judgment in favor of the defendant on the ground that the contract was against public policy being in restriction of trade and to create a monopoly.

ON every hand we learn of the great scarcity of long bill stuff, especially 20, 22 and 24 feet stock. The deficiency does not seem to be caused so much through the scarcity of long logs, but mainly owing to the risk entailed in floating long timber to the mills. The large number of jams, and the consequent heavy loss of logs, this season so far, is indeed a serious question to the lumbermen. It is therefore not surprising that they refrain as far as possible from incurring additional risks by putting many long logs into the streams. There is no uniformity in price for bill stuff at the present time, although prices generally rule high. There is certainly a good field for speculation in the manufacture of this class of stock where the risks incurred are not too great.

THE lumbermen of old Canada have begun to turn their attention to the pine on the other side of the Rocky Mountains. More than one of them is likely to be operating on the Pacific coast. As to the quantity and excellence of the pine and other wood there is no doubt, and the only question would be as to the market if the output were greatly augmented. There seems, however, every likelihood of rapidly increasing settlement on the great prairies and this must bring a demand for lumber in that direction. The markets in Australia also should be capable of extensive development, for they have little but hardwood and their requirements are large. British Columbia should certainly be able to compare with Norway in Melbourne, Sydney and Adelaide if some enterprise were shown in pushing the trade which has its peculiarities.

THE Mills' tariff bill now before Congress is certainly meeting with bitter opposition from numerous quarters, but the following, taken from a Wiscousin paper, takes the palm for unadulterated prejudice. The paper referred to bewails the situation thus:—"Let the Mills bill pass, and this country would stagnate. Our logging and milling interests would result in a failure. Wolf river, now the scene of active life, crowded with logs and covered with log drivers, would be as desolate as a forsaken churchyard. The mills at Three Lakes, Gagen, Cedar, Cavour and Crandon would soon become the abodes of bats and owls. Spiders would spin their webs about the engines and between the saw-teeth; rust would eat away and dust cover up the now brightly polished machinery. The great pulp mill at Monico would digest no more spruce, poplar, balsam or what-not, and pulp wood lands would soon go back for taxes to a county too poor to pay its officers' salaries."

SOMETIME previous to the first of June notice was given by the Grand Trunk Railway that commencing on the 1st ult. a storage charge of 25 cents per car load per week on lumber would be exacted. This bit of news did not come as a surprise to the Toronto lumber dealers, as the threat had often been made before, but for some reason or other invariably failed to mature. The recent difficulty between the wholesale and retail dealers of the Queen City, however, seems to have had something to do with the recent decision of the Grand Trunk authorities. Certainly the best of feeling does not exist between the middlemen and the retailers, and as a consequence each are making a strong effort to get the best of the situation. Another month has come and gone, but notwithstanding the order above spoken of the question of storage seems to have again fallen through, and the old system is still in vogue. One thing is certain and that is that the lumber trade of Toronto, under present conditions, has to depend altogether too much on the railways for storage room. What is wanted, and what must sooner or later be had, is a central piling ground in close proximity to the various railways, large enough to accommodate the wants of the wholesale trade of the city. The matter is already we understand, receiving more or less attention.

THE stir created by Senator Clemow's sawdust committee of the last session of the Dominion Parliament has resulted in something tangible being effected. Negotiations have been in progress between the Chaudiere lumbermen and the Government in reference to the examination of the Ottawa river for the purpose of determining to what [illegible] charged from the mills injures the river, and it is understood that Sir Hector Langevin has consented to the application of the lumbermen for the appointment of a commission of engineers to investigate the matter. It is understood that Mr. Sandford Fleming will undertake the examination, provided he receives from the Government copies of the survey of the river made for the government some y[illegible] C.E. The lumbermen have agreed to [illegible] It is to be hoped that the great lumber inter[illegible] will not be effected by such an examinati[illegible] prove to the mutual interest of all parties concerned to allow the matter to drop.

SOMETIMES the settler is told, especially by the party politicians on the hunt for votes, to look upon the lumberman as his natural enemy, or at least as having antagonistic interests. Many a settler in the backwoods knows the truth to be very different, finding in the lumberman his best friend and most renumerative customer. A striking instance is given of this fact by a gentleman who has been visiting Lake Temiscaming last winter. He describes the lumberman as being busily at work there and having a number of shanties established in that far away region. Settlers are also becoming numerous and they are looking forward to finding for years to come customers in the lumber shanties for all they can raise, and at good prices. What they consider good prices may be judged from the quotations, $30 a ton for hay, $1 a bag for potatoes and 75 cts. a bushel for oats. No wonder the settlers in the Township of Dymond appreciate the lumbermen and wish to keep them to themselves, declaring even that they have no wish to see a railway built so that they may retain this profitable monopoly. Many a now flourishing agricultural community has thus been built up in its early days by the timely aid thus given by the lumbermen, though they do not always remember these past benefits at a later period. A look at the map to note the exact situation of Lake Temiscaming shows how far a field lumbering is now carried on in Ontario, what were distant backwoods a few years ago now coming well to the front by comparison.

THE magnificent redwood forests of California are the theme of a recent article by the San Francisco *Bulletin*. It describes the great inroads that have been made in the accessible timber, but fortunately the redwood forests of the Pacific slope seem to have far greater powers of reproduction than the Canadian pine woods, so that in some cases there is a very valuable second growth. Our contemporary says, however, that the redwood forests of Mendocino, Humbolt, Del Norte and Siskiyon are still almost in a virgin state. Not being accessible from the sea nor penetrated by railways, they have to a great extent been left in the hands of the government, though they are open to purchase at $2.50 an acre. It is expected that railways will traverse them before long, when being made accessible they will become immensely valuable. Michigan lumbermen, the *Bulletin* says, have already invested largely in these forests. We know that these same Michigan lumbermen had already made extensive purchases in the forests of the Southern States and in the pine lands of Ontario. This would seem to indicate that these gentlemen forsee a serious denudation of the Michigan forests at no very distant epoch, and may be taken as a note of warning to our own lumbermen to be somewhat conservative in their operations, and not to sacrifice their prosperity for an insufficient return by being too eager to force sales prematurely if a little holding back would give better results. The Michigan lumbermen by the by are not alone in investing in Pacific coast forests, some of our Ontario lumbermen being reported to have done the same in British Columbia, where the magnificent forests wil some day acquire a very high value.

THE Act which has just passed the Dominion Government for the suppression of gambling in stocks and merchandise makes

it a misdemeanor, punishable by five years' imprisonment and a fine, (1) to make a contract for the sale or purchase of stock in any company or undertaking in Canada or elsewhere, or of merchandise with the intent to make profit by the rise or fall in price, and without the *bona fide* intention of acquiring any such stock or merchandise; (2) to make a contract for the sale of stock or merchandise with the intent to profit by the rise or fall in the price thereof, when there is no delivery or *bona fide* intention to give or receive delivery of the stock or merchandise so bought or sold. This section applies to every one who "acts, aids, or abets in the making or signing of any such contract or agreement." It is also a misdemeanor, subject to a year's imprisonment, to habitually frequent any office or place when such contracts are made, signed, or negotiated. By the second section the onus of proving the *bona fide* nature of the intention with which the contract was made rests on the party charged under the act. By section 3 every one, either principal or agent, occupying, using, managing, or maintaining the place in which the contracts prohibited in the first section are made, negotiated, or signed, shall be held to be the keeper of a common gaming house, the house or place shall be held to be a gaming house, and the tablets, blackboards, slates, and other implements used in recording prices or fluctuations in the prices of stocks, shares, merchandise, etc., shall be held to be gaming implements within the Dominion Act for the suppression of gambling houses.

THE forests of Quebec were the theme of discussion recently in the Legislative Assembly of the Province. In the first place Mr. Poupore obtained an order of the House for copies of all correspondence exchanged between the lumbermen of the province and the Commissioner of Crown Lands on the subject of the protection of the forests against fire, for which protection $5,000 were voted in the year 1884. It is to be hoped that this step will lead to due attention being given to this very important matter of so great interest not only for the trade but for the public revenue and for the whole community. Immediately afterwards Mr. Tessier moved a resolution, which after a long preamble, setting forth the evils resulting from the destruction of forests, the benefits derived from forests, cultivation and the large profits which the different countries of Europe drew from their forests, declaring that "it is of the highest interest for the Government to take measures to introduce the study of silviculture which has produced such good results in Europe and India, so as to permit the Province to draw from the forest means of augmenting its revenues and to promote systematically the interests of colonization by furnishing the colonist with a safeguard for the future." The resolution was adopted. The system of setting apart forest reserves in the Province of Quebec is to be abandoned and it is said that regulations are to be adopted reserving a certain amount of timber for the settlers on each lot. It is to be hoped that this does not indicate the encouragement of settlers upon the limits, for that is a system which infallibly leads to much distinction of property, and to friction which might well be avoided. Till these regulations are actually framed it would be premature to say that they must necessarily be mischievous, but the report is not assuring.

DURING the month just closed the tariff on lumber has had a generous share of attention in the debate in Congress over the Mills bill. Notwithstanding a most persistent opposition, the lumber clauses of the bill, taking off the United States customs duties, were accepted. It was surprising what wide differences of opinion there were, even among those of the same side, whether for or against the reduction. Hardly any two speakers seemed quite in accord as to the exact incidence of the duty, some holding that the Canadian manufacturer paid it, and others that it was paid by the United States, while others thought that it was divided in various proportions. Some maintained that the change was simply making the Canadian lumbermen a present of the amount of duty, while others declared that it would give the people cheap building material reducing the profits of the United States lumbermen. It was urged that it would preserve the pine forests of the North-Western States while depleting those of Canada, but others argued that by diminishing the value of the United States forests it would make owners less careful of the property. In the course of the debate "Sunset" Cox, of New York, is reported as saying that the lumbermen were almost all millionares, men who had made the forests of Michigan almost a calcined desolation. He wanted to protect the forests against a tariff which offered a premium to selfish people to cut them down, leaving scars and waste places and breeding places of malaria. Mr. Dockery of Missouri, said the explanation of the failure of lumbermen's wages to increase lay in the fact that 90 per cent. of the workmen were Canadians. Mr. Guenther, of Wisconsin, predicted that the Democratic party, if it passed this bill, would go to that place paved with good intentions where every limb and knot of timber would be used, not to raise the revenue, but to raise the temperature to at least 600 deg. above zero. The debate on the pending paragraph expiring, the amendment to strike out from the free list timber hewed and squared, and timber used for spars and whaves, was rejected by a vote of 61 yeas to 101 nays. On June 19th an arrangement was concluded whereby the tariff bill was laid aside for a week or ten days, therefore for the present it is difficult to forsee what will be the ultimate outcome. There is, however, no doubt but that the prospects are improving for a removal of the lumber duties at no distant date, even if the measure is not carried this year.

CORRESPONDENCE.

TORONTO, June 17th, 1888.

Editor Canada Lumberman.

SIR,—In your issue of June 1st there appears a letter signed by one "Pinus," in which assertions, too one-sided in their nature, are made, that I cannot allow it to pass entirely unchallanged. The present state of affairs as described by "Pinus" has been caused, and maintained up to the present by the retail men themselves. They one and all decline to purchase at the mills, or to quote their own words, "decline to buy a pig in a sack," and desire to see what kind of lumber they are getting for their money; therefore the lumber has to be brought here for their inspection, and if not sold (in order to release the cars) must be piled off until such times as a purchaser is found. Again the retail dealers are so close in financial matters, that I think I may say, that, without exception, they all require the wholesale dealer to pay the entire freight charges before they accept a car of lumber—and this is done in nearly every case, so that the assertion made by "Pinus" that the retail dealers contribute largely to the revenue of the railway company is not correct, and the railway companies are well aware of this fact, and therefore grant privileges to wholesale dealers which they would not otherwise give them.

"Pinus" is well aware that the wholesale dealers have tried in vain to compromise all differences existing between the wholesale and retail men, and all in vain. Some of the retail (or if "Pinus" would like the term better—yard men) are so utterly selfish they want to have all their own way, and give nothing in return. The offer made by the wholesale men was as follows: If the yard men will agree to buy all the lumber they require from the middle-men, and not go to the mills, we on our part promise not to break bulk or sell to any consumer. This offer was declined by some of the most important men in the yard trade, and the matter stands so. There is still another more important phase of the question left untouched by "Pinus," and that is the financial part. I venture to assert, without fear of contradiction, that during the entire of the last winter, that retail men did not retire more than 25% of their paper as it matured, and the wholesale dealers had to carry them through, and one considerable dealer has shown his appreciation of the wholesale dealers leniency, by making away with all his effects and absconding from the country, leaving many crediors to mourn his dishonesty. Is it any wonder I would ask "Pinus" in view of facts above given, that we prefer to distribute our lumber as suits us best, and to reduce our risks as far as possible?

Now as to what quantity of lumber a dealer must sell at one time in order to be classed as a wholesale dealer. I would ask "Pinus" if a grocer sells 10 or 20 lbs of sugar or tea is he not called a retail dealer, and if on the other hand he sells a brl. of sugar or a chest of tea does he not stand as a wholesale man; and the same with a dry goods man, if he disposes of cloth by the yard he is classed as a retailer, if by the bale, as a wholesale man. I therefore claim the same latitude for the lumbermen. If we sell less than a car load we are retail dealers, if by the 1,000 ft. and car load lots, we are retail and wholesale dealers, and just there comes the rub with "Pinus." He evidently desires to be able to sell by car load or smaller quantities and still claim to be only a retailer. "Pinus" had better take the advice given to the shoemaker, "stick to your last, my friend." If "Pinus" and his confreres in the trade will only do this, and so not touch on the preserves of the wholesale men, there will be some chance of a full and complete separation of the operations of both retailers and wholesale men. Then in conclusion let me define our position and our wishes as to the equity of the relations sought to be established between the railway companies and the wholesale dealers. We desire to pay for all we receive, and we frequently pay for a little more than we absolutely get. We have made the following offer for their acceptance: Allow 12 ft. as a suitable space for piling off one car of lumber, charge us for that place, and if we do not keep the space occupied that will be our own fault. Can "Pinus" say that we are trying to gain any advantage over the retail men by this offer? There is little to fear, but the railways will charge us much more per foot than any retailer is paying for his holding, and that coupled with frequent doubling up of parts of cars, and first cost of unloading will make our cost of handling equal to the yard men's. We ask for no monopoly, and will certainly not claim squatter sovereignty. We only ask fair play and to be allowed to do our own business in our own way, paying for all the privileges given us, and asking favors from none. I trust this explanation of the position we wish to occupy will satisfy even "Pinus."

Truly yours,

WHOLESALER.

Trade With Australia.

Editor Canada Lumberman.

SIR,—I enclose you a letter which arrived here some weeks prior to my return from Australia *via* England. It may be of service to your numerous readers. It is from the Hon. Philip Santo, of Adelaide, South Australia. I know Mr. Santo very well. No man in Adelaide has a better reputation. I have no personal interest in the matter referred to in this letter. I presume, however, that I told him what I told many others in that prosperous British colony, that there ought to be a larger trade, especially in timber, between them and the Canadians, who were in possession of as extensive forests and as great a variety and as excellent quality of timber as any country in the world. A great deal of the lumber used is at present brought from the Baltic. What I saw (and I saw a good deal of it) was apparently from second-growth pine, with more knots than could be counted, and with no board above six inches wide. It seems to me a large trade might be established between these two great colonies of Great Britain in other branches of industry as well. I saw spades, shovels, hoes, forks, and other horticultural and agricultural implements imported from the United States. I think we can send as good and as cheap. They must soon (as I predicted in various parts of the country) have stoves such as we use, both for cooking and heating purposes. These are not manufactured at all in Australia. Yours, etc, D. V. LUCAS.

Grimsby, June 16th, 1888.

ADELAIDE, S. Australia, March 12, 1888.

Rev. Dr. D. V. Lucas, Montreal, Canada:

DEAR SIR,—Since you left South Australia I have felt very sorry that I did not speak to you on a matter of business in which I have no doubt you are quite able to obtain for me information that would be of great service in forwarding the object I have in view.

If I am correct, I understood from you when in Adelaide that some of your friends were engaged in the timber and shipping trade. I have been supplied with spruce deals, clear pine, Canada siding and shelving from Boston and New York, and in this way the timber has cost me much more than it should do by direct shipments from some port in Canada.

If, on receipt of this, you can place it in the hands of some good house in the timber trade who would be desirous of doing business with me I think it could be made mutually profitable.

We are short of stocks of this description of timber at present and I think we shall be so for some time. The information I would like to have, if possible, is: The prices on board or afloat at Port Adelaide, say cost, freight, and insurance; the shippers to draw on me at 60 days after sight for the value of the timber and insurance, freight to be payable in the colony, vessel to be about 400 tons or less, the timber to be sound and good in quality. As time is an object with us, your friends might telegraph prices at once, and I will reply. If they do not like to telegraph they may write, but in this way we shall not have the necessary information in time for this season's supply. If they should telegraph, they will only have to state price of each kind of timber in the order in which the specifications enclosed herewith are numbered, say No. 1, price per thousand feet super., which would mean spruce deals, so much per thousand feet super.; in the same way No. 2 would mean dressed shelving; No. 3, Canada siding; and No. 4, clear pine, all at per thousand feet super. as 12x1, as per specification. The vessel to be consigned to me with usual commissions.

Should your friends require any reference I would refer them to the Bank of South Australia, London. * * * I remain, dear sir, yours, faithfully, PHILLIP SANTO.

P. S.—If this matter be carried out satisfactory. I have no doubt but that it will lead to a considerable business in the future, as our silver and tin mines are opening out most satisfactorily, and the consumption of timber must be very large in the future.

SPECIFICATION OF SPRUCE TIMBER SUITABLE FOR THIS MARKET.

No. 1. Say 500 pieces 7x3, 400 pieces 9x3, 8,000 pieces 11x3. Length to run, say from 12 feet upwards to 25 feet; greater proportion to run 15 feet and upwards. Short lengths required for stowage to be 11x3. Timber to be thoroughly dry when stowed, and all sound and of good quality, as free from knots as possible.

No. 2. Shelving dressed, say as follows: 12x1 inches, 10,000 sup.; 14x1, 4,000 sup.; 16x1, 3,000 sup.; 18x1, 3,000. To run full size when dressed: bright and clean and as free from knots as possible.

No. 3. Canada siding, 3 to 8 inches thick, 9, 10, 12, 14, 16 and 18 inches wide and wider, 12 to 16 feet long. About 15,000 super.

No. 4. Clear pine, 3 to 8 inches thick, and mostly from 12 to 26 or 28 inches wide; length 12 to 16 feet. About 20,000 super. Both siding and clear pine to be free from knots.

The above approximate specifications of proportions of the different kinds of timber to be increased or diminished according to the carrying capacity of vessel.

THE FIRE RECORD.

Nicholson's saw mill at Victoria Harbor was recently burned. Loss, about $3,000.

Mr. John Elwood's shingle mill on the Semiahamoo spit, near Westminster, B.C., was burned recently. This mill was turning out large quantities of shingles.

Mr. Bæcheler's saw mill, located between Kingarf and Black Horse, in the county of Bruce, was totally destroyed by fire last month. The loss is estimated at $2,500; no insurance.

The Cedar Hall saw mills and the lumbering establishment at Lake Metapedia have bsen burned down. They belong to the Howard, Guernsey Company, and the loss is reported to be extensive.

On the 25th May Nickerson Bro's. mill, near Victoria Harbor, Ont., together with docks, shop, lumber, and about 200 cords of wood and slabs were destroyed by fire. Loss $4,000; insurance $1,500.

Barnes & Co.'s box shook factory at the Chaudiere, with all the valuable machinery, was destroyed by fire the latter part of May, causing a loss of $100,000 and throwing 125 men out of employment.

The lumber piles burned during the burning of the new shook factory at the Chaudiere were owned by Shepherd, Moore & Co., and by Pierce & Co., successors to Grier & Co. Their loss will be about $2,000.

The rotary saw mill, owned by James Brown, near Wellsford, and a saw mill at Baltimore, both in the Province of New Brunswick, were destroyed by bush fires last month. A large number of deals belonging to the last named mill were also destroyed.

During the early part of June the planing mill and factory at Penetanguishene, Ont., owned by John Craige & Sons were destroyed by fire, together with considerable dressed lumber. No insurance. Loss from $4,000 to $5,000. The firm will rebuild as soon as possible.

The extensive planing mills belonging to Taft, Morgan & Co., at Burlington, Vt., were totally destroyed by fire during the past month. The Sheppard & Moore Lumber Co., near by, had a narrow escape. The business of both these mills is largely connected with the interests of some of the largest Ottawa firms.

During the progress of the great fire at Hull, Que., fire broke out in the blacksmith shop in connection with Hurdman's lumber mill on the Hull side of the Suspension bridge. It originated in the blacksmith shop by a piece of burning iron catching on to the woodwork. In a few seconds the place was in flames. The mill hose were quickly run in though, and in about five minutes the fire was under control. The north end of the building and the roof were pretty badly burnt. The loss on the building was light. In the same building separated by a wooden partition are the machines by whlch the mills are lit by electricity. The fire got into this room and two of the machines were burnt. They are valued at $5,000. About fifteen minutes before Hurdman's fire broke out, Messrs. Pennock & Mason had concluded a risk on the building. They won't lose much though.

On Sunday evening, June 10th, a very destructive fire occurred in the huge lumber piles belonging to the Lakefield Lumber and Manufacturing Co., at Lakefield. How the fire originated is not positively known, but incendiarism is strongly spoken of. A strong wind prevailed and at the outset it was generally feared that all that was left of last season's cut—about four million feet—would become a prey to the devouring element; but through the heroic efforts of the fire brigade and citizens of the village, and the prompt response of the Peterborough Firemen to the call for aid, over three quarters of the lumber was saved. The portion destroyed, however, was the most valuable part of the stock, being the best quality pine 16 feet boards. The total loss foots up to about $15,000. The Company had $20,000 insurance on the entire stock, divided equally between the Western and the Liverpool, London & Globe.

CASUALTIES.

A young man named John Payne, of the township of Horton (Ont.) recently lost his life while driving on the Wahnapitae river.

James McCabe, a teamster, employed in Cozzens' lumber yard at Sarnia, was instantly killed a short time since, through the team he was driving running away.

A man named Samuel Gilgore, 22 years of age, engaged on one of the Messrs. Strickland's drives, was drowned in Jack Creek, near Apsley, Ont., recently.

A workman in Neil McKenzie's saw mill, at St. Pierre Baptiste, Que., had his arm completely shattered some days ago by a piece of timber being thrown from a saw.

A man named Bedard, working at one of Mr. W. C. Edwards' mills at Rockland, Ont., was instantly killed some days ago by a board flying from a cutter and striking him on the chest.

A young man named Fleming Johnson while working in W. S. Loggie's shingle mill in the Cassidy factory, Chatham, N.B., had one of his hands cut off at the wrist by a saw which he was trying to relieve of rubbish.

Tom Sanderson, a river driver, was thrown into the Black River at Brosse's Falls the other day and in the plunge he struck his head against the log with such force that he was fearfully cut and nearly fractured his skull.

A sad accident happened at Cape Cove, Que., on June 6th. Silas Vibert, fell under a circular saw mill, both of his legs being cut off and a large wound made on his shoulder. The unfortunate young man died the following morning.

A young man named Dodge, aged 17, working for Carswell, Thistle & Mackay on the Black Donald Creek, was killed on a roll-way recently. Three logs rolled on to him, crushing him to death. Several other men had narrow escapes.

A young man named Penton, of Three Rivers, who is working in the Ottawa Lumber Company's Mill, at the Calumet, met with a painful accident recently, one of the fingers of his left hand being completely severed by a butting saw at which he was working.

William Parsons, an Englishman, 24 years old, who was married in Toronto last New Year's eve, was assisting to place a heavy timber in the lower pier of a mill-race in course of construction, at Suspension Bridge, when he fell into the river, was carried through the rapids and drowned.

An accident occurred on Whitestone Lake, near Parry Sound, by which two men working on McCormack's drive named John Morley and John Amou, lost their lives. It appears that the men were crossing the lake in a canoe which by some means capsized and both men were drowned.

The lumbering firm of J. R. Booth & Co., have been advised that a Jos. Desjardins employed as a driver on their drive of logs on Black river was drowned at Floodwood creek on the 15th of June. No particulars as to how the unfortunate man lost his life have been received. Desjardins hails from Montreal.

Mr. R. Clark, engineer at McGibbon's Mill, Penetanguishene, was trying to put the belt on the pumping machine some days ago and was caught in some mysterious manner and whirled round the shaft and left insensible. He is unable to to tell what happened after taking hold of the belt, and he has evidently narrowly escaped what might have been a fearful death. As it is his spine seems to be injured, and he will be laid up for some time.

On June 2nd six men in the employ of Pierre & Co., Ottawa, attempted to run the rapids of Mile Roche at the head of Lake Traverse, on the Pettewawa river, against the orders of their foreman. The boat swung around in the current and upset, drowning Cleophas Theorel, of Point Clair, Hyacinthe Malett, of Buckingham, and Dennis Beaudry, of Papineauville. It is indeed unfortunate that so many men, through bravado, place themselves in the jaws of death, in order to satisfy their desires for foolhardy feats. Casualties of this nature are becoming very frequent.

An accident, which was nearly attended with fatal results, occurred June 3rd on the tramway of the Calgary Lumber Company at Cochrane, N.W.T. A train carrying Lieut. Cochrane, R.N., and party, consisting of Lord and Lady St. Maur, Lady Adela Cochrane, and others, as well as a number of mill hands, was ascending the grade near the mill when one of the cars left the track, throwing one of the hands, Fred. Thompson, off the car and on to the track under the engine which was pushing behind the train. The flange of one of the driving wheels took off Thompson's right ear and he was badly cut about the head and the skull slightly fractured. The rest of the party were badly shaken up, but escaped without serious injuries. Lady Adela Cochrane showed great pluck, and was one of the first to render assistance to the injured man, bandaging and dressing his wounds with the ability and celerity of a trained nurse.

ITEMS OF INTEREST.

The Canadian parliament has voted $1,000,000 for the proposed ship canal at Sault Ste. Marie.

It is estimated that the consumption of lumber is about 500 feet for every individual, therefore every million increase in population calls for 500,000,000 feet of lumber.

To find the diameter of a pulley for any speed multiply diameter of pulley on main shaft by the revolutions (or speed) required, the quotient will be the diameter in inches of required pulley.

A botanical phenomenon in which the people of Leominster, England, take pride is a pair of trees—an oak and an ash—which appear to have but a single trunk. They grow together for about four feet and

A lumber stacking machine, worked by one man, which takes the place of fifteen men, has been invented. The lumber is carried on chains from the trimmer and dropped on the cars in better shape than by the men who formerly did the work.

The great demand for cedar, especially during the past fifteen years, has served to develop an industry second only to that of pine. The supplies necessary for street paving, telegraph and electric poles, and cedar fence posts has sent large gangs into the cedar swamps and to-day the cedars of Canada alone far transcend in the yearly value of the output the famous cedars of Lebanon.

PERSONAL.

Mr. James Scott, of the Georgian Bay Lumber Co., is removing from Waubaushene to Toronto. He does not sever his connection from the above company.

Mr. B. S. Davidson, an old-time lumberman of Pembroke, Ont., was among the callers at this office during the past month. He reports the lumber business in his section in a prosperous condition.

Mr. John Anderson, of Deux Rivieres, late manager of Messrs. A. & P. White's steam saw mill, has left for Washington Territory, where he proposes entering into the lumber business in connection with his brothers.

R. W. Phipps, of Toronto, is shortly going to England to investigate forestry matters there and observe the system of tree-planting in the British Islands, thereby expecting to get valuable information for his next forestry report.

We learn that Mr. A. Cadenhead has accepted the position of manager of the Ontario Lumber Co.'s business at Midland, Ont., vice Mr. F. Hammet, resigned. Mr. C. is, we understand thoroughly experienced and in every way qualified for the position.

Particulars concerning the death of Mr. Murdoch McDonald, formerly of Black River, and who was well known amongst the lumbermen of Northumberland and Gloucester, (N.B.) have been received by his friends. McDonald was one of a party of eleven lumbermen who started from Boston July 1st, 1887, under arrangements with G. D. Emery of Chelsea, to go to Central America and get out mahogany logs for him.

We regret to have to announce the death of Daniel Hilliard, M.P.P. for North Lanark, which sad event took place at the family residence in Pakenham on June 23rd. Deceased was extensively engaged in the lumber business and had the reputation of being a clear-headed and successful business man. He was returned to the Legislative Assembly of Ontario at the last general election as a supporter of the Mowat administration.

When Mr. James Walsh, of the lumber firm of James Walsh & Co., Toronto, dropped into the LUMBERMAN office a few days ago, togged out in a white choker and silk hat, we thought our time had come to make reparation for our sins. A short but pleasant interview, however, convinced us that our visitor was not of the clerical persuasion, but an old-time subscriber to THE LUMBERMAN who desired to pay his subscription up to 1890. We were pleased to see him look so hale and hearty, and also to learn that the business of his firm was prosperous.

Mr. W. W. Belding, of Katrine, Ont., dropped into THE LUMBERMAN sanctum some days ago and in paying his subscription up to 1890 informed us that he was contemplating still further additions to his new mill at the above point. His next move, he informs us, is to put in a band mill and shingle making machinery, and while here interviewed the Wm. Hamilton Manufacturing Co. on the subject. Mr. Belding informs us that his cut of lumber this year will be in the neighborhood of five and a-half million feet. He secures his logs from the south branch of the Maganetawan river.

THE C. P. R. CO'S NEW STEAMER.

Arrangements are about concluded between the Canadian Pacific Company and the Polson Iron Works Company, for the construction by the latter in Toronto of a large steel steamer to run with the "Alberta" and "Athabaska" between Owen Sound and Port Arthur. The new steamer will be wholly built in Toronto, and taken apart for transportation through the Welland Canal. She will be thirty feet longer than either of her two sister ships, and will be one of the largest vessels afloat on fresh water. She will use the engines of the "Algoma," which were saved almost uninjured when that vessel was wrecked on Isle Royale. Two very large steel steamers are to be built in Buffalo for the Canadian Pacific Company, to run between Buffalo and Chicago.

THE NEWS.

ONTARIO.

—Mickle & Dyment's new mill, Barrie is about finished.

—Gravenhurst mills are running ten and a-half hours a day.

—Messrs. Hilliard & Dickson have started up their mill at Pakenham.

—Hamilton lumber dealers complain of a very poor quality of lumber.

—The drives in the Pettawawa district are all coming down satisfactory.

—Phillips & McLeod, planing mill operators, Aurora, have dissolved.

—The various drives around Minden are reported as making good headway.

—Chew's saw mill at Midland narrowly escaped being burned some days ago.

—N. Dyments' drive on the Thessalon river recently broke, causing a loss of 3,000 logs.

—The retail lumber trade of Hamilton is reported to be in a fairly flourishing condition.

—The new boat built for the Georgian Bay Lumber Co. has been successfully launched.

—The Georgian Bay drives are all well forward, and so far it has been a remarkable good driving season.

—Brown & Mahood, shingle manufacturers of Utterson, have assigned for the benefit of their creditors.

—Basswood logs for the Lumber Cutting Machine Company, Belleville, have commenced to arrive at the boom.

—The big new mill belonging to the Canada Lumber Co., at Carleton Place, has commenced a satisfactory run.

—Messrs. J. R. Booth, E. B. Eddy, and R. Hurdman & Co., of Ottawa have put on night gangs in their mills.

—The Ontario Lumber Co., will cut in their three mills this year 20,000,000 feet of lumber and 5,000,000 shingles.

—Miller Brothers have built a new custom saw and shingle mill on the K. and P. railway, at McLaren's Mills station.

—Mr. J. D. Shier, of Bracebridge, has added about $1,500 worth of new machinery to his sawmill during the past winter.

—All the mills in the Georgian Bay district, with the exception of the Emery Lumber Co's mill at Midland, are now running.

—It is expected that 10,000,000 feet of lumber will be cut this season at the mill of Messrs. Christie, Kerr & Co., Bradford.

—Messrs. Moore Bros. are reported to have sold their timber limit on Bye's Creek to Mr. Richard White, of Pembroke.

—Burton Bros. tug "Matamony" recently brought down 2,000,000 feet of logs from Beaver Stone river to Byng Inlet.

—Messrs. Walsh & McKinnon, of Little Current, are making extensive additions to the machinery in their saw mill this season.

—Bush fires have again been raging in the back country in the vicinity of Kingston. Much valuable timber has been destroyed.

—Mr. McCormack's mill east of Sudbury will shortly commence running. This is the same mill operated by Lee & Potter last summer.

—The Rathbun Company are having difficulty with the Knights of Labor, at Kingston, through refusing to discharge non-union employees.

—The Georgian Bay Consolidated Lumber Company are having a small tug built at Midland, to be used at Byng Inlet to run between upper and lower mills.

—Mr. Jacob A. Shaver, of Ancaster, has associated himself with one or two other gentlemen, who are about going into the lumber business in the city of Hamilton.

—Burglars recently entered the lumber office of A. Caldwell & Son, at Lanark, blew the safe door clear across the office, and secured a renumeration of $23 for their work.

—The Blind River Lumber Co., of Blind River, and Buzzwell & Co., of the Spanish, supply a great quantity of lumber for the buildings in course of erection at the Sault.

—During the latter part of May Messrs. Cook Bros. had 10,000 logs adrift from the mouth of the Mississago river, a large portion of which have, however, been secured.

—There is an immense quantity of cedar lying around Lake Manitou ready to be towed by the tug to Vanzaat's landing to be put through the saw mill in course of construction there.

—Hamilton dealers complain that they are now compelled to pay $1 per thousand feet more on bill stuff than heretofore, and find it impossible to raise the price in the local market.

—The Ottawa Lumber Co.'s mills at the Calumet have upwards of 150,000 logs in their booms at the Rouge, and will give employment to a very large number of men during the season.

—The lumbering firm of Perley & Pattee, Ottawa, have a gang of men employed making improvements in the tramways used to convey sawn lumber from the mills to the piling grounds.

—The general store trade of the Georgian Bay Consolidated Lumber Co., has been consolidated under the name of the Canada Trading and Supply Co., with headquarters at Waubaushene.

—It was agreed at a recent meeting of the North West, Ontario and Manitoba Lumber Association to continue the present price list, with the exception of a slight advance in some sizes in dimensions.

—Messrs. Bronson & Weston, of Ottawa, have secured the services of the government dredge, St. Louis, to deepen the canal in front of their new piling grounds at the Deep Cut, so as to allow loaded barges to approach their wharves.

—Davidson & Hay, of Toronto, are locating a mill on the limit recently purchased by that firm close to Lake Nipissing. They have three townships, Hawley, Appelby, and No. 29, off which they expect to take 70,000,000 feet of lumber.

—Messrs. Vigar Bros, Port Arthur, are making considerable improvements in their sawmill. A Cunningham patent steam feeder, together with other additions to their machinery, will, it is expected, give the mill double the capacity it formerly had.

—During the early part of June the houses along the bank of the Ottawa river at Gatineau point were inundated, the water being so high that the occupants were obliged to use the upper portion of their houses and in some cases to abandon them.

—The Rathbun Company have been exceedingly fortunate with their stream driving operations this year. Although the water was low and they had other difficulties to contend with, all their logs will soon reach the booms at Trenton and Belleville.

—Mr. C. Young, of Young's Point, has completed the contract for supplying timber for the coffer dam, stop-logs, piers, etc. being constructed at that place. His saw mill is kept very busy, and it is said that he contemplates increasing its capacity shortly.

—Letters patent have been issued to the Ryan Manufacturing company of Canada with a capital of $100,000. The business of the company will be to manufacture house furnishings, builders' supplies and hardwood specialties, with headquarters at Toronto.

—Mr. G. B. Green, manager of the Upper Ottawa Improvement company, says that the drive of logs on the upper Ottawa is very successful this season. Very few logs have been stuck in the small streams and the smaller drives are coming out into the main stream in good time.

—Manager Lake, of the Rathbun Company's business at Picton, says that the company's sales from January to April, inclusive, for the present year have very largely exceeded the sales made in any previous year since the advent of the Company to Picton, and that in the months named the sales were double what they were in the same period last year.

—Word has been received by the insurance agents of Ottawa, that at a meeting of representatives of insurance companies held in Montreal it was decided to advance the rates of insurance on the yards adjoining Barnes' mills, recently destroyed by fire, but just rebuilt. This means several thousand dollars a year more to pay by the lumbermen. The lumbermen will protest.

—A representative of THE LUMBERMAN recently inspected a main driving belt in a large manufacturing concern in Toronto, manufactured by the Canadian Rubber Co., which has been in continuous service for the past fourteen years. It is still in good condition and doing its duty nobly. This is merely a sample of the quality of the above firms' manufacture.

—The government and the lumbermen have about come to an agreement for settlement of the arrears owed by the lumbermen for water leases at the Chaudiere. The lumbermen agree to pay the balance due by them under the old leases, and take new ones at reduced rates, with conditions providing for the preservation of the water power at the falls. They also want the flow of water on the falls regulated by artificial works.

—Messrs Flatt & Bradley, the well-known lumbermen of Hamilton and Casselman Ont., and East Saginaw, Mich., have just secured an order from England for five million feet of lumber, to be shipped during the present season. We understand that the consignment will foot up to upwards of $75,000. Messrs. Flatt & Bradley are to be congratulated on their success in securing such an important order from across the sea.

—The E. B. Eddy Manufacturing Company is the first Ottawa lumber firm this season to saw new logs cut during the past winter. A small portion of the firm's drive of new logs from the Colonge River arrived at the Chaudiere on the 19th of May, and are now being cut into lumber. This is the earliest that logs have ever reached Ottawa from the lumber districts. The main drive cannot reach the Chaudiere until late in June.

—Messrs. Perley & Pattee have been advised that a serious fire is raging on their limits on the Pettewawa river. The information is brought by one of the employes of the firm, and the particulars are very scanty. The destruction is supposed to have been started from fires made by settlers for the purpose of clearing their lands. No estimate can be formed of the probable loss, as the full extent of the fire is not known, but the limits are of the best in the lumbering districts of the Upper Ottawa.

—The Chaudiere lumbermen, says the *Journal*, are anxiously looking for their drive logs. The reserves held in the booms at Thompson's Bay and Deschenes were very small this season owing to the the short cut last season. The cutting this spring promises to have a short rest as most of the firms will have completed cutting their reserves before this season's drive is in the booms at the Chaudiere. This spring has despite the high water been a very favorable one for the lumbermen and a large quantity of timber has been turned into the yards.

QUEBEC.

—Lake Megantic lumbermen have been very successful in drive operations so far.

—The Cookshire Mill Company, Cookshire, who have an extensive saw mill plant at Cookshire, are building another large mill at Sawyerville.

—Stevedores report ship labor getting scarce at Quebec. Some difficulty is experienced in producing enough men to load the vessels now ready to take in cargo.

—A combination, calculated to injure the business of the legitimate lumbermen, has been formed by the Quebec Timber Farmers, who have fixed a uniform scale of rates.

—The Mantais Mills, Lake Megantic, has been considerably improved this season by the addition of new machinery. The capacity will hereafter be about fifty thousand feet per day.

—A new regulation respecting the removal of timber on Indian lands has been passed. It provides that purchasers of these lands be required to clear five instead of fifteen acres, and after the necessary buildings have been provided the agent may grant a settler's license.

—The demand for lumber in Montreal during the month just closed was fairly good, but despite this a rather gloomy feeling prevails regarding the future. Dealers have experienced some uneasiness owing to the imminent danger to which stocks at the Chaudiere were exposed. That material is now, however, practically out of the millowners hands, having already been disposed of and being in process of delivery. There has been a fair amount of orders from the country and prices are steady and without change.

—One of the largest lumber failures which has occurred in the province of Quebec for some time, took place the early part of June when Mr. W. Little the lumber merchant of Montreal, assigned with liabilities upwards of $200,000. The principal creditors are Ross & Co., of Quebec, $79,354; Bank of Montreal, $24,953; La Banque de Peuple, Three Rivers, $17,394; E. H. Lemay, Montreal, $10,885; Dame Anne Tovell, $9,234; E. B. Eddy & Co., Hull, $7,077. The assets consists of timber limits in St. Maurice district, valued at $40,000; timber limits in Compton, $60,000; land in Florida, $10,000; lots in Rat Portage, $600. The Hon J. G. Ross, of Quebec, has been appointed provincial guardian, and has substituted Mr. Samuel C. Fatt in his place. A supplimentary list of assets and liabilities has been filed in Court. The list, besides the large creditors already given, shows the names of persons largely interested but secured. Dundee Mortgage and Trust Company, $37,470; Andrew Allan, $20,247; H. G. Burleigh & Bro., Whitehall, N. Y., $9,540; Leonard G. Little, $2,500. The Banque du Peuple at Three Rivers is indirectly interested for $18,199. The total liabilities, as stated at the time are about $200,000, and the asserts are fixed at about $116,000. Among the principal assets are:—Lumber at the Ross Mills, Three Rivers, $13,500; logs and timber on the St. Maurice River, $40,000; laths in Canada and the United States $23,000.

—The freight rates at present are 42/6 to 45/0 from Quebec to London or Liverpool, and probably the same to Glasgow.

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NEW BRUNSWICK.

—Messrs. Allan Bros., Carleton, are supplying the machinery for the new lumber mill of Mr. D. J. McLaughlin, being built at Pollet River.

—Messrs. Murray & Shaw, Flat Lands, near Chatham, are building a shingle mill which will be equipped with the newest and best machinery.

—S. T. King & Sons, of St. John, are the purchasers of the lumber business of Mr. E. C. Gates, of Calais. Mr. Charles King, of the firm, will look after the business.

—The Chatham New Brunswick *World* says, spruce logs which were worth but $6 there last year, and no demand for them at that, find a ready sale now at $7, and the supply is not equal to the probable demand.

—Extensive forests fires have been raging in the eastern section of New Brunswick, and doing an immense amount of damage. Immense tracts of forests lands, besides mills, farm houses, barns and standing crops have been destroyed. The town of Moncton had a narrow escape.

—W. H. McLeod, of Richibucto, Geo. K. McLeod, of St. John, Jas. F. Atkinson, of Kouchibouguac, Wm. E. Cleaver, of London, Eng., and John Curran, of New Mills, Restigouche Co., seek incorporation as the "Kent Lumber Company." Capital $80,000 in $100 shares.

MANITOBA AND THE NORTH-WEST.

—P. McLaren's new saw mill at Macleod, Alberta, has been completed and put in operation.

—The capital stock of the Calgary Lumber Company has been increased from $85,000 to $170,000.

—Hunter & Moore have opened their lumber yard, at Crystal City, and have a large stock of building material.

—Cedar shingles from British Columbia are being used extensively throughout Manitoba. They are said to give the utmost satisfaction both as to price and quality.

—Campbell & Stevens have opened a lumber yard at Glenboro', and M. W. Naughton has opened a yard at Killarney, both in Manitoba. J. R. Reilly & Co., have opened a yard at Regina, Assa.

—The ties from the Riding Mountains for the N. W. C. railway have all passed this place on their way down the river. The drive from the mountains which was made in 20 days is the fastest time on record for such a large quantity of timber. There are over 30,000 ties and a lot of bridge timber.

—A bush fire set fire to Mr. Strevel's ties at Stott's Hill near Whitemouth, and before it was stopped 10,000 of them were destroyed. About two weeks previous another lot of 10,000 of the same ties were destroyed. These were the ties once intended for the R.R.V.R., but the Government never took them over. Mr. Strevel, however, claims that the ties belong to the Government; while the Government say they belong to Mr. Strevel.

—We learn from the Edmonton *Bulletin* that the damage to timbers on the head waters of the Saskatchewan and the Athabasca this spring has been very great. The country from the 52nd to the 55th degree of north latitude and from the Rocky Mountains eastward to about the 5th principal meridian contains the available supply of sawing timber of the Northwest. The area of this region is very great, but it was never as densely or as uniformly timbered as the wooded lands of Eastern Canada. The good spruce is in patches with considerable areas of scrub and even open prairie. However, the whole region is so thoroughly cut up by the main streams mentioned, their greater tributaries the Red Deer, the Brazeau, the Pembina and the McLeod, and many smaller branches that the greater part of it is really accessible. Many million feet of spruce well fitted for lumber, which within the memory of man was standing green and growing in the country mentioned is now lying in brule of no use for any purpose, an impediment to travel and furnishing a perpetual supply of tinder with which to kindle and spread new fires. Even within the past five years the loss on known and immediately available timbered lands must have mounted into the hundreds of thousands of dollars. As is well known, in the Northwest series of wet and dry years alternate. During the former the timber is comparatively safe, the only loss arising from local fires in the fall. No matter how dry the weather may be for a time the ground is always moist, and when it is so the fire does not travel far. After a succession of dry years the reverse is the case. The soft mould, full of vegetable matter, becomes thoroughly dry and in the woods even heavy rains fail to wet it. When fire is once started in a section of country having such a soil in such a state it is bound to run through it all. Nothing has ever been done to stop this destruction. The timber destroyed had no market value and no one was interested in it. Now, however, matters are different. Local saw mills are turning the spruce to account in yearly increasing quantities and eastern speculators have seen the bonanza that must be in limits of good timber lying on the headwaters of navigable streams flowing on the lower part of their course through agricultural lands. There is bound to be an influx of immigrants shortly who will need this timber and will cause the loss of every stick to be felt. At the same time the past dry seasons have brought the country in the condition in which it is most liable to fires.

—In a description of the town of Calgary, N. W. T., printed in the Winnipeg *Sun*, the following reference is made to the largest lumber firm in the Northwest: The Eau Claire and Bow River Lumber Co., organized in 1883 with a capital stock of $300,000, is situated at Calgary N. W. T. The company have purchased ten timber limits situated on the Bow, Spray and Kanabaskus rivers, covering an area of 500 square miles, estimated to contain 300,000,000 feet of growing timber, which is cut and put into the rivers and brought to Calgary on water down the Bow river, where they have established the largest sawmill in the N.W.T. They have also in connection with their mill a dam and extensive river improvements, booms, piers, etc., in order to hold and handle the large cut of logs brought down each year. They have for this year's manufacture five million feet of logs, and are in a position to furnish anything in the line of building material, etc.

BRITISH COLUMBIA.

—H. W. Petril is erecting a saw mill at Lilloct.

—John Elwood's shingle mill near Westminster, has been burned out.

—Fader Bros. have bought a disused saw mill plant at Vancouver. They will add machinery and operate the mill.

—The Brunette Saw Mill Company, Westminster, have recently built a 80x30 foot addition to their works, into which $1,500 worth of new machinery will be placed, consisting of a flooring machine, lathing machine, bolter, and a machine for cutting box lumber out of slabs.

AMERICAN NOTES.

—The southern California lumber boom is said to be on the wane.

—It is said that the lumber business in New York is duller than it has been for ten years.

—Duluth expects to receive upward of 500,000,000 this season from the Georgian Bay alone.

—The drives of the Penobscot River and tributaries in Maine aggregate upward of 100,000,000 feet.

—A big hemlock combination has been formed in New York State, to be known as the Pennsylvania Lumber Storage Co.

—The season at Bangor, Maine, opened with high rains and a slack demand for lumber, with prices bordering downwards.

—A Muskegon, Mich., paper reports the local surgeons as saying that accidents in the saw mills are scarcer than ever before.

—A congressman has estimated that there is not less than $700,000,000 to $1,000,000,000 worth of lumber in the forests of Arkansas.

—P. O. Scribner, of Tonawanda, N. Y., has chartered the mammoth lumber barge Wahnapeta for two trips from Lake Superior to that port.

—The Tennessee Lumber Company's property and the Mill Creek Distilling Company's works, Cincinnati, have been burned. Loss, $180,000.

—Hargreaves Bros., & Tripp, lumbermen Detroit, Mich., have made an assignment for the benefit of creditors to Francis G. Russel. Assets $2,274.85; liabilities, $7,072.39.

—Dubois, Pa., a thriving lumber town of about 10,000 inhabitants has been completely wiped out by fire. Over thirty lives were lost and about 4,000 people left homeless.

—Unless there is some unforseen accident, more lumber will be made in Minneapolis this year than in any preceding year. The total cut is expected to run considerably over 300,000,000.

—Wood fiber for paper makers' use is manufactured in twenty-one States. The industry employs $20,000,000 capital and 22,000 men. The State of Maine alone produces 84,000 pounds of ground wood fibre and 188,000 pounds of chemical wood fibre.

—A giant poplar tree, that measured 11 feet 8 inches in diameter at the base, and was 240 feet high, was recently felled near Taylorsville, O. It is estimated that it will yield 20,000 feet of lumber.

—From New York state comes the cry that there is more or less cutting of prices going on. Some Buffalo firms are in the habit of knocking considerable off the price in their strenuous efforts to secure trade.

—A curious freak in the tie trade is reported from Duluth, Minn. Vessels are carrying cedar ties to that port from Sault Ste. Marie for the Manitoba road, and taking back tamarack ties to the "Soo" from Port Arthur for the Grand Trunk. A heavy trade is thus carried on.

—New York City it is said is not demanding lumber as vociferously as it is wont at this season of the year. There has been a slowness in that quarter, that does not seem just natural. Not but that a great deal of lumber is being shipped there, but it is hardly up to the usual standard.

—A Muskegon, Mich., shingle manufacturer stated on Friday to a representative of the *News*, that the output of shingles from the Muskegon mills for 1888 will be at least 100,000,000 less than that of last year. Shingles are averaging better in price than last season, and decrease in the cut will redound to the interest of the manufacturers.

—Figures show that more lumber was sold in Chicago in May than in any month in the history of the market—20,000,000 more than was sold in March, the sales aggregating 229,000,000 feet. Of this total 151,000,000 feet went in local consumption, leaving only 78,000,000 for the out of town trade. A year ago in May the local consumption reached only 34,000,000 feet.

—There is a fairly encouraging tone to the reports regarding the British market for American woods. A steady trade continues in prime walnut logs and lumber. A quiet, steady trade is reported in whitewood, with stocks large in both logs and lumber. Prices fairly maintained. There is considerable activity in American oak. Gum seems to have been deserted, the market being overstocked.

—A resident of Chicago has in his possession a copy of the Ulster county, N. Y., *Gazette*, dated, "Saturday, January 8, 1800," and a sample of the contents is given in the style of the following advertisement, showing that the people of olden times did not notice little incongrugities such as are involved in this ad.:

FOR SALE—THE ONE-HALF OF A SAWMILL, WITH A convenient place for building; lying in the town of Rochester. By the mill is an inexhaustible quantity of pine wood, and also a stout, healthy, and active negro wench. Any person inclined to purchase may know the particulars by applying to JOHN SCHOOMAKER, JUN., at Rochester, November 13, 1799.

The *Courier* says the Saginaw cargo lumber market is dull, but June is invariably a quiet month. No sales of consequence are being reported, but a number of small lots have changed hands. There are no changes in quotations. What demand there is is limited to common lumber. Box stock is firm, and Norway strips sell readily, but bill stuff is dull and featureless. The demand for coarse box lumber seems to be fully equal to any demand for such lumber the valley has ever experinced and contracts are being made at $10.50 and $11 per thousand for green stock. Norway strips are also in good demand; also hemlock strips. While some claim that the demand for good lumber has improved the evidence on the face does not show much of an improvement. The dry lumber is nearly all sold and but very little green is being contracted ahead.

—The manufacture of hemlock in Michigan is increasing rapidly. In the Saginaw valley hemlock, bill stuff and lath are being largely used in home building, while a large quantity will find shipping market. As its use extends people are finding out that it makes a stiffer frame than pine, and is of greater value in all dimension sizes about a building.

Canadian Lumber in the States.

There is a general impression that the presidental elections in the United States will have a detrimental effect on the American lumber market and that in consequence the Canadian lumbermen will suffer to a certain extent.

A reporter visited the Chaudiere this morning with a view to obtaining the opinion of the Chaudiere lumbermen on the subject. The universal statement was as far as this year's cut is concerned almost every foot of it was sold before it was taken from the limits last winter, at fair average prices. It is now possible that the elections may effect the sale of next winter's cut, as the market is at present and will be until some time after the election in a demoralized state. The lumbermen have been expecting this however and many of them have made arrangements elsewhere for the sale of most of the cut for 1889.—*Ottawa Journal.*

QUEBEC TIMBER DUES.

The Quebec Government having changed the system of computing the Crown dues on saw logs from charging by the piece to charging on the 1,000 feet broad measure, several changes in the regulations were found necessary. The following are the most important :

As heretofore licensed holders are bound to furnish sworn statements from their foremen or persons in charge of the number and description of all pieces of timber, saw logs and other wood goods cut under their direction, or to their knowledge upon the berths operated by them the previous season.

In addition to this clause the new regulations provide that license holders shall also provide specifications of measurement sworn to any time after the expiration of the license for the season (30th April), but not later than the 1st day of September, by the cutters duly qualified, whose engagement with the producer shall not previously have been disapproved of by the Crown Timber Agents, as well as an affidavit in corroboration from the proprietors themselves, or their representatives.

As the new table for computing the contents in feet board measure is particularly hard on small logs, the lumbermen had almost fully decided not to take out any logs below 13 inches in diameter. To meet this, however, the new regulations provide that " Parties cutting timber, sawlogs, or wood goods of any kind on Crown Lands, and failing to haul all the wood in the trees cut down, because it may not appear to have a commercial value, shall include the same in their returns, and the quantity may be estimated and the dues thereon charged and payment enforced or otherwise subject to the report of the Forest Ranger." Thus placing in the hands of the Forest Rangers very great powers, which are liable for various reasons to lead to great abuses.

The rate per foot B. M. for saw logs is placed at 30 cts. per M ft. more than the Ontario Government charge, but in reality the rate is full 55 cents per thousand feet more when the difference between the tables prescribed by the regulations and the Doyle rule as shown below is taken into consideration. There is a petition now being prepared to the Quebec Government, protesting against enforcing the new rule and asking the adoption of the Doyle rule which is that which has been in use in Ontario for many years. It is hard to predict the result, but it would be surprising if the Government acceded to it, as they seem determined to squeeze the last cent out of the lumbermen.

The following shows the quantity for logs of each size computed by the new rule compared with the Doyle rule for logs from 7 to 22 inches ; a little attention to which will bear out what has already been said in regard to the difference between the Ontario and Quebec charges.

Saw Logs, 16 feet long.				Saw Logs, 13 feet long.			
Quebec Rule.		Doyle Rule.		Quebec Rule.		Doyle Rule.	
Diameter.	Contents in each piece.	Diameter.	Contents in each piece.	Diameter.	Contents in each piece.	Diameter.	Contents in each place.
7	19	7	8	7	24	7	9
8	26	8	13	8	32	8	10
9	37	9	21	9	45	9	25
10	48	10	29	10	59	10	36
11	54	11	40	11	67	11	49
12	65	12	52	12	80	12	64
13	81	13	66	13	100	13	81
14	97	14	81	14	120	14	100
15	108	15	98	15	133	15	121
16	130	16	117	16	160	16	144
17	152	17	136	17	187	17	169
18	173	18	159	18	313	18	195
19	200	19	183	19	247	19	225
20	227	20	208	20	280	20	256
21	249	21	235	21	309	21	289
22	282	22	263	22	347	22	324

It will thus be seen how largely the new table favors the new government at the expense of the lumbermen and how the latter are totally at the mercy of the former.

WASTES IN LUMBER.

Statisticians have proven that the primitive forest, before touched by the lumbermen, shows less than ten per cent. of actual money producing wealth. Think of a loss of over ninety per cent. in cutting and sawing before economic values are reached. The wanton waste of lumber is often one of the striking features of the camps. In California it is still worse ; only the largest of trees are cut. Those measuring less than two feet in diameter are rarely touched but to ring and subsequently burn. In this country, even with the rare and valuable roots, we leave a large unsightly stump, often the most dense and beautiful part of the tree. Generally speaking, the roots of these trees are not widely divergent nor extremely thick, and it is strange the woodsman insists in cutting off so far above ground.

Apropos of this may be mentioned a little experience of the writer : Two years ago in the usual run of business, an old wood lot came in my possession. One part of this was the remnant of an old walnut forest, being thickly studded with stumps from three to four feet high, and literally strewn with tops and limbs from a foot in diameter down to four inches. Some of these were quite lengthy, but the larger ones were, of course, crooked and scraggy. To make a long story short, these stumps were grubbed out, the tops all trimmed, and the entire lot being taken to the mill, the result being the interior of a new house was almost entirely finished with walnut. All the stationary stands, book cases, wainscoting, stairs, balustrades, and the like, besides much of the furniture was made from this walnut slash, besides which four thousand feet of beautifully grained lumber for special purposes was gotten out, which netted thirty-seven dollars per thousand feet. This one hundred and fifty dollars more than covered the cost of clearing, hauling and sawing, leaving the field perfectly clear and nearly ready for the plow.

Of course the field was a good one ; but, all things considered, I venture the assertion that the aggreate profits from the slash and remains were greater than from the original forest, for the lumber from this particular field was sold in a bunch, mill run, for twenty-five dollars per thousand, and, including first cost of the land, nearly three-fourths of this price must have been exhausted before the lumber was ready for market, proving conclusively that the lumbermen of eight years ago did not hew close to the line. Whether he has learned to hew any closer may be demonstrated by visiting any section where trees, even the more expensive, are being cut. The stumps and tops still cumber the ground, while the manufactories are continually making small pieces from the plank sawed long and wide, whereas the trees would go a great deal farther, and the results would be as good or better by working no closer and down lower, making many shorter cuts, but producing much handsomer grain, as demonstrated in the foregoing. Besides, it should be borne in mind, that these results may be materially enhanced by working at the start. Cutting low, below the ground, means a longer butt cut, always the best of these hard wood trees, and, in connection with the upper cuts, limbs and bends can often be worked into much better advantage than after the main logs are cut.

What is true regarding valuable lumber, applies with all its force, only in a modified form, to all varieties of timber. Any stump that shows unbroken soundness on the top represents a waste in proportion to its height. The peculiar construction of tools, and the nature of the average tree renders it nearly as easy and much more profitable to cut off at the very bottom, and there is no reason why the long, straight limbs should not all be worked up into merchantable goods, and that, too, at a fair profit to producer and consumer.—*Exchange.*

RECIPROCITY AND THE LUMBER TRADE.

VIEWS OF A LEADING LUMBERMAN.

At the ordinary fortnightly meeting of the Commercial Union Club of Toronto, Professor Goldwin Smith presiding, the subject of " the effect of Reciprocity on the Lumber Trade of Canada " was discussed. Much interest was given to the proceedings owing to the presence of a large number of lumbermen, who were in the city attending the annual meeting of the Ontario Lumbermen's Association, some of whom took part in the interesting discussion.

Mr. A. H. Campbell was the first speaker. In introducing Mr. Campbell to the meeting the Chairman said he observed a number of gentlemen present from outside Toronto who were not members of the club. He would take the opportunity of assuring them that, notwithstanding what they might see in party journals to the contrary, this was no party movement. The club addressed itself to what it believed to be for the interest of the whole community. Its members belong to both political parties : Mr. Campbell who was to address them, was a Conservative.

Mr. Campbell then spoke. He said that when the present agitation for unrestricted reciprocity with the United States commenced, the benefits which would accrue to the lumber trade were so great and so manifest, that he feared his judgment might be warped by selfish considerations, and that what might be good for him personally might be detrimental to the interests of the country at large. A full consideration of the circumstances and of the various interests and industries which would be affected convinced him, however, that all the important interests, including farming, mining, stock-raising, with the fishing and carrying trade of Canada, would equally share in the benefits of a free market with a people having a population of sixty millions, and consequently that this movement, he felt, was in the general interests of the whole country. Amongst the most important of our industries was that of lumber. From the lofty tree growing in the distant forest to the finished board manufactured for the varied uses of commerce, it employed the labor of a large number of men and horses, and provided the means of living to many families in the country. He had not the statistics for the export trade from Canada to the United States for 1887, but in 1885 it valued $9,355,736 ; in 1886, $8,545,506, and taking the value for 1887 to be not less than that for 1886, they would have a sum of money far exceeding $26,000,000 in three years. Of that sum about $5,289,308 was paid into the United States treasury in duties, and very nearly the whole of that money would be saved to this country had there been unrestricted reciprocity. Another way in which lumbermen would benefit by Commercial Union was that they could export dressed instead of rough lumber, and by the difference in weight reduce the freight. When the reciprocity treaty existed they had good trade with the States. The year 1866 was perhaps the most prosperous year lumbermen ever experienced in Canada. Since the abrogation of the reciprocity treaty he paid over $350,000 for duty on exported lumber, and he was not a very large operator. The great want in this country now was a market. What made the National Policy a national failure was the want of a market. Under the National Policy instead of chimney stacks marking the country the mills were reducing labor or wages. High protection ever meant over-production, and over-production meant failures, ruin and distress. Commercial Union, or, as he preferred to call it, reciprocity, meant the opening of a market for our products. " Canada for the Canadians " was a great cry at one time, but it seemed to him to have ended as they might have expected, viz., Canadians were living upon each other. Why did England Colonize but to find a market. Why were France, Germany, etc., so anxious to get colonies but in order to have an outlet for their goods. Commercial Union would give them the large market which they needed. Not only would lumbermen be benefitted ; the good effect would reach almost all classes of manufacturers and the farmers. American capital would flow into the country and the country would prosper. What made Maine such a large manufacturing country but that they had a market of 60,000,000 people. He believed our manufacturers were as good business men and more economical than those on the other side of the boundry line. Speaking generally, he was of opinion that about 800,000,000 feet of lumber were cut in Ontario yearly, and only one-third of that quantity was used in Canada.

Mr. Gordon Waldron asked whether a larger market and the investment of more capital would not have the effect of depleting our forests too rapidly ?

Mr. Campbell, in reply, said the greater the demand the more valuable would lumber become, and consequently the greater would be the care to preserve it from fires and destruction. The cry that the country would be denuded of timber was a fallacy. Young trees were always growing, and thinning the forests would facilitate the growth of trees.

Mr. James Pearson pointed out that the increase in the value of lumber, consequent on Commercial Union, would increase the selling value of the limits, and thereby increase the public revenue derived from the sales of timber limits.

Mr. Geo. Kerr, Jr., suggested that the Government should begin at once to plant large areas of land with young trees.

Mr. Thomas Conlon, of Welland, said the inland marine was for the past few years fast disappearing from the lakes. This was a very serious matter, and one reason for it was found in the fact that vessels trading with American ports had often to return without a cargo. Boats took lumber from the Georgian Bay to Chicago, and because of the interpretation put on the American coasting laws they could not load with wheat from Chicago to Boston *via* Collingwood because both Chicago and Boston were American ports. Canadian vessels were not allowed to trade between American ports. There were minerals, copper, granite and marble, which would be developed. Commercial Union was of vital importance to the marine interests as well as to the lumbering interests.

Capt. Wm. Hall, a large vessel-owner, and one of the Vice-Presidents of the Commercial Union Club, endorsed what had fallen from the previous speaker, and gave an interesting account of his own experience and observations in connection with the inland marine trade of Canada. He keenly regretted the circumstances which had long depressed the shipping trade of the country and the disabilities under which owners of vessels engaged in the coasting trade found themselves in consequence of the restrictionist policy pursued by the government. He closed by warmly endorsing the Commercial Union movement and predicting its ultimate triumph.

United States Lumber Dens.

An extraordinary story was told by Mrs. Eben Obenauer, at a meeting of ladies of the Central M. E. Chapel, Detroit, relating to the lumber dens of the north parts of the state. Mrs. Obenauer is a missionary employed in the pineries.

"A fair example of what these places are," said Mrs. Obenauer "is the stockade den at Seney, in the Upper Peninsula. Seney itself is turned against all good influences. Before going I was counseled against speaking there for fear of bodily harm. The minister who had preceded me had been carried bodily from the hall. The town is the headquarters for four large lumber companies, and though there are but twenty-five houses in it thirteen of them are used as saloons.

The dive at the place is surrounded by a high board wall that reaches to the gable of the roof of the house enclosed. Why is the wall needed? Not to keep the lumbermen out, not to keep the women out, but to keep imprisoned the girls whose lives are by compulsion made a continual debauch. Great care is exercised in admitting strangers to the den and everyone unknown must be vouched for. One man gained admittance through the assistance of the groceryman who supplies the place. After leaving the bar room he heard a scream. He turned back and saw, lying prostrate on the floor, with the blood streaming from her mouth, a young woman who had been felled.

In the dance hall of the house he saw eighteen nude women dancing in a circle with the keeper in the centre brandishing a club. This is the state of things throughout the lumber country of Wisconsin and Michigan.

"What is the remedy? The governor of this State, when appealed to refused to meet the issue, dodging it on a technicality. The powers of the State, the officers of this commonwealth, either through fear or cupidity, dare not touch this terrible blot on the State."

Others spoke on the matter, aud it was unanimously resolved to call a mass meeting at an early date. Evidences will be collected giving specific details, and Gov. Luce will again be called on to act.

Lumber Exports in Australia.

The San Francisco *Journal of Commerce* says :— "The lumber trade with Australia forms one of the greatest departments of our business with that country. Except for some of the fine timber of Western Australia, that great island continent may be said to be almost absolutely dependent on importations for that indispensable adjunct of modern civilized life—a good supply of lumber. We ship largely from this city, more largely still from Puget Sound and Humboldt Bay. Out of somewhere about one hundred and thirty millions feet of lumber exported from the Pacific coast of the United States in a year, Australia takes nearly one-half. The exact quantity taken runs from fifty to sixty millions feet annually, and is steadily increasing. Our business with Australia commenced away back in the fifties—in 1853, it forming the bulk of our exports for that year. Puget Sound began shipping to Australia largely as far back as 1856. In 1869 the exports to Australia increased very heavily. The record was even beaten in 1878. It has varied from year to year according to the demands of the colonies and must be much greater in the future than it has ever been in the past."

Prevention Of Boiler Scale.

The scale in boilers is formed from impurities of the water, and if pure water only is fed into the boiler, no scale is formed. This being settled beyond doubt, many methods have been proposed to purify the feed water in a rapid and cheap manner. To prevent scale by the use calcium hydrate and soda, F. Scheukel employs one or more tanks, according to the supply needed for the works, in which the water from the river is purified, and another tank for the purified feed-water. As purifying tanks he uses four iron boxes (or cylinders of old steam boilers), not over 5 feet high, which have an outlet cock about 6 inches above the bottom. They are heated by steam to 60° at least, and are preferable surrounded by some non-conducting material. Besides, they are furnished with a stirring arrangement, preferable a Koerting steam-jet stirrer. The pure water tank is placed on a level below the purifying tank, so that the purified water can flow directly into it from the purifying tanks, without the use of a pump. The water in the purifying tanks is heated as much as possible and the required quantity of thin milk of lime added and stirred ; this quantity being either calculated after the analysis of water or ascertained by experiment. Only so much lime is to be added that red litmus paper dipped into the water, after 15 to 20 seconds begins to turn blue. Then the calculated quantity of pure (96 to 98 per cent) soda dissolved in hot water is added, stirred, and the water allowed to settle. In 20 to 30 minutes the precipitate formed is thrown down in large flakes and the perfectly clear water is drawn off into the feed water tank. With ammonium oxalate it must not give any turbidity ; and if another sample taken becomes turpid on the addition of calcium chloride, too much soda has been used. The advantages of this method of purifying the feed-water are : that the boiler requires no cleaning for a whole season ; that the iron of the boiler-walls is not attacked ; that the water does not froth and stop up the guage-cocks, etc. ; that the steam is free from acid ; that steam is easier generated and thereby fuel is saved ; that no breaking out of scale is required, its cost saved and the interruption of work caused thereby is avoided ; that, finally, the method is compartively inexpensive.

The purification of water by milk of lime and soda is known, but as regards the practical application, the above communication is valuable. The "Pharm Centralhalle," however, remarks that soda is not the cheapest purifier for all calcareous water, but for such as contain considerable proportions of calcium nitrate, besides gypsum, barium chloride would be cheaper to employ.—*Practical Mechanic.*

Don't Do these Things.

Don't open a cock or a valve under pressure, and let steam into cold pipes suddenly. If you do there will be a bill of repairs to pay, to say nothing of the liability of killing or maiming some one for life. A man was employed in a brewery cleaning barrels with steam from the boiler. He opened the globe valve suddenly and blew up the barrel, losing one arm by his imprudence.

Don't suppose that a safety valve is going to think for itself, and don't fancy it is all right because it was tried last month, or last year, perhaps. Try the safety valve daily, and examine it, so as to be sure that the stem is not bent, or that the weight has not been shifted by accident or design.

Don't omit to keep the water guage in good order, and be sure that the openings into the boiler, both steam and water, are not stopped up partially by scale or something lodged in them. Where the openings are of different sizes the water level will not show properly. Test the guage by the guage cocks, and be sure that it is right.

Don't suppose that the boiler is all right internally because it has never blown up yet. Get into it, and see whether it is or not. The man-hole plate ought to come off every week, and the engineer should satisfy himself by inspection that the braces are all right.

Don't forget that the blow cock is a thief which is very apt to run away with a great deal of coal unless it is tight. It should not leak a drop.

Don't be to liberal with oil or fat in the cylinder. Some men are constantly slushing the cylinder with grease, under the impression that it makes the engine run easier. After one or two revolutions all the grease that does not cover the rolls of the cylinder is carried out with the exhaust and scattered over the surrounding country. On a wooden roof this invites fire, and on a metal roof it soon causes leak by corrosion, for fatty acids are the most active of corrosive agents. Use sight feed cups in preference to any other agents ; they not only save attendance, but they feed oil as it is needed—drop by drop.—*Milling Engineer.*

Solid Emery Wheels.

At a meeting of the Polytechnic Section of the American Institute, held Dec. 8th, L. Duvinage, in a paper of which this is an abstract, said that the increased quantity and quality of work that goes out of the modern machine shop was due to the skillful use of solid emery wheels. He said that a grain of sand from the common grindstone magnified, would look like a cobble stone, a fracture of which shows an obtuse angle, whereas a grain of corundum or emery would look like a rhomboid, always breaking with a square or concave fracture. No matter how much it is worn down in use it does not lose its sharpness ; hence it is evident that the grindstone rubs or grinds and heat the work brought in contact with, while the corundum or emery-wheel with its sharp angular grit cuts like a file or circular saw.

There are two general classes of emery wheels in the market—one class of wheels has the grains of emery joined and consolidated by a pitchy material as rubber, linseed oil, shellac, etc. These must run at a high speed to burn out the cementing material by friction, loosening the worn out grains and thus revealing new cutting angles. These are non-porous wheels. Truing up this class of wheels is done with a diamond tool.

The other class consists of two kinds, one made by mixing the emery with a mineral cement and water into a paste, which will harden and bind the grains together ; the other kind by mixing the emery with a mineral flux or clay, moulding into shape and burning in a muffle at a high temperature. These are porous wheels in which the grains of emery are held together by matter having affinity therefore. This class of wheels, unlike the grindstone, has sharp grains of emery bedded together among matter which, in [illegible] cases, is as hard and sharp as the emery itself. Such wheels cut very greedily, and do not need to be run at any particular speed.

The dresser made of hardened steel picks, is the proper tool for toning up this class of wheel.

Manufacturers in metal goods aiming in reducing the cost of production, would do well to look into the adaptibility of the solid emery wheels or rotary file and other labor-saving machinery before deciding on reducing wages of labor. A glance at the first page of this journal will show our readers where all kinds of emery wheels for the different classes of work can be purchased.

New Postal Arrangement.

By the new postal arrangement between the United States and Canada, which went into effect on March 1, 1888, articles will be allowed to go into either country, if admitted by the domestic law of either, except sealed packages (which are other than letters) and publications which violate the copyright laws of the country of destination, liquids, [illegible]

All articles exchanged under this arrangement are required to be fully prepaid with postage stamps, at the rate of postage applicable to similar articles in the domestic mails of the country of origin, and are required to be delivered free to addresses in the country of destination.

Articles other than letters, in their usual and ordi[illegible] on their arrival at the exchange post office of the country of destination, will be inspected by customs officers of that country, who will levy the proper cust[illegible]ties upon any articles found to be dutiable under the laws of that country.

EXCHANGE ECHOES.

Chicago Timberman.

The *Timberman* has hitherto striven to fairly present the views of the advocates and opponents of free trade in lumber by the removal of $2 duty on Canadian manufactured pine. It is a foregone conclusion that the Mill's tariff bill will be modified, and now only serves the purpose of affording a subject for the evaporation of language laden wind. There is one point, however, that has been, to some extent, overlooked in the discussion of free lumber and that is that the removal of the import tax on Canadian lumber will not benefit the consumer over here in the least. The argument all along has been that the removal of this tax would give the Americans cheaper lumber. Does anyone for a moment suppose that this will be the case? On the contrary, the Canadian market will take its cue from prices prevalent over here, and the Canadian lumbermen will at once put up prices to correspond with the American market. They certainly would be fools if they did not, and the generality of them are not built that way. The serious attention of the advocates of free trade in Canadian lumber is invited to mentally discuss the above fact, and ask where the great benefit to the consumer is to come in. *The Timberman* has only seen one advantage in the free introduction of Canadian lumber to American markets, and that was confined to the economizing of our own forests. Outside of this foreign supply to prolong the diminution of our home stock, the removal of the restriction upon Canadian lumber, would not depreciate the price of lumber a mill a thousand.

Detroit Free Press.

The capital employed in sawed lumber in 1880, according to the census, was $181,186,122. The wages paid amounted to $31,845,974 ; and the cost of materials was $146.155,385. The value of the product was $233,268,729 ; and the profits of the lumbermen were $55,267,370, or 30 per cent., and upwards on their capital. The duty is $2 per thousand feet. The lumbermen, like all beneficiaries of the war tariff, stoutly deny that the duty is added to the price ; and if this is so the removal of the duty would not effect the amount of the lumbermen's profits. It may be safely assumed, however, that the cost to the consumer is enchanced by some portion of the duty, though not, perhaps, by the full amount. It may, therefore, be assumed, also, that the cost to the consumer will be reduced by the removal of the duty, though not to the full extent of the duty. The American manufacturer will still have the cost of importation from foreign countries in his favor, and he will take the full benefit thereof. Suppose that the removal of the duty reduces the cost of lumber to the consumer $1.50 a thousand. This on sawed lumber would be about equal to a little over 12 per cent. reduction on the value of the lumber product. On the figures for 1880 as already given it would mean a reduction of $28,313,112 and a net profit in round figures of $27,000,000, or somewhat more than 14 per cent. on the capital invested. What excuse is there in such a showing for any reduction in the present rates of labor, or any threat that such a reduction shall follow the removal of the duty on lumber?

Chicago Lumber.

It becomes apparent as the season advances the lumber merchants at leading points are not, as the phrase goes, climbing over each other in their anxiety to secure stock for their yards. There have been some heavy purchases made, it is true, but when it is possible to get at the bottom of these transactions it is usually discovered that they were made on a basis somewhat more favorable to the buyers than the current prices for bulk lumber at the market. Trades have been heard of in which large blocks of stock have changed hands in the log at fully $1 below the figures which were paid for the same kind of lumber a year ago. Those who are buying heavily are probably getting an average on their purchase of somewhere about this sum below the 1887 prices. This theory of the situation is measurably confirmed by the reported weakness of the great bulk supply point for the east—the Saginaw Valley—where all good stock is from $1 to $2 off from the opening prices. Some of the shrewdest jobbers and most careful observers of the conditions of the trade are convinced that they can supply themselves with about all the lumber they can find sale for at figures that will give them a full dollar difference in their profit accounts if they succeed in making a selling average equal to last year. While there is some doubt as to the latter point, the situation is not hopeless in this respect. Lumber is weak at distributing points, but a strong effort later in the season, after the heavy buying has been done, may enable operators to recover the little ground now lost.

THE FRIENDS OF FREE LUMBER.

In the congressional debate on the lumber schedule in the tariff bill, Messrs. Weaver, of Iowa, and Wilson, of Minnesota, made arguments favorable to free lumber, in which they expressed themselves as follows :

Mr. Weaver—Mr. Chairman, the venerable gentleman from Pennsylvania [Mr. Kelly] and the gentleman from Maine [Mr. Reed] cannot both be right. The gentleman from Pennsylvania appeals to the committee not to destroy the lumber industry of this country. How can it destroy this industry if the other contention of the gentleman be correct that the price of lumber is not increased by the tariff? The gentleman from Maine contends that the price of lumber will not be affected. Then I say what harm is there in placing lumber on the free list?

The gentleman from Maine took good care not to deny that the lumber interests are combined in a "trust" for the purpose of limiting the supply and controlling the prices of lumber. It is not only true—historically true, and I refer gentlemen, to an article in the *North American Review*, by Mr. Lloyd, as far back as 1884, and to a recent work published by William C. Cook, of the New York bar; it is not only true that this lumber interest is engaged in a "trust" to limit the supply, and control the price, but it is also true that they control the local dealers, and require them to sell at a schedule price also.

And, sir, by reason of their further combination with the transportation monopolies, no man can engage in the lumber business without the consent of the Lumber Trust, and the transportation companies, which together constitute one of the most unconscionable trusts ever organized in this or any other country. It is organized for the purpose of plundering the people who are far removed from the great centers of lumber manufacture. I challenge the gentleman to deny before the American people that this lumber industry is engaged in a trust, the object of which is to absolutely determine who may, and who may not deal in lumber, to limit the production, and to control the price—a criminal organization at common law because in the nature of a conspiracy in restraint of trade.

Now, as an appeal has been made in behalf of these "trusts" by gentlemen on the other side of the House, I stand here and make my appeal in behalf of the people of the west who consume this lumber. Let this trust take its clutch from the throats of the people, and quit robbing the consumer. Let them pay some respect to other people's industries, which are just as sacred, and should be as inviolable as their own.

Now, I wish to call the attention of gentlemen to the fact that the law of 1883 also put railroad ties of wood on the free list. The railroads buy them ready hewn in Canada, made by cheap Canadian labor, ship them over here by the million, and thus they obtain cheap ties for their roads. But they are unwilling to treat the people with equal fairness. The same law puts the lumber which my constituents must use in constructing their houses, their granaries, and their barns on the dutiable list at the rate of from $2 to $3 per thousand feet. This is an unmitigated shame.

It is a plain discrimination in favor of the railroads and against the farmers and builders. This bill, sir, in a broad and catholic spirit, treats the monopolies and people exactly alike. It puts the lumber of the poor man upon the free list and at the same time it leaves the railroad tie on that list also.

Mr. Wilson, of Minnesota—Will my friend permit a suggestion? The gentleman from Maine made a point which seemed difficult to answer, but if any one can answer it the gentleman from Iowa can. He said that if this duty were taken off, the lumbermen of Canada, who are not one-fifth as wealthy as ours, would overwhelm us and run us out of the market. How can you answer that?

Mr. Weaver—That overwhelms me. Ask me an easy one. I tremble for my feeble country and her infant industries. Why try to answer such an argument? It is a mere chimera of the brain and wholly absurd. It answers itself.

Mr. Wilson—But I do not wish, Mr. Chairman, to be interrupted.

Allow me to say, sir, in this matter that the property invested in the lumber interest equally in my friend's district and in my locality within the last fifteen years has risen in value to an extent I am sure of not less than 300 to 500 per cent., whereas the property of the agricultural community, who are compelled to pay $2 a thousand feet to support and enrich this lumber interest, has not risen 1 per cent.

These are the facts for our consideration. And yet this tariff law compels the agriculturists, men who purchase from the lumbermen, to pay a heavy tribute to them ; and I repeat that within the last fifteen years this agricultural property has not risen 1 per cent. to match the increase of 300 to 500 per cent. which this protection has afforded to the lumbermen. It is time that this condition of things was brought to an end. It is time that we stopped making these poor men support the millionaries. To keep up any longer this state of things is simply to legalize injustice, and although some of my best friends in the world are manufacturers of lumber I cannot vote to sustain this condition of things.

From remarks of Mr. Outhwaite, of Ohio. Take the state of Maine ; total value of sawed lumber, $7,933,868 ; total value of materials $4,951,957 ; and this estimate of material is, of course, at the high price that the manufacturers adopt as their estimate. Take the one sum from the other and you have remaining $2,981,911. From this subtract the amount of wages paid and divide the remainder by the capital, and it gives you 28½ per cent. on the capital invested. Take the number of employees engaged in that business, and divide that into the total wages paid, and you get as the wages paid to a lumberman during one year $170. In other words, Mr. Chairman, a man working during the year in this business in the State of Maine gets for his subsistence $170, while the capitalist upon every $1,000 invested gets a return of $285. Is not that a spectacle to show how protection benefits the laborer?

From the same page let us read the figures of the State of Michigan. The amount of wages paid there, as shown by a similar calculation, is in the lumber business $305 per year, the percentage upon capital invested is 33.7. In other words the laborer during the year gets $305, while the capitalist upon each $1,000 invested gets $337, or $32 more than the other laborer receives.

Mr. Reed—That portion of our lumber which is not produced in the United States is obtained solely from Canada. In the United States twenty-four thousand million feet of lumber are cut ; the proportion imported from Canada is only about 2½ per cent. and it would be very difficult to make it 10 per cent., under the most favorable circumstances. Now, I do not expect to effect many of the members on the other side by the consideration I am about to submit ; but I do say to them that if they were business men, with business education, they would see at once from these figures that there is no possibility of lessening the cost of lumber and material for houses by letting in Canada lumber. The sole effect of it will be that there will be just so much added to the price of Canada lumber, just so much added to the price of Canada "limits." This bill does not touch that ; and the result will be that whatever amount of money may by reason of this bill fail to go into the treasury of the United States will go into the pockets either of Canadian subjects or of American subjects who have had the wisdom to purchase lands in Canada—except on the Pacific coast, where, by competition with Chinese labor, it is quite possible some damage may be done to the American industry.

SAWDUST TURNING INTO SOIL.

Did any of *The Timberman* readers ever make a study of sawdust turning into soil? Doubtless many have, in some measure, given the idea a passing thought, but have not watched the action of nature in resolving back again into its original elements the capital she had lent out over a thousand years ago, to build up the stock in trade of a pine tree. The study is one of engrossing interest, and its results are well worthy of a brief notice in these columns. Twenty-five years ago, East Saginaw, Mich., was a scattering hamlet, built here and there among and along the edges of swamps and bayous, bordering the Saginaw river. The sawdust and debris of the mills were used to fill up these inequalities, more for the purpose of getting rid of the annoying accumulations, than for any well defined knowledge of the value of such material, or its possible use as a future soil. From year to year the work went on. The swamps and bayous were filled up, and soil was spread on top of the sawdust of variable thicknesses, from sixteen inches to two feet. Strange, as it may seem, there was no settling of the ground, and heavy buildings were erected upon the soil thus made. These buildings are the best in the city, and show no cracked walls. Sewers are dug through what was formerly a bed of sawdust, and while traces of the original material can yet be found, still there is a clear evidence of the transformation process going on, beheld in each shovel of matter thrown out. It would be difficult to fully and clearly explain this process. It looks as though the exudations rising up from beneath the over-lying debris are continually acting as distilling elements, by which the granules of sawdust gather to themselves earth incrustations, and finally become a homogeneous conglomeration of original soil without undergoing the action of decomposition. This hypothesis may not be any clearer than mud, but it is certain that one of the finest and most substantial cities in Michigan, rests secured today on a bed of sawdust, which latter has resolved itself back into its original elements within a quarter of a century. Can any one account for this?—*Chicago Timberman.*

MIDLAND'S NEW PLANING MILL.

At the head of our beautiful bay, says the Midland *Free Press*, stands the most complete and best arranged planing mill in the Dominion, being built after the style of A. S. Mariam's mill of Quincy, Ill., which is considered one of the best in the United States. Messrs. Paterson & Hall commenced to build on the 9th of April and will have their mill ready for work this week. The main building is 20x54 ft. stone foundation, sides and roof covered with iron and practically fireproof. The engine house 30x32 ft. is built of stone and covered with metallic roofing. Adjoining the engine house is a shaving vault also of brick and stone, capable of holding three days shavings, and in case of fire can, by pipes from the boiler, be instantly filled with live steam, one of the most effective agents to extinguish fire. The machinery consists of a double cylinder Lightning Matcher, capacity from twenty to thirty thousand a day. One No. 0 Sticker, capacity 10,000 lineal feet per day. One 26 inch Double Surfacer capacity ; 40,000 feet. One Re-Sawer, and one Gang Rip, capacity 20,000 feet. The Re-Sawer was manufactured by an American firm. and the rest of the machinery is of Canadian production. To each machine is attached an automatic indicator which measures the lumber as it passes through. The boiler is made of steel 54 inches by 12 feet and 54-horse power. The engine is 12 x20 cylinder, slide valve, and about 45-horse power. Engine and boiler were manufactured at the Toronto Engine Works. The shafting, with patent adjustable hangers, is all under the floor as a precaution against accident, as it does away with over-head belting ; the pulleys are known as the Dodge wood-split pulleys and are considered the finest made. The mill will be kept clean by a large Sturtevant fan, which by means of exhaust pipes, carries all refuse direct from the machines to the shaving vault, from which it passes through a hopper bottom and is deposited convenient to the furnace door. The dock in connection with this mill is 200 feet long and 45 feet wide, and after the dredging is done vessels may load or unload at the end or either sides. A system of live rolls worked by a chain gear will run down the centre full length of dock, and convey the lumber to the planers as it is sorted. After passing through the machines the lumber is conveyed by rolls into cars on their own siding, or in case cars are not ready it is passed across the track to a large shed where it is protected from the weather for the time being. The object Messrs. Paterson & Hall have in view in erecting their mill here is to supply the Ontario market with every description of dressed lumber and moldings and their enterprise will prove a boon to the builders of Toronto and other large places, but more especially to those contractors who do not own planing mills. It is the intention of this firm to introduce into this country the long leaf yellow pine of Georgia, which makes a very handsome finish for buildings, and will be brought here by vessels from Chicago, but the principal part of the lumber handled will be cut in the mills of the Georgian Bay. It is expected that the mill will dress about 8,000,000 feet annually, but the proprietors will handle two or three million feet besides. The foreman of the mill, Mr. Wm. Pratt, has the reputation of being one of the best planing mill men in Canada, and was formerly employed by Withrow & Hillock, Toronto. The mill will be running shortly and as they have a stock of 1,000,000 feet of seasoned lumber on hand, parties ordering can rely upon prompt shipments.

TRADE REVIEW.

Toronto, Ont.

TORONTO, June 27th, 1888.

CAR OR CARGO LOTS.

1¼ and thicker clear picks, American inspection	$34 00@35 00
1½ and thicker, three uppers, American inspection	40 00
1¼ and thicker, pickings, American inspection	30 00
1X10 & 12 dressing and better	20 00 22 00
1X10 & 12 mill run	15 00 16 00
1X10 & 12 dressing	14 00 16 00
1X10 & 12 common	12 00 13 00
1X10 & 12 spruce culls	10 00 11 00
1X10 & 12 mill culls	9 00
1 inch clear and picks	24 00 26 00
1 inch dressing and better	18 00 20 00
1 inch siding mill run	13 00 15 00
1 inch siding common	12 00 13 00
1 inch siding ship culls	10 00 11 00
1 inch siding mill culls	8 00 9 00
Cull scantling	8 00 9 00
1¼ and thicker cutting up plank	22 00 25 00
1 inch strips 4in to 8in mill run	14 00 15 00
1 inch strips, common	11 00 12 00
1¼ inch flooring	14 00
1½ inch flooring	14 00 15 00
XXX shingles, sawn	2 40 2 50
XX shingles, sawn	1 40 1 50
Lath, Sawn	1 80

YARD QUOTATIONS.

Mill cull boards & scantling	$10 00	Dressing stocks	14 00@15 00
Shipping cull boards, promiscuous widths	12 00	Picks Am. inspection	30 00
" stocks	13 00	Three uppers, Am. inspect.	40 00
		B. M.	
Scantling & joist, up to 16 ft	13 00	1½-in. flooring, dres'd	25 00 30 00
" " 18 ft	14 00	1½ " " rough	14 00 15 00
" " 20 ft	15 00	1¼ " " dres'd	23 00 25 00
" " 22 ft	16 00	" " undres'd	14 00
" " 24 ft	17 00	" " dres'd	16 00 20 00
" " 26 ft	18 00	" " undres'd	12 00 14 00
" " 28 ft	19 00	Beaded sheeting, dressed	18 00 20 00
" " 30 ft	20 00		
" " 32 ft	21 00	Clapboarding, dres'd	12 50
" " 34 ft		XXX sawn shingles per M	2 75 2 90
	22 50@22 50	Sawn Lath	2 25
" " 36 ft	24 00	Red oak	20 00 25 00
" " 38 ft	27 00	White "	25 00 30 00
" 40 to 44 ft	30 00	Basswood, No. 1 & 2	18 00 20 00
Cutting up planks 1¼ and thicker dry	25 00 26 00	Cherry, No. 1 & 2	50 00 60 00
" board	18 00 20 00	White ash, 1 & 2	25 00 30 00
		Black ash, 1 & 2	20 00 25 00

Ottawa, Ont.

OTTAWA, June 28th, 1888.

Dimensions, Inches.	*Per M.*
Mill culls 10 x 1	$8.00
" 12 1	
" 12 1½	
" 12 2	
" selected 16 ft. long, above dimensions	8.50 to 9.00
Cull strips, 1 in. thick, 5 to 7 wide	7.00 to 8.00
Mill cut outs 12 x 1	4.00 to 5.00
" 11 1½	
" 12 2	
Scantling 2 4	12.00
" 3 4	
" culls 2 4	7.00
" 3 4	
Laths	1.25
Stock shorts, 12 x 1	10.00
1 inch siding outs, 1¼, 1½, 2	15.00
" outs from shorts, 1¼, 1½, 2	6.50 to 7.00
Outs from stocks 12 x 1	10.00 to 12.00
" " 12 1¼	
" " 12 1½	
Shingles, X	1.25
" XX	2.00
" XXX	3.00
" cedar, No. 1	2.00 to 2.
" cedar, culls	1.25
Difference in planed lumber, in waste and planing	5.00
Ditto, on average good stock	20.00 to 25.00

Hamilton, Ont.

HAMILTON, June 28th, 1888.

Mill cull boards and scantlings	$ 9 00@10 00	Dressing stocks	$16 00 18 00
Shipping cull boards, promiscuous widths	10 00 12 00	1¼ flooring, rough	16 00 18 00
Shipping cull stocks	14 00	1½ flooring, rough	16 00 18 00
Scantling and joist up to 16 feet	13 00	1¼ flooring, dressed	25 00
do up to 18 feet	13 50	1½ flooring, dressed	32 00
do up to 20 feet	14 00	1 flooring, dressed	21 50 23 00
do up to 22 feet	15 00	Beaded sheeting 1	25 00 30 00
do up to 24 feet	16 00	Picks, Am inspection	32 00 34 00
do up to 26 feet	17 00	Three uppers Am. In.	40 00
do up to 28 feet	18 00	XXX sawn shingles	2 60 2 70
do up to 30 feet	20 00	Sawn Lath	2 25
Cutting up plank 1¼ and thicker, dry	20 00 25 00	Red Oak	20 00 25 00
Cutting up boards	20 00	White Oak	25 00 30 00
		Basswood No. 1. & 2.	16 00 20 00
		Cherry No. 1 &2	60 00 70 00
		White Ash No. 1 & 2.	25 00 30 00
		Black Ash, No. 1 & 2.	20 00 25 00

St. John, N. B.

St. JOHN, June 29th, 1888.

Deals, Boards, Scnatlng, etc.

Spruce deals	$12 00	Spruce boards	12 00
Pine "	15 00	Pine "	12 00@40 00
Deal ends	6 00	Oak "	40 00
Scantling	10 00	Ash "	15 00@25 00
		Hemlock "	7 50

Shingles.

Spruce, extra	$3 50	" No. 1	1 25
" clear	3 00	Pine	1 25
" No. 1 extra	2 25		

Clapboards.

Pine, extra	35 00	Spruce, extra	24 00
" clears	45 00	" clears	23 00
" 2d clears	35 00	" No. 1	15 00
		" No. 2	10 00

Flooring, Dressed.

6 in., No. 1	12 00	4 in., No. 1	12 00
" No. 2	10 00	" No. 2	10 00

Miscellaneous.

	3 00@ 4 50	Laths	1 80
	04	Pickets	6 50@15 00
17 in.	05½	Railway ties	15
22 in.	06		

Goderich, Ont.

GODERICH, June 28th, 1888.

PRICES IN CAR LOTS.

1 inch Mill Culls	$8 00@ 8 50
1x6-8-10 & 12, common	12 00
1x6-8-10 & 12, dressing	16 00
1x14, and wider, common	12 00
1x14, " " dressing	16 00
1¼ dressing	16 00
1½ "	16 00
1¼ Norway pine flooring	14 00
1½ " " "	14 00
1 inch clear and picks 4 to 9 inch	25 00
1 inch " " 4-in. and up	26 00
1 inch " " 9-in. and up	27 00
1¼ and 1½ clear and picks	35 00
Lath 1½x4 feet	1 80

Montreal, Que.

MONTREAL, June 28th, 1888.

Pine, 1st qual'y	M	$35 00	40 00	Basswood, run of log culls out per M	$13 00 20 00
Pine, 2nd "	"	22 00	30 00		
Pine, shipping culls	M	14 00	16 00	Oak, per M	40 00 50 00
Pine, 4th quality deals	M	10 00	12 00	Walnut, per M	60 00 95 00
Pine, mill culls,	M	8 00	10 00	Cherry, per M	80 00 100 00
Spruce, per M		10 00	13 00	Butternut, per M	30 00 40 00
Hemlock, per M		9 00	10 00	Butternut, per M	30 00 40 00
Ash, run of log culls out per M		13 00	18 00	Birch, per M	15 00 25 00
				Hard Maple, per M	20 00 25 00
				Lath, per M	1 75 2 00
				Shingles, 1st, per M	2 00 3 00
				Shingles, 2nd, per M	1 25 2 00

Saginaw, Mich.

SAGINAW, June 26th, 1888.

CARGO LOTS.

Uppers	36 00@38 00	Norway	8 50@ 9 25
Common	16 00 19 00	Box	10 50 11 00
Shipping Culls	8 50 10 00	Straight measure	12 50 18 00
Mill Culls	6 00		

YARD QUOTATIONS—CAR LOTS DRY.

Drop Siding.

Clear, ⅞ in	42 00	C, ⅞ in	30 00
A	38 00	D	19 00
B	36 00		

Flooring and Siding—Dressed.

Flooring, clear, d & m	40 00	Siding, clear, ½ in.	22 00
No. 1	33 00	A	23 00
No. 2	30 00	B	17 00
No. 3	20 00	C	14 00
No. 4	13 00	D	12 00

Finishing Lumber—Rough.

Three uppers, 1 in.	42 00@44 00	Fine common, 1 in.	32 00@32 00
1¼ & 1½	44 00 46 00	1¼ & 2 in.	33 00
Selects, 1 in.	36 00 37 00	C, 7, 8 & 9 in.	25 00
1¼ & 2 in.	38 00	Base, 2 to 9 in. No. 1	40 00
		No. 2	30 00
		No. 3	20 00
		Coffin boards 16 in. and over	18 00

Joist, Scantling and Timber.

12 to 18 feet	10 00	22 feet	12 00
20 feet	11 00	24 feet	13 00

Plank and timber, 12 inches wide, $1 extra.

Wide Select and Common—Rough.

C (No. 1 com.) 13in. and up	28 00	D (common) 14 in. and up	16 00

Lath, Shingles and Pickets.

Lath, No. 1	1 50	Country brands XXX	3 25@ 3 35
No. 1	1 00	Clear butts	2 25 2 35
Shingles, river brands		P'kts, 2 to 2½ in rough	12 00 13 00
XXX	3 40@ 3 50	Dressed	20 00
Clear butts	2 40 2 50	1¼ in. square, dressed	14 00 19 00

Philadelphia, Pa.

PHILADELPHIA, June 28th 1888.

White Pine.

Mich. uppers, 1 to 2 in., dry	$48 00@50 00	1¼ to 2 in. plank, barn quality	22 50@25 00
2½, 3 & 4 in	55 00 60 00	Common plank	20 00 22 00
S'lcts, 1¼ to 2 in.	42 50 45 00	⅞ box boards, wide	14 00 16 50
2½ 3 & 4 in	41 00 43 00	⅝ siding, selected	27 50 30 00
12 in. flooring quality	30 00 32 50	Culls, 12 in.	15 50 17 00
barn	19 00 23 00	Wide	15 00 16 00
Edge barn, all widths	18 00 20 00	Narrow	13 50
		No. 1 moulding	36 00 38 50

Cargo Lots.

Yellow pine edge bds	14 00@16 00	Scantling and plank	20 00 22 00
Heart face boards	19 00 21 00		

Hemlock Boards and Scantling.

Edge boards	10 50@11 50	Scantling, 2x3 & 2x4,	
12 in. stock	11 50 12 00	16 & 18 ft	12 00@13 00
Fencing, 6 in., 16 ft	11 50 12 00	3x4, to 12, 12 to 20 ft.	11 00 11 50

Shingles and Posts.

Cypress shingles, 24 in. heart, d & b	13 00@18 00	Cedar shingles, 30 in. hand dressed	35 00 40 00
24 in. sap, d & b.	10 00 12 00	Chestnut posts, 9 ft.	32 00
		7 ft.	28 00

HARDWOOD.

Walnut.

Nos. 1 & 2, 1 in., good dry, Indiana	$87 50@ 95 00	Reject or common, 1 in., 1¼ and up	60 00@65 00
1¼ & up	92 50 100 00	Culls, 1 in.	35 00 37 50
Nos. 1 & 2, ⅝ in	72 50 77 50	1¼ in. & up	35 00 40 00

Poplar.

Nos. 1 & 2, ⅝ in. good wide, Indiana	25 00@27 50	Nos. 1 & 2, 1¼ in. & up, good wide, Ind.	32 50 36 00
1 in.	28 00 32 50	Columns, 5x5 & up clear	35 00 35 00

Oak.

Nos. 1 & 2, 1 in., good western, straight quartered	32 50@35 00 49 00 50 00	Nos. 1 & 2, 1¼ in. & up, good western, straight quartered	35 00 37 50 52 50 55 00

Ash.

Nos. 1 & 2, 1 in., good western	35 00@40 00	Nos. 1 & 2, 1¼ in. & up, good western	32 50 42 50

Yellow Pine—Yard and Wholesale.

Sc'tlg, 2x4 to 12x14	22 00@23 00	Flooring, 1 in., Va.	17 00 19 00
Plank, 1¼ to 2 in.	23 00 27 50	1 & 1¼ in., Ga. & Fla. cargo run	22 00 24 00
Fl'g, 1 & 1¼ in. No. 1	27 50 30 00		

Cherry.

Nos. 1 & 2, 1 in., good	62 50 70 00	Nos. 1 & 2, 1½ in. & up, good	65 00 75 00

New York City.

NEW YORK, June 28th, 1888.

Black Walnut

⅝ in., all clear	$75 00@ 82 00	Culls, 1 inch	$35 00@ 37 00
1 and 1¼ inches	92 00 97 00	Culls, thick	37 00 38 00
1½ and thicker	98 00 105 00	Counter tops, 18 in	
Rejects	52 00 55 00	and over	145 00 150 00

Poplar, or White Wood

⅝ in. 10 inches and over	22 00@ 24 00	1¼ to 2 inch	24 00@ 1 00
¾ in. coffin boards	27 00 28 50	2½ and thicker	31 00 3 00
1 inch, 10 inch and over	28 00 30 00	Common 1 to 2 inch	21 00 22
1 inch, 8 in. and over	26 00 28	Culls, all thicknesses	11 00 12 00

Dressed Poplar

½ inch panel	24 50@ 25 00	¾ in. clg. 4 to 6 in	21 00@
⅝ inch panel	27 00 28 00	½ in. clg. 4 to 6 in	24 00 3
¾ inch panel	29 00 30 00	¾ in. clg. 4 to 6 in	27 00 28
4, 5, 6 inch casing	30 00 31 00	¾ in. clg. 4 to 6 in	29 00 30 00
7, 8, 9, 10 inch casing	32 00 33 00	¾ in. clg. 4 to 6 in	30 00 34

Ash

1 inch, white	36 00@ 38 00	Strips, clear	26 00@ 2
1¼ to 2 inch	37 00 39 00	Black ash, good	26 00 3
2½ to 4 inch	40 00 41 00	Black ash, culls	10 00 12

Cherry

1 inch plain sawed,	36 00@ 39 00	inches and over	46 00@ 4
1¼ to 2 inch	37 00 40 00	Thicker	48 00 50 00
Thicker	38 00 42 00	Strips under 6 in.	38 00 40 00
Quarter-sawed, white, all clear, 6			

Cherry

⅝ in., white & clear	65 00@ 70 00	2½ and thicker	85 00@ 90 00
1 inch	76 00 80 00	Counter tops, 18	
1 inch strips	40 00 42 00	and over	100 00 115 00
1¼ to 2 inch	80 00 83 00	Culls, all thickness	18 00 20 00

Miscellaneous.

Chestnut, clear	35 00@ 38 00	Hickory, old growth	50 00 60 00
Chestnut common	20 00 23 00	Hickory, 2nd growth	70 00 80 00
Basswood white	28 00 32 00	Elm	20 00 22 00
Basswood common	20 00 23 00	Sycamore	24 00 27 00
Maple, clear	25 00 30 00	Sycamore quartered	35 00 40 00
Birch, clear	32 00 36 00	Gum	36 00 41 00
Birch, 1s and 2s	26 00 30 00	Butternut	45 00 50 00
Cottonwood	20 00 22		

Boston, Mass.

BOSTON, June 29th, 1888.

Western Pine—by car loa

Uppers, 1 in	$48 00@50 00	Fine com., 3 & 4 in	46
1¼, 1½ & 2 in	50 00 52 00	No 2, 1 in. Fine com.	29
3 & 4 in	55 00 60 00	1¼, 1½ & 2 in	31 00 33 00
Selects, 1 in	42 00 45 00	No. 1 strips, 4 to 6 in	41 00 43 00
1¼, 1½ & 2in	44 00 46 00	No. 2	37 00 38 00
3 & 4 in	48 00 52 00	No. 3	25 00 27 00
Moulding boards, 7 to 11 inch clear	37 00 41 00	Cut ups, 1 to 2 in	26 00 30 00
60 per cent clear	35 00 37 00	Coffin boards	22 00 26 00
Fine common 1 inch	37 00 42 00	Common all widths	20 00 25 00
1¼, 1½ & 2 inch	40 00 42 00	Shipping culls	17 00 19 00

Eastern Pine—Cargo or Car Load.

Nos. 1, 2 & 3	40 00@43 00	Clapboards, 4 ft., sap clear	40 00 42 00
4	28 00 30 00	Sap, 2nd clear	30 00 32 00
5	23 00 26 00	Heart extra	55 00
Ship'g bds & coarse	16 00	Heart clear	50 00
Refuse	12 00		
West'rn pine clapbds 4 ft. sap extra	43 00 45 00		

Spruce—by Cargo.

Scantling and plank, random cargoes	13 00@13 50	Coarse, rough	9 00 12 00
Yard orders, ordinary sizes	14 00 14 50	Hemlock bds., rough	10 00 11 00
Yard orders, extra sizes	15 00 16 00	" dressed	12 00 12 00
Clear floor boards	19 00 19 00	Clapbds., extra, 4 ft.	28 00 30 00
No. 2	16 00 16 00	Clear, 4 ft.	26 00 28 00
		Second clear	20 00 22 00
		No. 1	12 00 15 00

Lath.

Spruce	1 90@ 2 00

Shingles.

Spruce	1 40@1 50	Cedar, sawed, extra	3 30@3 60
Pine, 18 in. extra	4 50 4 75	Clear	3 00 3 15
Pine, No. 1	3 50 3 70	Extra, No. 1	2 00 2 20
		Cypress, No. 1, 18 in.	5 00 5 25

Oswego, N. Y.

OSWEGO, June 29th, 1888.

Pine.

1¼, 1½, 2 and thicker uppers	$40 00@43 00	1¼	30 00 35 00
" " " pickings	30 00 33 00	1 & 1½ box or No. 2 culls	11 00 12 00
" " " No. 1 cutting up	22 00 26 00	1 & 1¼ sidings No. 1 dressing and better	17 00 25 00
" " " cuttings up pickings and uppers as run	30 00 35 00	1x10 & 12x12 to 16 feet dressing and better	17 00 25 00
1 inch selected sidings	25 00 30 00	" " " shipping culls	12 00 17 00
		" " " No. 2 "	11 00 12 00
		1 & 1¼ in. strips 4 to 7 wide selected	20 00 30 00
		" " " dressings	16 00 17 00
		" " " box	9 00 12 00

Brown Ash.

1 1¼ 1½ 2 & 3 in. 1st & 2nd quality			17 00 21 00
" " " culls			9 00 11 00

Basswood.

1 & 1¼ 1st & 2nd quality			20 00 21 00
" culls			9 00 12 00

Shingles.

XXX 18 inch pine standard thickness		to 2¼	$4 25
XX " " " " "			3 25
X " " " " "			1 10
XXX " cedar " " "			3 40
XX " " " " "			2 25
XXX 16 " pine " " "			3 20
XX " " " " "			2 20

Lath.

No. 1 1⅜, 1½			2 00 2 10
" 2 "			1 25 1 50

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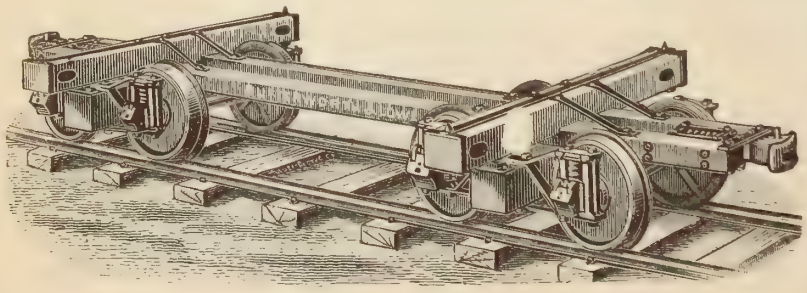

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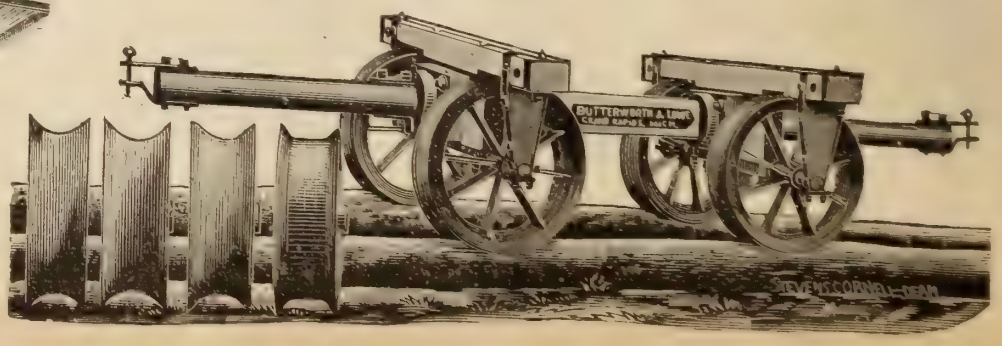

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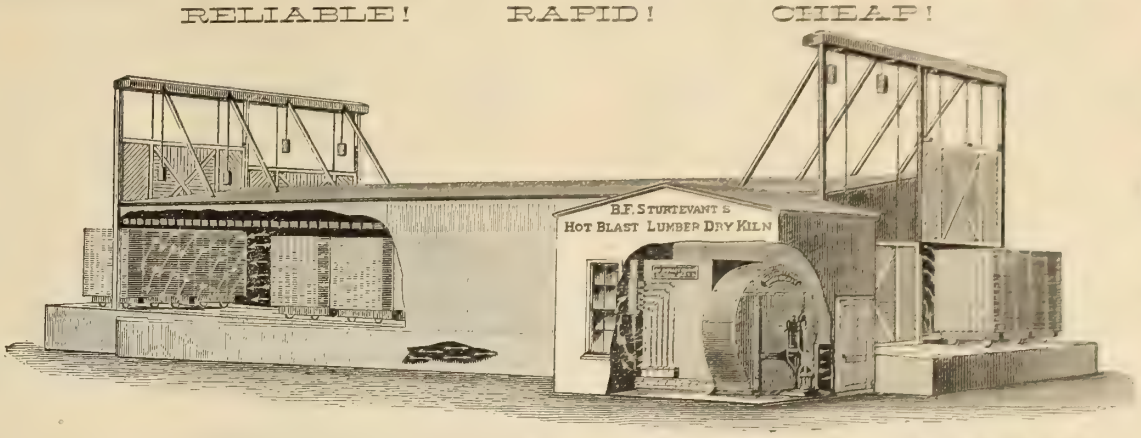

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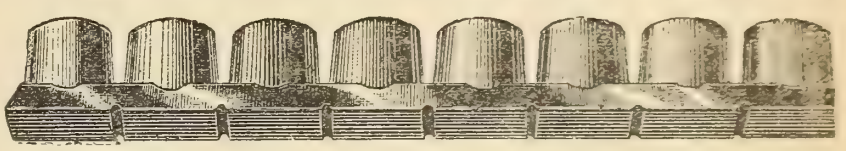

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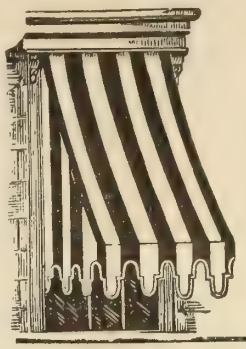

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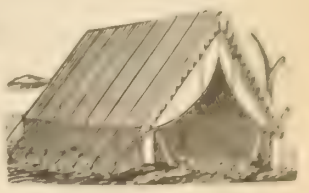

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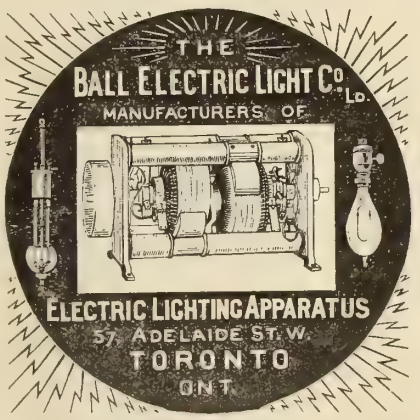

GRATEFUL—COMFORTING.

EPPS'S COCOA.

BREAKFAST,

"By a thorough knowledge of the natural laws which govern the operations of digestion and nutrition, and by a careful application of the fine properties of the well-selected Cocoa, Mr. Epps has provided our breakfast tables with a delicately flavoured beverage which may save us many heavy doctors' bills. It is by the judicious use of such articles of diet that a constitution may be gradually built up until strong enough to resist every tendency to disease. Hundreds of subtle maladies are floating around us ready to attack wherever there is a weak point. We may escape many a fatal shaft by keeping ourselves well fortified with pure blood and a properly nourished frame."—"*Civil Service Gazette.*"

Made simply with boiling water or milk. Sold only in packets, by Grocers, labelled thus:

JAS. EPPS & CO., Homœopathic Chemists, London, England.

COLUMBIA * REFINING * CO.'Y
NEW YORK.

CYLINDER,
ENGINE AND
MACHINERY OILS.

Sole Manufacturers of the

Royal Lubricant and Royal Crank Pin Lubricant,

Which is specially adapted for engines and shafting, and is a saving of 50 to 75 per cent. over oils.

JOSEPH HARTON & CO.,
29 Church-St., Toronto,
SOLE AGENTS FOR CANADA.
Telephone 806.

Our readers will confer a favor by mentioning this Journal when writing to Advertisers.

NAPANEE CEMENT COMPANY
LIMITED.
— MANUFACTURERS OF —

Hydraulic Cement

PARTICULARLY adapted for Dams, Smoke Stacks, Reservoirs, Culverts, Cisterns, Cellars, etc.

ENDORSED BY LEADING RAILWAYS AND CONTRACTORS

ROACH * LIME,

For Building, Plastering, Gas Purifying, Paper Manufacturing, &c.

Galt * Machine * Knife * Works.

MACHINE KNIVES

OF EVERY DESCRIPTION FOR

Planing, Moulding & Stave Cutting.

SEND FOR PRICE LIST.

PETER HAY, - - - GALT, ONT.

TO MILL OWNERS, MANUFACTURERS

AND ALL WHO ARE USING

LEATHER * BELTING

IF YOU WANT BELTING

Which will Run Straight on the Pulleys,
Which is Thoroughly Well Stretched,
Which will not Tear at the Lace Holes,
Which will give Complete Satisfaction,

— SEND TO —

F. E. DIXON & CO.

MANUFACTURERS OF

PATENT LAP-JOINT STAR RIVET

LEATHER BELTING

70 King Street East, Toronto.

Sole Agents in Canada for the

CELEBRATED PHŒNIX OIL

The Only Perfect Belt Dressing.

All our Belting is sold at the Canadian price list. Please compare before purchasing. Send for Discounts and our Pamphlet on Belting.

MARKET QUOTATIONS.

(Continued from page 11.)

Buffalo and Tonawanda, N. Y.

BUFFALO, June 27th, 1888.

Norway Pine—Rough.

No. 1, 1 & 1¼ in.	20 00	@22 00	Stocks No. 1, 1 & 1¼ in		22 00
No. 2, 1 & 1¼ in.	15 00	15 50	No. 2, 1 & 1¼ in.		17 00
No. 3, 1 & 1¼ in.	11 50	12 00	No. 3, 1 & 1¼ in.		12 00
			Scantling 2x4 to 2x12 12 to 16 ft		r3 00
			Timber, 4x6 to 12x12 16 00		25 00

White Pine—Rough.

Uppers, 1 in.	$44 00	@45 00	Shelving, No. 1, 13 in.		
1¼, 1½ and 2 in.	44 00	46 00	and up		29 00
2½, 3 and 4 in.	54 00	56 00	No. 2, 13 in. & up	22 00	24 00
Selects, 1 in.	36 00	38 00	Fine common, 1 in.		30 00
1¼, 1½ and 2 in.	37 00	40 00	1¼, 1½ and 2 in.	30 00	33 00
2½, 3 and 4 in.	44 00	46 00	Common, 1 in.	16 00	19 00
Cuts, No. 1, 1 in.	27 00	30 00	1¼ and 1½ in.	17 00	20 00
1¼, 1½ and 2 in.	32 00	33 00	2 in.	20 00	22 00
2½, 3 and 4 in.	37 00	40 00	Coffin boards	16 00	19 00
No. 2, 1 in.	17 00	19 00	Box, 1 in.		13 50
1¼, 1½ and 2 in.	21 00	22 00	1¼ in. & thicker		13 50
Moulding, 1 in.	30 00	33 00	A stocks, 1x10		27 00
1¼, 1½ and 2 in.	30 00	33 00	1x12		28 00
Siding strips, 1 in.		38 00	B stocks, 1x6 to 16		17 50
			C stocks, 1x6 to 16		13 50

Dressed Lumber.

	No. 1.	No. 2.	No. 3
Base and Casing under 6 inches	$33 00	$23 00	$16 00
Base and Casing, 6 inches	34 00	25 00	17 00
Base and Casing, 6, 7 and 8 inches	35 00	27 00	20 00
Flooring, 1 and 1¼ inches, 2½ to 5 in. wide	32 00	20 00	14 00
Ceiling, ⅞ in., 2½ to 5 inches wide	33 00	23 00	16 00
Ceiling, ⅝ in., 2½ to 5 inches wide	28 00	22 00	14 00
Ceiling, ½ in., 2½ to 5 inches wide	24 00	18 00	13 00
Philadelphia Fencing	36 00	25 00	17 00
Bevel Siding, 6 inches	23 00	21 00	11 00
Bevel Siding, 5 inches	23 50	19 00	14 00
Bevel Siding, 6 inches	23 00	19 00	14 00
Novelty Siding, 6 inches and over	34 00	25 00	17 00

Shingles and Lath.

Shingles, 18 in. XXX	4 10		Lath, pine No. 1	2 10	2 10
XX	3 10		No. 2		1 60
X	1 25		Norway		1 80
Shingles, 16 in. XXX	3 00		Hemlock		1 60
XX	2 10				
X	90				

Detroit, Mich.

DETROIT, June 28th, 1888.

Uppers, Selects, Stocks, etc.

Uppers, 4-4	$43 00	Shop, 5-4, 6-4 & 8-4	$25 50
5x4, 6x4 & 8x4	43 00	Fine common, 4x4	31 00
3 & 4 in	50 00	5x4, 6x4 & 8x4	33 00
Selects, 4x4	38 00	Stocks, 1x12 & 1x10, No. 1	19 00
5x4, 6x4 & 8x4	38 00	1x12, & 1x10, No. 2	16 00
Shop, 4x4	22 00	1x12, & 1x10, No. 3	13 00

Flooring, Siding, Ceiling, etc.

Flooring, select common	22 00	Roofing, D & M	16 00
No. 1 common	18 00	Siding, clear	21 50
No. 1 fencing	16 50	A	20 50
Ceiling, select common	25 00	B	18 50
No. 1 common	22 00	C	13 50
No. 1 fencing	20 00		

Bill Stuff and Culls.

Bill stuff, ordinary sizes:		26 to 28 ft	14 00
12 to 16 ft	12 00	30 to 34 ft	16 00
18 to 20 ft	12 50	Ship culls	12 00
22 to 24 ft	13 00	Mill culls	10 00

Shingles and Lath.

Shingles, clear, 18 in. Ex	3 75	6 in. stocks clear, Ex	4 00
10 in. clear, 18 in.	3 00	5 in. stocks clear, Ex	4 80
6 in. clear, 18 in.	2 75	Lath	2 10

Add for surfacing one or two sides, $1.

Burlington, Vt.

BURLINGTON, June 28th, 1888.

Canada Pine Sidings—1x8 in. and up, 12 to 16 ft. d 2 or 4 s.

Select & shelving	$40 00	Finish	$38 00
Pickings	37 00	Dressing	28 00
Pickings & better	40 00@42 00	Common	20 00@21 00

Canada Pine Stacks—1x10 in, 12 to 16 ft., d 2 or 4 s.

Selects (clear)	55 00	Pickings & better	40 00
1st shelving	42 00	As run, common out	28 00@30 00
2nd	39 00	No. 1 barn boards	25 00
3rd	30 00	Common	21 00
Pickings	38 00		

Canada Pine Stock—1x12 in. 12 to 16 ft. d 2 or 4 .

Selects (clear)	57 00	Pickings & better	44 00
1st shelving	47 00	As run, common out	33 00
2nd	41 00	No 1 barn boards	26 00
3rd	32 00	Common	21 00@22 00
Pickings	38 00		

Canada Pine Stock—14 in. 12 to 16 ft. d 2 or 4 s.

Pickings & better	45 00	3d shelving	33 00
As run, common out	33 00	Common	22 00

Canada Pine S. B'ds—1x8 in. & up, 11 ft. and under, d 2 s or r.

Pickings & better	33 00@35 00	Dressing & common, d 2 s or	
As run, common out	30 00	d 2 s & m	20 00@21 00
		Common	18 00@19 00

Canada Pine Sheathing, d. m. & b.—1" 4 to 7", 5" & up. cb 78".

1st quality, 12 to 16 ft	46 00	1st & 2nd quality, 9 to 11 ft.	33 00
2d	37 00	7 & 8 ft.	34 00
3d	27 00	3rd quality, 11 feet & under	22 00
4th (selected Common)	22 00	4th	18 00

Canada (Quebec) Spruce—1 & 1½ in., 4 to 7 in. d 2 s & m.

Clear, 10 to 16 feet	32 00	No 2, 10 to 16 ft.	15 00@16 00
No 1	22 00		

Above prices delivered on a rate of $30 per car load.

Manitoba.

—Following are the list prices of the Manitoba Lumber Association, f. o. b. at Rat Portage, Keewatin and Norman:

Dimension—2x4 to 8x8, 12 to 18 ft. long, $14; do. 10 and 20 ft. long, $15; 2x10 to 12x12, 12 to 18 ft. long, $15; do. 10 and 20 feet long, $16. One dollar per M advance on each 2 feet over above lengths up to 24 feet long. One dollar per M advance on each inch over 12 inches in depth. Boards—1st, common, rough, $15.50, dressed, $16.50: Culls, rough, $10, dressed, $11; common, stock, 12 in. rough, $18, dressed, $19; do. 8x10 in, rough, $17, dressed, $18; second common, 12 in. rough, $16, dressed, $17; do. 8x10 inch, rough, $15, dressed, $16. Shiplap—10 in. $17, 8 in $16.50. Siding, ceiling and flooring—1st, 6 inch, $31; 2nd, do. $26; 3rd, do. $20; 4th, do. $17; 1st, 5 inch, $31; 2nd, do. $26; 3rd, do. $19; 4th, do. $16; 1st, 4 inch, $31; 2nd, do. $26; 3rd, do. $18; 4th. do. $15. $1 per M advance for dressing on both sides. $1 per M less for lengths 10 feet and under. Bevel siding—No. 1, 1st siding ½ in. x 6 in., $20; No. 2, do. $17. Stock—B, $35; C, $30; D. $25. Clear, 1 inch —1st and 2nd, $32; 3rd, $28; 1 1-4, 1½ and 2 inches—1st and 2nd, $40; 3rd, $35; selects, $30; shop, $25. Mouldings—Window stops, per 100 feet lineal, 75c.; parting strips, do. 50c.; ¾ round and cove, per 100 feet lineal, 60 cents. Casing—4 inch, O. G., per 100 feet lineal, $1.50; 5 in. do., $1.75; 6in. do $2; 8 inch, O. G., base, $3; 10 inch, do. $3.75. Lath, $1.75. Shingles—1st quality, $3; 2nd do. $2.50; 3rd do. $1.50.

MANITOBA MATTERS.

[Correspondence M. V. Lumberman.]

WINNIPEG, June 11th.—The city lumber firms report an active inquiry for lumber from all over the province, and it is now certain that business will show an improvement over any year since probably 1882. Stocks were exhausted before the mills commenced cutting, and orders are now well ahead. Most of the Lake of the Woods mills had logs on hand held over from last season, and they were thus enabled to get to work early this spring, and have been pushing operations as fast as possible since. The season will therefore be an active one on the lake. On Lake Winnipeg operations have been greatly retarded by the very backward season. The ice has held solid on this lake to an unusually late date, and it is only now that navigation may be said to have fairly opened. This will render the season for cutting very short, so that the mills will be pushed to their fullest capacity, and no time will be lost in conveying the lumber from lake ports to Selkirk. The Lake Winnipeg boats will therefore have a busy season.

A meeting of the Northwest Ontario and Manitoba Lumber association was held at Norman, Lake of the Woods, recently, to consider the advisability of continuing the list prices. This association was formed last fall, for the purpose of establishing prices. Previous to that time the lumber trade here was badly demoralized, owing to the excessive stocks and cutting prices. It was considered that the time was opportune to put the business on a better basis, as surplus stocks had been pretty well cleaned out, and a generally firm feeling prevailed. After a good deal of preliminary skirmishing, the association was formed and a price list was arranged, which was to continue in force to the present month. The arrangement has been adhered to, and dealers have found business more satisfactory in consequence. At the last meeting of the association, it was decided to continue the list prices, no change of importance having been made.

A movement was on foot to erect a large saw mill at Brandon, Man., this season, but it will likely now be abandoned, as an attempt to get logs down to that point has probably ended in a failure, at least for this summer. The logs were cut in the Riding Mountains country, claimed to be the best spruce timber region in Manitoba. About 28,000,000 feet were taken out, and floated down the Bird Tail creek as far as Birtle, but it has been found impossible to get them any further. The failure is very annoying, as only a few more miles would have brought the logs to the Assiniboine river, where there would have been no further trouble from low water. It is possible that a mill may be erected at Birtle, where the logs now are, for the purpose of sawing them up. There is a mill at present at Birtle, but the logs have passed the rapids below this mill, and could not conveniently be taken back. Besides the mill is rather antiquated, and could not be worked to advantage.

In railway construction, there are now three roads being built in Manitoba. The Manitoba & North-western company has just completed a contract for an extension of about twenty five miles, and work has been commenced. The Northwest Central has fifty miles of its line under construction, running north-westward from Brandon. The Red River Valley road, which will connect Winnipeg with the Northern Pacific at Pembina, D. T., is also being pushed ahead once more, and will be soon completed. Fifty miles of road between Winnipeg and Portage la Prairie will also be built this summer, but work has not yet commenced. None of these roads are of any special benefit to the lumber trade, beyond the usual advantage accruing to the trade from railway construction. It is also probable that a short link road will be constructed along the river front, through Winnipeg, to connect the Red River Valley and Canadian Pacific railways. This road would be of great convenience to the saw and other mills and factories along the river front. There is another proposed road, however, which is attracting great attention here at present, and which is of special interest to the lumbering industry. This is the Winnipeg and Southeastern, which it is proposed to construct from Winnipeg in a south-easterly direction to the Minnesota boundary, in the neighborhood of the Lake of the Woods. This would tap the timber region of the lake with a direct and much shorter road than by the present Canadian Pacific railway line to Rat Portage. Mills could be established on the southern end of the lake, and in addition to the shorter railway haul of the lumber to the city, there would be a considerable saving in towage. At present the logs come from the territory principally to the south and east of the lake, and mills established in that locality would be considerably nearer the timber region than the present mills, which are all located on the extreme northern end of the lake. The proposed Southeastern is intended to connect at the boundary with a road from Duluth. Duluth is very anxious to secure a direct line to Manitoba, in order to share in the rapid increasing grain trade of the province, and the people here are equally anxious for a road to Duluth. Such a road could run through the most valuable timber country in Minnesota. Monopoly having been abolished there is now nothing to prevent the construction of such a railway into Manitoba, and the scheme is looked upon here as one of the most likely and important railway enterprises yet proposed. If the Duluth people can succeed in pushing their end of the road through, there will be little difficulty in building the Manitoba portion.

Wood Fiber for Paper.

The extent of the manufacture of ground and chemical wood fiber for paper makers' is not appreciated by those who have not investigated this industry. Certainly the Democratic members of the ways and means committee who have put this manufactured product on the free list, in the face of the fact that the duty now is only ten per cent—less than it ought to be to protect the industry from Canadian and Norwegian competition—could not have fully understood the justice of such a step.

From a statement presented to the House by congressman Dingley, it appears that wood fiber is manufactured in 21 States. The capital employed is about $20,000,000, number of men employed 22,000, tons of fiber made 225,000 ground wood and 112,500 chemical wood, value $12,375,000, cost of wood on the stump $1,235,000, and the remainder of the cost largely labor.

In Maine alone there are 84,000 pounds of ground fiber made daily. The ground wood fiber is made as follows:—

Androscoggin Pulp Co., Brunswick	[illegible]
Indurated Fiber Co., North Gorman	[illegible]
Alvin Record & Sons, Livermore Falls	[illegible]
W. R. Shurtleff & Co., Skowhegan	[illegible]
J. S. Clapp, Snow Falls	[illegible]
Sebago Co., South Windham	[illegible]
Kennebec Fiber Co., Waterville	[illegible]
Total	[illegible] Pounds.

The daily production of chemical wood fiber in Maine is as follows:

Poland Pulp and Paper Co., Canton	[illegible]
Somerset Fiber Co., Fairfield	[illegible]
Penobscot Chemical Fiber Co., West Great Works	[illegible]
Lincoln Pulp and paper Co., Lincoln	[illegible]
S. D. Warren & Co., Cumberland	[illegible]
S. D. Warren & Co., Yarmouthville	[illegible]
Poland Pulp and Paper Co., Mechanic Falls	[illegible]
Total	[illegible] Pounds.

The production and use of mechanical wood fiber began about 1868, and within a few years has rapidly increased. All the patents have expired except those on a recent process known as sulphite. The fiber has been greatly reduced in value, ground wood now bringing only 1¼ cents per pound, and chemical 3½ cents. The cost of paper has been reduced from nine cents before the war to 4½ cents, in consequence of development of the manufacture of wood fiber.

Before 1883, the duty on imported wood fiber, which is made in Canada, Norway, Sweden, and Finland, as well as in this country, was 20 per cent. In 1883 the duty was reduced to 10 per cent., and since that date foreign competition has increased. In 1886 there were imported 18,000 tons, in 1887 the importations were 32,000 tons, and this year 53,000 tons will be imported. If wood fiber should be placed on the free list, as proposed by the Mills bill, our wood pulp mills would be speedily swamped by Canadian and Norwegian competition, as the labor only costs half as much in these countries.—*Lewiston Journal.*

EUROPEAN NOTES.

—There has been good arrivals of pine and spruce deals at Liverpool from Quebec of late.

—The latest London wood circular to hand reports that none of the present season's Canadian timber is yet to hand in that market, and consequently no retail business, landed stocks being practically exhausted.

—Stave buyers are falling into line with other seccions of the timber trade as far as auctions are concerned, and sales to furnish them with supplies are getting to be almost as regular as those provided for the other branches of the same trade.

—Simson & Mason, of London, in their latest circular, say: The market would seem to be open for all classes of fresh Canadian timber, if the scarcity of stock here is any index. The principal delivery has been 400 loads birch. Fresh ash and birch of good size and quality will meet with a ready sale. Oak timber is also wanted.

Sales of Canadian Timber.

Note of Messrs. Singleton, Dunn & Co.'s public sale at Yorkhill, Glasgow, 6th June, 1888:

ST. JOHN, N.B., SPRUCE DEALS.

Pcs.		
67	9/22 x 13/16 x 3	11d.
116	9/25 x 10/12 x 3	10½d.
247	11 x 11 x 3	10d.
178	10 x 11 x 3	10d.
234	9 x 11 x 3	9¾d.
493	15 x 9 x 3	9¾d.
864	13 x 9 x 3	9¾d.
432	13 x 9 x 3	9¾d.
190	24/27 x 7 x 3	9d.
240	23 x 7 x 3	8¾d.
331	22 x 7 x 3	9d.
454	21 x 7 x 3	9d.
299	20 x 7 x 3	8¾d.
292	19 x 7 x 3	8¾d.
290	19 x 7 x 3	8¾d.
361	18 x 7 x 3	8¾d.
361	18 x 7 x 3	8¾d.
532	16 x 7 x 3	8¾d.
2560	16 x 7 x 3	8¾d.
424	14 x 7 x 3	8¾d.
464	13 x 7 x 3	8¾d.
362	11 x 7 x 3	8½d.
362	11 x 7 x 3	8½d.
911	9 x 7 x 3	8½d.
200	20/25 x 7 x 2½	9¼d.
243	18/19 x 7 x 2½	9d.
331	16/17 x 7 x 2½	6d.
725	12/15 x 7 x 2½	9d.
334	9/11 x 7 x 2½	8½d.
68	10/21 x 9/11 x 2½	9¼d.
327	9/26 x 6 x 2½	9d.
119	9/24 x 5 x 2½	9d.
1143	9/26 x 3 x 3	8½d.
1651	9/26 x 2 x 3	8d.

1st QUEBEC PINE DEAL ENDS.

88	6/8 x 12/23 x 3	2/3

QUEBEC RED PINE DEALS.

551	12 x 11 x 3	11d.

The most important items in the import list for the past week, besides several large consignment of pine deals by the regular liners from Quebec and Montreal, are two large cargoes of sawn and hewn pitch pine. The market could have easily done without these, but there they are and they must take their chance with others who have come before them. The stock of pitch pine is more than ample, the demand being very slack indeed.

—The official returns of the import of wood goods for the month of May at the port of London, go to show that there is a decrease of 17,909 loads of hewn timber as compared with last year for the same month, and a still more noticeable decrease in the quantity for the five months as compared with 1887. On sawn timber the decrease is much larger, amounting to 117,995 loads; the decrease from Sweden and Norway being especially heavy; Russian and United States sawn wood importation is also not much more than half what it was last year. In staves there is a small decrease on the month, while mahogany shows an increase.

—An active trade continues in American whitewood and a large distribution continues to be made, while prices are fairly maintained.

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for Post Office etc., Pembroke, Ont.," will be received at this office until Friday 6th July, 1888, for the several works required in the erection of Post Office at Pembroke, Ont.

Specifications and drawings can be seen at the Department of Public Works, Ottawa, and at the office of U. H. McKimm, Collector of Inland Revenue, Pembroke, Ont., on and after Friday 22nd June, and tenders will not be considered unless made on the form supplied and signed with actual signatures of tenderers.

An accepted bank cheque payable to the order of the Minister of Public Works, equal to *five per cent. of amount of tender*, must accompany each tender. This cheque will be forfeited if the party decline the contract or fail to complete the work contracted for, and will be returned in case of non-acceptance of tender.

The Department does not bind itself to accept the lowest or any tender.

By order,
A. GOBEIL,
Secretary.

Department of Public Works, Ottawa, 20th June, 1888.

THE RATHBUN COMP'Y,

DESERONTO, ONT.,

MANUFACTURERS OF

TERRA COTTA FIRE-PROOFING

For Use in Old and New Buildings.

Endorsed by Leading Architects. Absolutely Fire-proof. About as Cheap as Wood or Brick. Weight One-Third that of Brick. Does not Crack on application of Heat or Water.

Deadens Noise. Gives Warmth in Winter; Coolness in Summer

FOR SALE BY AUCTION

— ON —

Friday, 6th July, 1888.

VALUABLE TIMBER LIMITS,

THE PROPERTY OF

HAMILTON BROTHERS

— IN LIQUIDATION. —

W. H. LEWIS, Auctioneer.

Will offer for sale by auction at OTTAWA CITY the following Timber Limits, comprising on

Dumoine River and tributaries,
Black River and Schyan River,
All in the Province of Quebec,

751½ SQUARE MILES

with large and well cultivated farms, general plant, supplies and stock in connection therewith; and on

Gatineau River and tributaries,
in the Province of Quebec,

934½ SQUARE MILES

with farms, plant, supplies, etc., etc. Plans of above limits can be seen at Government Crown Timber office, or Hamilton Brothers' office, Sussex street, Ottawa city. Immediate transfer of above on sale being effected.

ALSO, with possession, say, the 1st December next, the property known as the Hawkesbury Mills, owned by the above firm, and used for manufacturing timber from above limits; situated on the Ottawa River, in the Province of Ontario, midway between Ottawa and Montreal, consisting of four saw mills and lath and scantling mill additions, driven by water, with sawing capacity of over

2,000,000 Feet Weekly,

blacksmiths', fitting, wheelwrights', and carpenters' shops, etc., etc., etc. Extensive wharves and piling space for forty million feet of lumber. Large brick dwelling house with extensive grounds; ditto stone house, and seven good houses built of wood, and one hundred tenements now occupied by employees.

Valuable farm in the vicinity of over 1,000 acres, a large portion of which is covered with excellent timber. For terms of sale plans of properties and all particulars apply to Mr. Chas. Magee, Ottawa.

J. J. C. ABBOTT,
GEORGE W. HAMILTON,
G. C. HAMILTON,
C. F. GILDER,
Trustees.

Lumbermen

SHOULD SEND FOR A COPY OF

Scribner's Lumber & Log Book.

OVER ONE MILLION ALREADY SOLD.

Price 35 cents post paid.

+ + + ADDRESS + + +

A. G. MORTIMER, PETERBOROUGH, ONT.

J. L. JONES
WOOD ENGRAVER
10 KING ST EAST
TORONTO
SEND FOR PRICES

WANTED AND FOR SALE.

Announcements in this department will be inserted at the uniform rate of ten cents per line, each insertion, payable in advance. For three or more consecutive insertions of the same advertisement a discount of 25 per cent. will be allowed. Eight words should be counted as one line.

DRY LUMBER FOR SALE—30 M 1¼ IN. maple flooring for sale, 10 M 3½ in. maple, 15 M 1, 1½ and 2 in. elm. Box 60, Uxbridge.

CHEMAINUS SAW MILL, B.C.—FOR SALE—a saw mill; nearly new; fully equipped with water-power and steam-engine, a powerful steamer, scows, large real estate and timber leases; also hotel, store, manager's and workmen's houses; capacity 50,000 feet per day. Apply to Croft & Angus, Victoria, British Columbia.

FOR SALE—CHANTLER'S MILL—SHINGLE and lumber mill; never been run, owing to death of owner; will be sold cheap, and liberal terms will be given; good chance for party with small means; this mill is situated five miles from Bracebridge, on Lake Muskoka; logs can be had from any point on the lake with excellent booming ground. Apply to S. C. Kanady & Co., 18 Wellington east, Toronto, or G. W. Taylor & Co., Gravenhurst, Ont.

ATTENTION, LUMBERMEN—FOR SALE—at a sacrifice—new saw mill and one thousand acres pine timber; Parry Sound district. Geo. Coote & Son, Dundas.

SAW MILL—IN WESTERN TOWN—WITH woodworking machinery, mostly new; suitable for furniture or planing mill; a bargain; lithograph of buildings and particulars on application. Box 504, Globe office, Toronto.

TO MILLERS, LUMBERMEN AND OTHERS having capital awaiting good investment; splendid chance to purchase A 1 patent process flour mill, together with saw mill and timber limits on easy terms. Apply for particulars to Drawer 9, Minnedosa, Manitoba.

FIRST-CLASS LUMBER AND SHINGLE mill doing large trade; also, timber limit and large number of logs; for Toronto real estate. J. Huggard, 162, Dundas street, agent

A LARGE PLANING FACTORY—WITH lots of power—adjoining our summer storage yard. William Leak & Co., Dundas street, Toronto.

1,000,000 — FOR SALE — ONE million lath. F. O. B. cars at Gravenhurst. Donogh & Oliver, Lumber Dealers, Toronto.

FOR SALE—STEAM SAW MILL—IN GOOD repair; Lowmoor boiler, 30 h.p., and inspirator; engine 25 h.p., saw rig and carriage, edger, butter, shafting, belting, saws, patent canter and bull wheel; would take part lumber or city lots. Box 60, Uxbridge.

LUMBER INSPECTOR WANTED—IMMEDIATELY—one thoroughly up in inspection of pine and hardwood lumber, and who has a good general knowledge of the business. Apply by letter only to T. W. Walker, No. 4 Imperial Bank Buildings, Toronto.

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TIMBER LIMITS FOR SALE IN ONTARIO, Quebec and Manitoba. W. J. FENTON & Co., 50 Adelaide Street, East, Toronto.

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A WATRPOWER CIRCULAR SAW AND Shingle Mill with ten acres of cleared land, log house and stable situated on South river, about 4½ miles from Trout Creek Station on the Northern Pacific Junction R. R., convenient to School, Church and Post Office and s large settlement in Hainsworth. Also about 30,000 feet of dry Hardwood lumber, cut and piled about two years, and about 50,000 feet of Hardwood sawlogs, principally Birch. If not sold sooner, will cut to order this coming summer. For information apply to

THOMAS CORKERY,
Barrett, Ont.

SAW MILL FOR SALE.

FOR SALE, IN THE VILLAGE OF BELmore, Sawmill in first-class running order. Will be sold with or without stock. For terms, apply to

H. R. PERKINS,
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PINE TIMBER LIMITS FOR SALE.

Two choice Timber Limits in Northwest Territory, Canada, 100 square miles each; great bargains. Also, limits in Georgian Bay, Algoma and Muskoka districts for sale. JOHN SCULLY, Toronto, dealer in Pine Lands and Lumbermen's plant and supplies. Light iron and steel rails in stock.

Saw and Shingle Mill.

FOR SALE—[illegible]

LOCOMOTIVES FOR SALE.

[illegible]

JOHN [illegible]

TO LUMBERMEN.

[illegible]

J. K. POST & Co.,
LUMBER MERCHANTS
And Shipping Agents.
OSWEGO, N. Y.

MACHINERY FOR SALE

H. W. PETRIE'S list of Sawmill and general Wood-working Machinery, for quick delivery.

ONE new 2 or 3 [illegible]
ONE sawmill [illegible]
ONE 2-[illegible]
ONE automatic sawing [illegible]
ONE 20-inch [illegible]
TWO stave cutters with [illegible]
ONE gang lath mill, new
ONE Waterous self-[illegible]
ONE Goldie & McCull[illegible] Hall
gle machine.
ONE self acting shingle machine, Green Bros make.
ONE Waterous self-acting [illegible]
ONE Eureka self-a[illegible]
ter, I. Fren[illegible]
TWO Doherty hand s[illegible]
ONE upright saw [illegible]
EIGHT wood jointers, [illegible]
THREE drag saw machi[illegible]
ONE 21-inch planer and [illegible]
ONE new eclipse planer [illegible]
Galt make
ONE 24-inch planer a[illegible]
TWENTY-INCH plane[illegible]
EIGHTEEN-INCH [illegible]
LITTLE Giant [illegible]
NEW Economist 24-[illegible]
ONE 27-inch re[illegible]
make.
ONE 24-inch surfacer, M. K[illegible] & B[illegible]
ONE 24-inch [illegible]
ONE 24-inch [illegible]
TWENTY-FOUR-INCH [illegible]
TWENTY-FOUR-INCH [illegible]
TWENTY-TWO-INCH [illegible]
EIGHTEEN-INCH [illegible]
SIXTEEN-INCH [illegible]
THREE-SIDE [illegible]
make.
THREE SIDE [illegible]
TWO [illegible]
make.
ONE one-side moulder, [illegible]
NEW 2-side moulder, Galt [illegible]
TENONING machine, [illegible] & M'Culloch.
ONE J. A. Fay tenoner, [illegible]
TWO Ross tenoners.
ONE double ended tenoner, M. K[illegible] & Bertram.
BLIND slat tenoner, C[illegible]
POWER morticer, G[illegible] & M[illegible]
TWO power morticers [illegible]
LARGE stock of [illegible]
UPRIGHT boring [illegible]
SIX power scroll saws, [illegible]
ONE 34-inch bar saw, H[illegible]
TWO new band saws, Galt make
NEW 34-inch pedestal [illegible] band saw.
ONE upright Goldie & McC[illegible]
NEW iron top shaper, Cowan make
SHARPER, heavy iron col[illegible] Bros' make, Galt.
ONE wood frame shaper a[illegible]
ONE velocipede foot power [illegible]
ONE automatic handle [illegible]
ONE handle or gauge lathe, Bailey.
ONE axe handle or spoke lathe, new.
ONE Blanchard spoke lathe, Fay make
ONE broom handle lathe, wood frame.
NEW wood splitting machine [illegible]
BOBBIN lathe with cutters for [illegible] mills.
ONE iron bowl machine, American make.
SET of hoop machines, Goldie & [illegible] make
SET match machinery for [illegible]
LOT of lumber and log cars [illegible]
FOUR pole road cars, 7 feet [illegible] gauge
SANDPAPERER, new, Galt make.
FOOT mitering machine, Galt Bros' make.
ONE choir mortising and b[illegible]
ONE set spoke machines, Fay make, Cincinnati.
ONE knife grinder, Galt make.
SIX saw benches, cut off and ripping
ONE hand wiring machine
TWO new wood turning lathes with rests, etc.
ONE beading and moulding attachment for planer and matcher.
LOT of moulding and [illegible]
SEND for list 13 and 14 [illegible]

Address H. W. PETRIE, Brantford, Ont.

Our readers will confer a favor by mentioning this Journal when writing to Advertisers.

THE POLSON IRON WORKS CO. LIMITED.

(Successors to Wm. Polson & Co., Toronto, and Thos. Worswick & Co., Guelph.)

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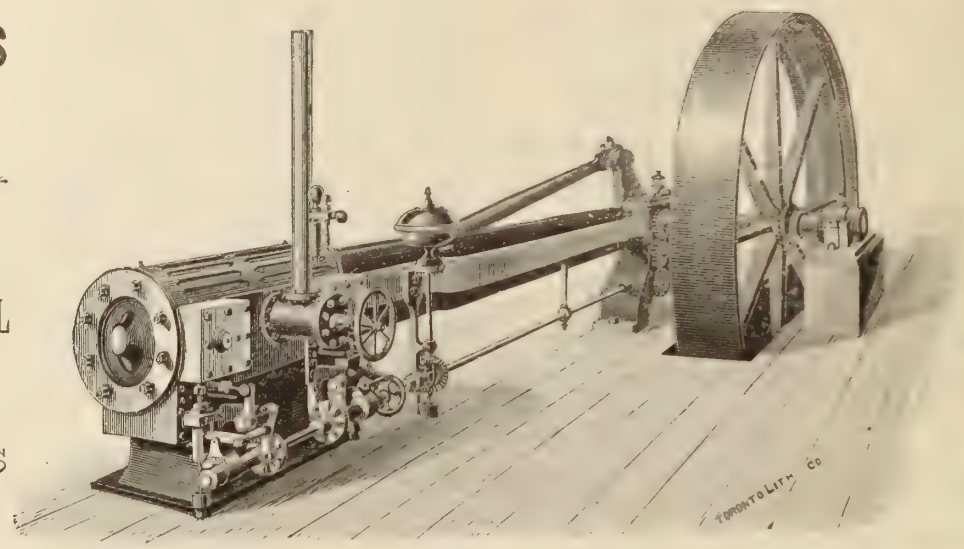

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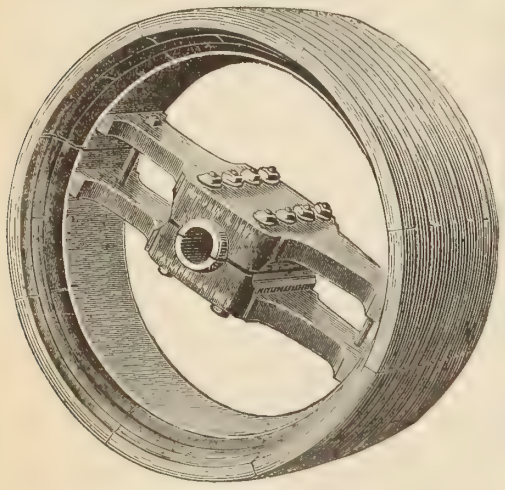
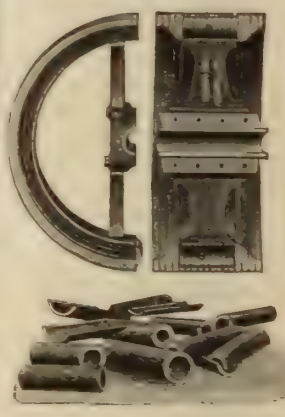
DODGE PATENT WOOD SEPARABLE OR SPLIT PULLEYS.



BEST BELT SURFACE, LIGHTEST, STRONGEST, BEST BALANCED AND MOST CONVENIENT PULLEY IN THE WORLD.



With our Patent Bushing System

Every pulley will fit 22 different sizes of shafting, and guaranteed to give from 30 to 60 per cent. more power from same belt and like tension than any iron or steel pulley. Every pulley a split pulley, 70 per cent. lighter than cast iron and 50 per cent. lighter than wrought iron or steel. Strong enough for any power required. Made in any size from nine inches to sixteen feet diameter.

As a material for pulleys wood is better than iron from the fact that it holds a belt much better. Most good mechanics are aware of this fact, but it may not be generally known how great is the difference, and for the benefit of our readers we give the result of two tests made and published by two of the most eminent mechanical authorities :—

Portion of Circumference embraced by Belt.	Rel. value of leather belt	
	On Wooden Pulleys.	On Iron Pulleys.
.20	1.80	1.42
.30	2.43	1.69
.40	3.26	2.02
.50	4.38	2.41
.60	5.88	2.87
.70	7.90	3.43

Morin.—Appleton's Encylopedia of Mechanical Arts.

Portion of Circumference embraced by Belt.	Rel. value of leather belt	
	On Wooden Pulleys.	On Iron Pulleys.
.20	1.90	1.40
.30	2.40	1.70
.40	3.30	2.00
.50	4.40	2.40
.60	5.90	2.90
.70	7.90	3.40

Haswell.—Engineers' and Mechanics' Pocket Book.

A Dodge Patent Wood Pulley is better than iron from the fact that it can be made very much lighter and thus save weight on the line shaft and bearings, thereby saving in expense from a saving in friction.

The advantages of the separable pulley are very apparent. By its use the necessity of taking down shafting already up for the purpose of putting on additional pulleys when needed, or to be changed, is avoided, thus saving time, trouble and expense, while their first cost is much less than any other pulley made not having these advantages.

The Compression Fastening whether used with keys in iron center or compression alone, keeps the pulley always in balance as the compression on the shaft and key is always towards the center.

The most perfect balanced iron pulley fastened with set screws or key, is invariably out of balance by being thrown from the centre, this fact is obvious to all mechanics.

The advantages of our mode of fastening over any other are : It is the only absolutely true fastening for a pulley. A pulley once properly balanced cannot be thrown out of balance in securing with this fastening. A pulley fastened with key or set screw in the ordinary way, cannot be screwed without lifting the pulley from the shaft at that point where the key or set screw is placed, thus throwing the pulley out of balance.

Manufacturers should carefully avoid any pulley with a set screw fastening for shaft ; also a key unless the pulley is compressed on it. The Dodge Patent Bushing system is a great convenience to manufacturers and also to agents who carry pulleys in stock, as with the aid of the patent bushings every pulley will fit 22 different sizes of shafts.

Haswell the acknowledged authority and most quoted by American mechanics, summarizes thus : The ratio is friction to pressure of leather belts, when worn over wooden pulleys is 47, over turned cast iron pulleys, 24, thus showing the average advantage of a wood pulley over iron to be 50 per cent.

We also manufacture GROOVED HARD WOOD PULLEYS FOR TRANSMITTING POWER BY MANILLA ROPES (tallow laid) by the Dodge Patent System of applying the ropes and taking care of the slack.

Illustrated catalogues of belt pulleys and the rope transmission system will be furnished on application to

The Dodge Wood Split Pulley Co., 89 Adelaide St. W., Toronto.

THE CANADA LUMBERMAN.

VOLUME VIII. NUMBER 8. PETERBOROUGH, ONT., AUGUST, 1888. TERMS. SINGLE C

THE CANADA LUMBERMAN

PUBLISHED MONTHLY BY

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Advertising Rates Furnished on Application.

THE CANADA LUMBERMAN is published in the interest of the lumber trade and of allied industries throughout the Dominion being the only representative in Canada of this foremost branch of the commerce of this country. It aims at giving full and timely information on all subjects touching these interests, discussing these topics editorially and inviting free discussion of them by others.

Especial pains are taken to secure the latest and most trustworthy market quotations from various points throughout the world, so as to afford to the trade in Canada information upon which it can rely in its operations.

Special correspondents in localities of importance present accurate report not only of prices and the condition of the market, but also of other matters specially interesting to our readers. But correspondence is not only welcome but is invited from all who have any information to communicate or subjects to discuss relating to the trade or in any way effecting it. Even when we may not be able to agree with the writers we will give them a fair opportunity for free discussion as the best means of eliciting the truth. Any items of interest are particularly requested, for even if not of great importance individually, they contribute to a fund of information from which general results are obtained.

Advertisers will receive careful attention and liberal treatment. We need not point out that for many the CANADA LUMBERMAN with its special class of readers is not only an exceptionally good medium for securing publicity, but is indispensable for those who would bring themselves before the notice of that class. Special attention is directed to "WANTED" and "FOR SALE" advertisements which will be inserted in a conspicious position at the uniform price of ten cents per line for each insertion. Announcements of this character will be subject to a discount of 25 per cent. if ordered for three successive issues or longer.

Subscribers will find the small amount they pay for the CANADA LUMBERMAN quite insignificant as compared with its value to them. There is not an individual in the trade, or specially interested in it, who should not be on our list, thus obtaining the present benefit and aiding and encouraging us to render it even more complete.

FROM advices received by the Government it appears that the Judicial Committee of the Privy Council expressed the opinion that the Dominion Government should be a party to the appeal of the St. Catharines Milling and Lumber Company v. the Province of Ontario. This suggestion has been acted upon and the Government will shortly appoint counsel to represent it in the appeal.

MESSRS. ECKARDT, KYLE & CO., wholesale grocers of Toronto, realizing the purchasing capacity of the great lumber trade of Canada in all staple lines of groceries, have contracted with THE LUMBERMAN for advertising space. Their first announcement appears on another page of this paper, and we have much pleasure in directing attention thereto. This firm is well known throughout Canada and has a reputation for upright dealing second to none.

IT was said not very long ago that a squirrel could travel from St. Petersburg to Moscow without touching the ground, and there are still immense forests in Russia. But even there, in some districts, the axe has been too busy. The navigation of the Volga and other rivers has been impeded by their being silted up with sand set free by the denudation of the forest. On account of this and other evils the Ministry of Imperial Domains has issued strict orders controlling the tree felling and checking the destruction.

WE particularly invite the attention of LUMBERMAN readers to the advertisement in the current issue relative to the sale of the Hawkesbury Mills property and plant, belonging to the estate of Messrs. Hamilton Bros. The executor of this estate Mr. Caledon F. Gilder, will receive tenders for the purchase of this property up the 7th inst. The logs spoken of in advertisement are first class stock and as good as any yet taken out on the Ottawa. There is but little doubt that the competition for this property will be keen.

THE terms of the new agreement between the mill owners and the Government in regard to the lease of the water-power at the Chaudiere have not yet been decided upon. Mr. Bronson, M.P.P., is reported as saying that the position of affairs had not advanced at all, and that the mill owners were waiting to see what action the Department of Public Works would take in regard to the proposals made. Mr. Bronson thinks that the examination of the Ottawa river now being made will last pretty well all the summer and into the fall.

THE prospectus for still another United States lumber paper has reached us. This time it hails from the far south, New Orleans, La. It will be known as the *South-Western Lumber World*, by the Lumber World Co., publishers. The first issue of the new journal is announced for the 15th inst. and will be a monthly issue. It will be especially devoted to the lumber interests of the South-west, a field fast coming to the front as an important lumber producing point. While we think that the United States is overflowing with lumber literature, we nevertheless extend our best wishes for the success of the new aspirant for public favor, hoping it will have a long and prosperous existence.

THERE is to be an International Marine Conference and the New York *Tribune* thinks that it should take in hand the case of such monsters as the Joggins raft. Our contemporary fears that one successful experiment might lead to ocean rafts becoming a constant danger to steamships and call upon the conference to take action to check the practice before it becomes established. Certainly a solid mass of timber 600 feet long, 53 feet wide and 38 feet high, containing 22,000 logs, would be an awkward obstacle in the way of the largest and strongest steam ship. The experiment is soon to be tried now and another failure, which is anticipated, would probably put an end to the project.

WHILE every business man realizes to a greater or less extent the existing closeness in the money market and the consequent depression in trade, especially throughout Ontario, it is nevertheless a fact that no time in the history of the Dominion has our national credit been rated so high as it is at the present time. The Dominion loan of four millions sterling at three per cent, has resulted most satisfactory. The tenders recently opened in London numbered about 400 and amounted to about twelve millions sterling at prices varying from 94½ to 95½, which was the minimum. So numerous were the high priced tenders that those at 95 only received 34 per cent. of the amounts applied for, while those above 95 receive the full amount. The average price obtained was 95 1-20 per cent.

THE improvements that are being made by the Dominion Government at the mouth of the Fraser River in British Columbia seem to have given an impetus to the lumber trade in the neighbourhood of New Westminster. We hear of large vessels coming up the river to the mills to load with lumber for Australia and Mexico, and the lead thus given is sure to be followed. New mills are going up and preparations are being made for others, some of those interested being lumbermen from Ontario and Quebec, among them being Mr. McLaren and Mr. Ross, and besides the export trade and the local requirements there is also a considerable demand for Pacific Coast lumber from the prairies on the other side of the Rocky Mountains. This demand must certainly increase and there is a bright future before the lumbermen of British Columbia.

SINCE the opening of navigation, says the Chicago *Timberman*, there has been a continuous running back and forward between this country and Canada, of capitalists in quest of pine. The Spanish river country has been honored recently by the presence of Mr. George Simpson, of Evanston, Ill.; Jas. S. Smith, of the Chippewa Lumber & Boom Company, Eau Claire, Wis.; L. H. Brown, Buffalo, N. Y., and Chas. Marthinson, of Grand Rapids, Mich., and rumor has it that these gentleman are acting in concert in the purchase of a big tract of pine—a purchase involving an outlay of half a million of dollars. The Spanish river pine is said to be large, and of fine quality, and will doubtless bring a good price in the stump from this time forward. Several Minnesota operators are said to be at the present time negotiating for a round block of pine on the Spanish river.

THE following striking item appears in the dispatches from Washington in the leading American papers, under date of June 15th: "The Post Office Appropriation Bill was taken up, amended and passed. Among the amendments agreed to is the inserting an item of $800,000 for more efficient mail service between the United States and Central and South America and the West Indies." This is practical evidence of the manner in which the Americans regard the [illegible] of this market. Many of the metropolitan papers of Canada as well as some of the most influential business firms have of late strongly urged the Canadian Government to take some action towards securing these important markets for the benefit of our manufacturers. It is to be hoped that the proper steps will now be taken to counteract this enterprising action at Washington, and save this valuable market to our Dominion before it is too late.

THE French Department of Agriculture has recently issued statistics of the forest lands of Europe, showing their distribution. Two-elevenths of the area of Europe is said to be covered with forests, though the average varies greatly in different countries. Of the British Islands only four per cent. of the surface is woodland. Denmark, Holland and Portugal have a rather larger proportion. In France the forests extend over one-sixth of the surface, in Norway nearly a fourth and Hungary nearly a third. In Russia forests cover nearly two fifths of her area, and Sweden, which stands at the top of the list, is still nearly the two-fifths. Evidently there is no probability of an early cessation of the competition of those countries with Canadian lumber. Taking the proportion of forest land to population the United Kingdom has an acre to eleven inhabitants, Denmark and Portugal are three times as well off, France seven times, Russia and Sweden about a hundred times, and Norway a hundred and twenty times. The forest statistics of Canada cannot be compared with those of Europe, for our woodlands have not been surveyed and estimated with any accuracy. The Governments interested should see that this is done for the information would be valuable.

THE San Francisco *Journal of Commerce* gives some particulars of the lumber trade of the United States Pacific Coast with Australia, showing the great importance and huge dimensions of the business. It says that there are not only large shipments from San Francisco but even greater from Puget Sound and Humboldt Bay. Australia takes nearly half of 132 million feet of timber exported in a year from the Pacific Coast of the United States. The export to Australia is from fifty to sixty million feet, and is still increasing. The business began to assume large dimensions as long as thirty-five years ago, with especially large increases in 1877 and 1878. The San Francisco *Journal* anticipates that the trade will be far greater in the future than ever it has been in the past. We hope our Pacific Coast contemporary is a little too sanguine. There is no good reason why its countrymen should monopolize this trade. In British Columbia we have forests from which Australia might well draw her supplies of lumber. These forests are practically inexhaustible and for quality they could not be excelled. Our lumbermen on the Pacific Coast should see that they are not left behind in the race. All that is needed is to see that the peculiar requirments of the Australian market are carefully observed.

THE action of Dr. DeGrosbois, M.P.P., in bringing in a bill in the Quebec Provincial Legislature to repeal the charter of the Quebec Ship Laborers' Society has had a useful effect. That society was originally formed as a benefit association, but having rather extensive powers under its charter it proceeded to make rules, which were so stringent as greatly to interfere with the business of the port. It has in fact been very generally admitted that the falling off in shipping was due to the difficulties and delays thus caused and to the

expense of loading and unloading as compared with those elsewhere. In fact at the beginning of July there were at Montreal four large vessels, the Grassbrooke, the Oxenholm, the Assyrian and the Iron Acton, taking on board cargoes of square timber, amounting altogether to 40,000 cubic feet, which had been brought from Quebec. This was avowedly to escape from the restrictions imposed by the Ship Laborers' Society. The bill of Mr. DeGrosbois was intended to remedy this evil, and he has attained his end though without legislation. While the bill was before the special committee that had been appointed, some of the merchants of the city anxious to see its business preserved, persuaded the laborers to make concessions by changes in their rules that would obviate the necessity for the measure. Deputations from the merchants and the laborers waited upon the committee and a long discussion took place. Finally the laborers agreed to amend the rules in several important respects. It was to be the rule henceforth that steamships might use their own steam winches to hoist and lower their timber, but not to move it by steam when on board. In the case of mixed cargoes captains are not to be obliged to take more than a deal gang, but the number of men that he decides to employ are to be retained until the ship is loaded, and any vessel taking one half or less of timber may employ a deal gang if wished. The members of the Society are to be free to work on holidays at the ordinary rates, but if from religious scruples they decline to do so, they are to be allowed their places without objections on the following day. The amendments removed the most objectionable features of the regulations made by the Ship Laborers' Society and the object of the bill being thus virtually secured Mr. DeGrasbois agreed to withdraw. The removal of these restrictions will be a very welcome improvement for the lumbermen who ship timber at Quebec, and the laborers' even will soon find that they gain rather than lose by thus facilitating business.

THE Province of Quebec has taken a retrogade step in the management of its forests. The establishment of forest reserves was a regulation that was beneficial alike to the public treasury, the lumbermen and genuine settlers. Now, however, the forest reserves have been abolished in spite of the very sensible opposition of several members of the Legislature. The passing of the new Act does away with the reserves entirely, and permits settlers to locate anywhere where the land is fit for cultivation. A large number of these forest reserves are timber limits leased from the Government by lumbermen, and the passing of this Act permits settlers to locate themselves on these limits, clear land, and use and sell timber on their lots. Lumbermen have paid high prices to the Quebec Government for the privilege of cutting timber on these forest reserves, upon the distinct understanding that the reserves were to be protected from the settlers until such time as the limits should be denuded of all timber over twelve inches at the bases. It is not surprising therefor that the lumbermen are indignant at what they consider a most unjust and aggressive action on the part of the Provincial Government. The only saving clause to the lumbermen in the Act just passed was introduced in the Legislative Council by Hon. Mr. Garneau, giving the lumbermen two and a-half years, after the issuing of any location ticket, to cut off the timber on the lot located, the settler to clear only ten acres for his own use within that time. This clause is certainly an important amendment to the original Act, and the lumbermen in order to protest their interests will now be compelled to hasten the cut of this timber as rapidly as possible, in order to save as much as possible during the brief period allotted them. During the discussion of the Act at the recent session of the Quebec Legislature, it was pointed out that a door was being opened to fraudulent operations such as had formerly taken place, when pretended settlers only remained on their so-called farms till they had stript them of their valuable timber, and then moved on to some new locality to repeat this device, leaving devastation behind them. These adventurers deprived the public treasury of dues, interfered with the operations of the lumbermen, and did not become farmers. The wise plan is to divide the forest and agricultural lands, and then the greatest value is obtained from the forests, and real farmers are not induced to settle on poor agricultural land when fertile districts far better suited for their purpose are abundantly sufficient. Quebec was ahead of the other Provinces in this respect, but now it has gone back on its own record.

CORRESPONDENCE.

TORONTO, July 9th, 1888.

Editor Canada Lumberman.

DEAR SIR,—In your issue of July we read a letter signed Wholesaler, in answer to one Pinus, and we feel called upon to ask him to draw it mild. He makes assertions and classes dealers so widely that he will have to put on his check line, or he will find that there are people who claim to be retailers that have paid up their paper last winter and every other winter for the last ten or twelve, as well, if not better, than any wholesaler who does business in Toronto to-day. His assertion about fear of contradiction is very loud, and if he wishes to go further we are perfectly willing to take up the gauntlet with him.

He may be right in some cases, but evidently the class of customers he has been carrying are of the lame kind, and he should be ashamed to own up that he is and has been in such company so long. He should make a desperate effort to get into better, as there is no ability required to sell lumber to that class of men, and judging from his harsh remarks this wholesaler must be badly used. As to his remarks that the wholesale men do everything that is necessary for the retail men, all we have to say is that if the retail men were only energetic enough to place themselves in such a position that their credit was as good as the wholesale man (which to our minds is not a very hard job) they would find that the manufacturer would be as anxious to sell direct to them, if not more so, than to the wholesale men, as if the retail man cannot sell his lumber at a profit, and to men who will pay for it, he can keep it piled in his yard, and if the worst comes to the worst he can hand it back to the manufacturer. Whereas, if the wholesale man gets it and finds it slow sale, he is bound to unload, and those people he speaks of who only pay 25% gets it and the manufacturers get 30 or 40 cents on the dollar from the wholesaler, who holds as his share a lot of unpaid notes, and where do you find the retailer? He is the best off; he has the stock on hand, even if unsold, and the wholesaler stands between him and harm. This goes to show you that it lays with the retailer himself to deal with the mill man, who is only too anxious to do so if the mark is good. In conclusion, we would ask wholesalef that when he next throws any slurs on the retailers he will be kind enough to remember that there are as good as he who claim that title, and who feel thankful that they stand as high in the scale as he does. By inserting this you will much oblige.

Yours, respectfully,

DOCKIE.

TORONTO, July 9th, 1888.

Editor Canada Lumberman.

DEAR SIR,—Will you kindly allow me to correct an unintentional error which appeared in my letter in your last issue, wherein I say, "that not more than 25% of so called yardsmen's paper was met at maturity during last winter." Whereas I intended to say, "that not more than 25% of so-called yardsmen retired their paper at maturity during last winter." There are several firms doing a joint wholesale and retail business from car and dock, as doubtless some others who meet their engagements promptly, and I trust that all such will accept this prompt correction in the same spirit intended by the writer.

Truly, yours,

WHOLESALER.

LONDON, June 28th, 1888.

Editor Canada Lumberman.

Could you or any of your readers inform me of the places in Ontario or Quebec to secure the best grades of Hard Maple, the section of the country where the best quality grows, also how I can procure a copy of the Government Forestry Report?

Yours truly,

JAMES GORDON.

Answer (1)—Those of our readers who are interested in the class of wood referred to above, are in a position to give our correspondent the necessary information. (2)—Write direct to the Crown Lands Department, Toronto, for Ontario Forestry Report and to the same department at Quebec for the report of the Province of Quebec.

New Brunswick Matters.

MADAWASKA, July 4th, 1888.

Editor Canada Lumberman.

By some mishap one or two of the latest numbers of your valuable journal failed to put in an appearance, and we are now looking forward to receiving the July issue.

The winding up of our last winter's operations is being carried on successfully, and the drives, with a few exceptions, have already reached the Fredericton booms. Owing to the late breaking up of the lakes, through which the logs had to pass, operations have been delayed, but on the whole there has been no reason for serious complaint. There has, without doubt, been an unusually large quantity of logs handled since the commencement of operations last winter, and the lumbermen's prospects look bright.

No doubt inside of two years a great reaction will take place in the business of small lumber operators, those who have been engaged in picking up the culling of the larger operators. The work of thinning out our forests has been going on at such a rapid rate of late years, that before long there will be literally nothing left to cut. As a consequence the trade will rapidly diminish, and heavy losses will be the order of the day.

There is no disputing the fact that we have too many novices engaged in the lumber trade, and as a result they have to pay dearly for their experience. It requires many years of experience to become a successful lumber operator, and among the many requisites necessary is the knowledge of how to [illegible] economically saw lumber, at the same time placing the proper value on the good article, and how to avoid loss in [illegible] inferior stock. He requires to thoroughly cruise his limits and exercise enough judgment to *know* a good chance from a good one when he sees it, and not say I *think* it will hold out a [illegible] supply. The next [illegible] a good camping ground handy to water and advantageous for log hauling. Another, and the next important move, is to select first class choppers and teamsters. The choppers should be taught not to cut a faulty tree, or one too small; if they do charge them with the expense of hauling to the [illegible]. No man is capable of successfully conducting a lumber business of any importance unless he can teach his men their duty from the cook to the stream-driver. What robs our lumber operators more than anything else is the cutting of poor [illegible] and small timber. Instead of quantity the main consideration should always be quality, as one-half the quantity of good timber pays better than double the amount of poor [illegible].

It requires an age to learn the lumber trade, and [illegible] theoretical but practical training is essential to success. I had an old Yankee in my employ at one time who told me that when he had driven oxen for about twelve years he considered that but few if any could excel him, but that after 25 years experience, he had come to the conclusion that his knowledge of teaming was very limited. A good lumberman will sooner or later come to the same conclusion. The more experience he has the more he will find out that he has still more to learn.

P. O. DYSART.

TORONTO, July 25th, 1888

Editor Canada Lumberman.

It may be presumptious for a retail man to reply to the article "Wholesaler," but being constituted as we are we will [illegible] "Wholesaler," and endeavor to express our opinion, even at the risk of being cut [illegible] a few more old saws, badly set and recklessly set in motion by this wholesale man.

Retail men, one and all, will not buy at the mills—[illegible] will not [illegible] the wholesale purchasers of the stocks? As the lumber must be seen; consequently the lumber must be brought here to be inspected, examined, etc. As the mill men do not, to any alarming extent, [illegible] to this point on speculation, it must be the wholesalers who do so. In paragraph number two we are gravely informed that on condition of not going to the mills the wholesale men promise not to break bulk nor sell to consumers. Again in the same paragraph we are told that during the past winter retail men did not retire more than 25% of their paper as it matured and wholesale men had to carry them through.

Observe, firstly, one and all retail dealers decline to purchase at the mills; secondly, that without exception they all require the wholesale dealer to pay the entire freight charges, excess included, still more the wholesale men had to carry 75% of the retailers paper, from all of which we infer that all without exception buy from the wholesale dealers. Such being the admission of "Wholesaler" (*vide* communication) whence the necessity of the condition required and which the most important men in the retail branch decline. In other words, the wholesale men ask the retailers to do what they are not doing. Is Lord Dundreary redivious? This is something "no fellah can understand."

As the wholesale men sell to the best consumers we have, the retailers have the men who possess but small capital and to whom they are compelled to grant renewals, hence the necessity for the retail men in turn requesting renewals. The price to the consumer supplied by the wholesale men being the same as to the retailers we are thus precluded from selling them and are hampered by the wholesaler. We must not raise any objections or we will be treated to the wisdom of the ancients (not by Bacon) in a condensed form.

One esteemed friend in classing the sale of a car of lumber with wholesale transactions is immensly humourous.

While still of the opinion that the R.R. yards should not be kept as a preserve for wholesale men, we are glad to know that they have actually condescended to make an offer to the R. R. Co.; and that they are desirous of paying for what they receive, although, sad to relate, sometimes they pay for more than they get. Unfortunately this occurs frequently in these degenerate days. With this communication, adieu.

PINUS.

THE FIRE RECORD.

The shingle and heading factory of Mr. D. Tennant, Hepworth, Ont., was destroyed by fire July 11. Loss, $2,000.

The saw and shingle mill of Mr. J. S. Levericht, Sturgeon Lake, Ont., was destroyed by fire June 21st. Loss, about $4,000.

McLellan's saw mill, in the twp. of Burpee, was destroyed by fire, together with a valuable horse, on the night of the 2nd July. The loss is estimated at $5,000.

A large boat belonging to the Georgian Bay Lumber Co. was burned at Waubaushene July 17th. A storehouse belonging to the same company was also consumed.

A warehouse owned by J. C. Schliehauf, at West Lorne, was destroyed by fire on July 8th, together with about 4,000 feet of lumber and the M. C. R. cattle schutes.

Lafrenciere's immense sawmills at Louisville, Que., were burned July 13th. A large number of logs were lost. The damage, it is expected, will reach $100,000; partly insured.

Bush fires at Carron's siding, Midland railway, burnt the station, 6,000 telegraph poles, a large quantity of cedar posts, several thousand cords of wood and a steam saw mill. Loss $15,000.

Callaghan Bros'. shingle and saw mill at Emily creek, on the south shore of Sturgeon lake, were destroyed by fire recently. A Mr. Leveridge of Port Hope owned the buildings. Loss about $5,000, with a slight insurance.

Mr. Geo. Thompson's steam sawmill, near Wingham, Ont., was destroyed by fire July 24th, together with about eight hundred cords of hard and soft wood slabs, sawn for firewood. Insurance on mill is said to be $1,000. Loss about $3,000.

A fire broke out in the engine house of Heap's cabinet factory at Oshawa on July 6th. Considerable damage was done as a good deal of lumber was being dried in the kiln attached to the engine house, but the loss is covered by insurance.

On June 27th the saw mill belonging to Kramer Bros. a few miles from Teeswater, Ont., was completely destroyed by fire. Loss on mill, logs, lumber, lath and shingles, about $5,000; no insurance. An effort is being made to enable the late owners to rebuild.

A most disastrous fire occurred at Southampton, Ont., the first week of July, through which about four thousand ties, two cars belonging to the Grand Trunk railway, and about one hundred and fifty feet of the south landing piers, the property of the government, were burned.

The town of Gravenhurst had another very narrow escape from being destroyed by fire on July 10th. Sparks from extensive bush fires on the south-west side of the lumber yards of Messrs. Mickle, Dyment & Son, Isaac Cockburn and Thomson & Baker nearly proved disasterous not only to the extensive piles of lumber just mentioned but also to the town. By the prompt response, however, of the firemen no serious damage was done.

A most disastrous fire occurred at Milmay, Ont., July 26th, by which the large roller mill, saw mill and private residence of Messrs. Eidt & Schmidt were totally destroyed. In the roller mill were about two thousand bushels of wheat and a large quantity of lumber was also destroyed. Burning shingles were carried a great distance and were the cause of two or three small fires in the village, which were luckily extinguished before gaining any headway. The loss is estimated at $20,000; insurance, $5,000.

A dispatch from Montreal under date of July 6th, says: Terrible forest fires are raging on the line of the Canada & Atlantic Railway, between here and Ottawa. Eighteen miles of track have been destroyed and cars were burned at McCaullay's Landing; also three mills and many houses were destroyed, and many thousand feet of lumber were swept away. The settlers are clearing out. Wade's saw mill, 5,000 cords of wood, five freight cars, five houses, and thousands of cords of tan bark have been destroyed. The country on each side for some days has been utterly impassable.

On July 7th a very disasterous fire raged at Corson's siding on the Midland railway, destroying the station and everything in the vicinity of it. The property destroyed consisted of 4,000 telegraph poles, an immense quantity of cedar posts and ties, several thousand cords of wood, a large quantity of lumber, together with Decatur's steam sawmill and outbuildings; also Capt. Corson's coal house with a considerable quantity of coal. The loss is roughly estimated at $10,000, and so far as can be learned the property was not insured. The fire was caused by a spark being carried by the wind from bush fires two miles distant.

During the early part of July, Mr. T.B. Tait's saw and shingle mill at Germania, together with the season's cut of lumber—about 500,000 feet, was totally destroyed by fire. It is supposed to have been caused by sparks from the refuse burner which caught in the mill and spread from it to the lumber yard. The high wind which prevailed at the time rendered it impossible to do anything to check the fire. Very general sympathy is felt for Mr. Tait in his serious loss which will amount to about $10,000, insurance only $2,000. This is the second mill on this site that Mr. Tate has lost by fire, besides the boarding house at Germania two years ago, and his residence at Gravenhurst. It is understood that he will not re-build at Germania.

CASUALTIES.

Eli Michaud was drowned a few days ago at Eddy's boom in Hull.

A man named Joseph Morceau had his leg badly jambed by one of the log carriers in Booth's mill at Ottawa recently.

A man, whose name we have not learned, had his hand cut off in Day's shingle mill, Manitowaning, a few days ago, and died the following day.

A colored man named Chas. Johnston, engineer at A. Dallas' stave mill, Chatham, Ont., was instantly killed July 19th by being caught in the belting.

While hewing a stick of timber at Rodd's new saw and shingle mill, near Lindsay, Ont., J. P. Miller allowed the axe he was using to slip which cut in the instep severing an artery. He had a narrow call, but is now doing well.

A despatch from Minden, Ont., says that John Massales, a young man working on one of J. M. Irwin's drives, was drowned while breaking a jam in the rapids on Gull River, about four miles from Minden. His body was found about a quarter of a mile from where he fell in. His parents live near Haliburton.

Mr. Darwin Stevens, chief millwright at Hamilton Bro.'s mill, and one of the most respected citizens of Hawkesbury, Ont., was accidentally drowned there on July 23rd. He was walking on a boom at the edge of the Yuile and slipped off into the rapids, the strong current sweeping him down quickly beyond help.

On July 20th Master Charles Kerr while attempting to put on a belt on a pulley in Messrs. Bick & Sons planing mill at Cannington, Ont., his right hand caught in the belt and was wound around the shaft till his arm was pulled clear from the body at the shoulder. The unfortunate lad is reported as doing well under his trying ordeal.

On Friday, July 13th, six men employed by the Eau Claire Lumber Co., Calgary, lost their lives in Kamanskis rapids on the Bow river, 45 miles west of Calgary, while driving logs. At that hour nine left the camp in a boat for the opposite shore to commence the day's work. The point at which they attempted to cross, though not considered dangerous, is only a short distance above a chute of some five or six feet. When the boat got within a few feet of the shore the hands attempted to snub her to a stump on land by throwing a line. In this they failed, the boat became unmanagable and swung around in the current, instantly acquiring such a momentum of speed that before anything could be done to stop her she shot over the fall like an arrow. In the leap over the first falls she only shipped a little water and she passed the second fall without shipping any more. Just after passing the third fall, however, she struck a rock and capsized. Three men managed to catch the upturned boat, but the other six were carried down stream and drowned. The three shortly afterwards were rescued.

ITEMS OF INTEREST.

A dozen trees planted each year may change the appearance of a farm greatly in a generation, and lead along to income, very satisfactory as well.

An exchange says it takes $60 each year to provide a farmer with fuel in Dakota. The stumpage question does not bother the authorities out there.

The Dodge Wood Split Pulley Company, of Toronto, of which Mr. Samuel May is president, have purchased a site for their new works at West Toronto Junction, near that city, and will, during the present season, erect extensive buildings thereon.

A Pittsburg mechanical engineer, 82 years old, is said to have invented a novel movable dam, by which he claims a boating stage of water may be obtained in shallow rivers at all seasons of the year, and old river men have pronounced the invention practical.

It is most desirable that encouragement be given to the cultivation of trees, and in order to prove more effective, some other system than that of appointing an arbor day will doubless have to be resorted to. The granting of prizes in each municipality, for the best ten acres or more of trees, might have a good effect.

Ebony can be imitated on wood by first painting with one per cent. solution of sulphate of copper. When perfectly dry, the wood is painted over with a liquid consisting of equal weights of aniline hydrochloride and spirits of wine. The blue vitrol acts on the aniline, and forms nigrosin, a black which cannot be affected by acids or alkalies. A luster can be added by coating with simple copal varnish.

Log drivers are important personages at this time of year, and are being talked about by everyone. The Menominee (Mich.) *Herald* says they have a nomenclature of their own, containing words unintelligible to the uninitiated. We have heard a few, but cannot perhaps give the correct idea of their meaning. "Wing-jam" is said to be a collection of logs on the shore of a stream, while a "center" is a jam of logs on an island. "Breaking a center" is, of course, dislodging logs "hung up" on an island. "Tow head" is reported to be a small island, invisible at high water, but sticking up as the water recedes, just enough to catch logs floating down stream and stop them. A "sweeper" is an uprooted tree which has fallen into the stream, and oftentimes as a log or boat containing the men comes upon such an object unexpectedly the poor fellows are swept off into the flood.

THE LATE STRIKES.

Since the part of THE LUMBERMAN containing a report of the strike among lumbermen in the Georgian Bay and Ottawa districts went to press we learn that the strikes in both places have been amicably settled. The men in the Georgian Bay district, it is stated, have succeeded in making a compromise with their employees which enables them to draw their wages fortnightly instead of monthly as heretofore. They will, however, work eleven hours per day as in the past, not having succeeded in getting the reduction asked for.

The men in the employ of J. R. Booth, of Ottawa who went out on strike for an increase of wages, have returned to work on the old terms on the understanding that if upon examination of the pay sheets of the business it is discovered that the employees of Mr. Booth are receiving less pay for the same work as is paid eleswhere that the deficiency, whatever it may happen to be, will be made up.

GENERAL NEWS NOTES.

—The British steamer [illegible] Mass., from Chaleur Bay, N. B., [illegible] way ties, which is said to be the [illegible] taken to Boston and the *Alaska* is [illegible] the business.

—A feature of the London (Eng.) Board of Trade timber returns is that affording us an insight into the enhanced value which importers have given for this year's purchases. The chief increase seems to have been on hewn descriptions, which represent intrinsically over £120,000 more value than *pro rata* they did June twelvemonth. The sawn wood exhibits an increase in cost of over £60,000. These values are estimated from the shipping documents, and therefore are fairly accurate.

The following is a comparative statement of Timber, Masts, Bowsprits, Spars, Staves, etc., measured and culled to July 18th at the Port of Quebec:

	1886.	1887.	1888.
Waney White Pine	1,007,646	604,648	586.948
White Pine	744.676	456.588	162.902
Red Pine	157,364	355,877	170.689
Oak	450,015	335.557	557.270
Elm	384,175	160,012	109,695
Ash	92,159	30,136	68.212
Basswood	218	64	.....
Butternut	192	55	419
Tamarac	3,285	3.047	1,257
Birch and Maple	153,742	114,228	124,995
Masts and Bowsprits	—pcs.	—pcs.	—pcs.
Spars	—pcs.	—pcs.	—pcs.
Std. Staves	36.1.3. 1	38.3.2.22	18.9.2.27
W. I. Staves	8.1.2.17	65.9.1.26	168.8.2. 5
Brl. Staves	.....	13.5.3. 3	11.4.3. 5

Hardening Wood.

"The recently invented process," says *Iron*, "by which wood is made to take on some of the special characteristics of metal, has been turned to practical account in Germany. By this process the surface becomes so hard and smooth as to be susceptible of the high polish, and may be treated with a burnisher of either glass or porcelain; the appearance of the wood being then in every respect that of polished metal, having, in fact, the semblance of a polished mirror, but with this peculiar and advantageous difference namely, that, unlike metal, it is unaffected by moisture. To reach this result the wood is steeped in a bath of caustic alkali for two or three days together, according to its degree of permeability, at a temperature of between 165 and 197 degrees Fahrenheit. It is then placed in a second bath of hydrosulphate of calcium, to which a concentrated solution of sulphur is added after some twenty-four or thirty-six hours. The third bath is one of acetate of lead, at a temperature of from 95 to 120 degrees Fahrenheit, and in this latter the wood is allowed to remain from thirty to fifty hours. After being subjected to a thorough drying, it is in a condition for being polished with lead, tin or zinc, as may be desired, finishing the process with a burnisher, when the wood apparently becomes a piece of shining polished metal.

THE NEWS.

ONTARIO.

—The Collingwood Dry Dock has been disposed of at Bailiff's sale.

—Bush fires have been very bad in the country surrounding Byng Inlet.

—River driving on the northern waters is said to be three months ahead of 1887.

—Pierce & Co's mills, at the Chaudiere, are now running at night by electric light.

—The machinery for the Neebing Lumber Company's saw mill at Port Arthur has been shipped.

—Burton Bros., of Byng Inlet report that their cut up to July 21st amounted to over 5,500,000 feet.

—The Spanish River Lumber Company lost $12,000 by the extensive fires which totally destroyed their two camps.

—David H. Cameron, lumberman, Boundary Line, has assigned. His liabilities have not yet been ascertained.

—McLachlin Bros., the well known lumbermen, have generously granted to Arnprior a site for the new town hall.

—A Detroit firm is now shipping several thousand cords of spruce and other soft wood, for paper making, from Port Findlay.

—The McBurney & Laycock Lumber Co.'s mlil at West Gravenhurst recently cut 250,000 feet of lumber with one circular in a week.

—About 22,000,000 feet of logs are adrift in Lake of the Woods. The break was caused by a raise in the water letting the logs out of the booms.

—From almost every section we learn that the drives are progressing very favorably, and in some localities are months ahead of previous years.

—Messrs. Burton Bros. steam tug "Metamora" has brought to Byng Inlet three tows of logs this summer, each tow exceeding 16,000 pieces.

—Messrs. Cummer and R. Young, sawmillers, of Arran, were each severely fined recently for allowing sawdust from their mill to fall into the river.

—The Algoma Mining and Lumber Syndicate will shortly commence work on some of their valuable properties at Goulias Bay and Garden River.

—Graham, Horne & Co., of Port Arthur, have secured the contract for supplying all the lumber necessary to complete the new elevator at Fort William.

—A fine drive belonging to the Rathbun Co., of Deseronto, consisting of about 160,000 logs, passed down the Otonabee river during the early part of July.

—During the recent storm the tug Superior had 12,000 logs in tow for the Victoria Harbor Lumber Co. The logs broke loose and were lost near Giant's Tomb.

—The smoke stocks of the Midland & North Shore Lumber Co's timber and shingle mill has been raised and the new mill will be ready to commence cutting in a short time.

—Thirty feet addition is being built to the saw mill at Young's Point by Mr. C. Young. He has a big order for shingles which will tax the capacity of the mill to supply.

—The steam barge *W. B. Hall*, owned by the Midland & N. S. Lumber Co., was recently loaded with 500,400 feet of lumber in a little less than seventeen hours. This is a good record.

—At a recent meeting of the directors of the Lakefield Lumber & Manufacturing Co., Mr. A. V. R. Young, chartered accountant, of Peterborough, was appointed auditor for the Company.

—Messrs. Hurdman & Co's new mill at the Chaudiere is now running, and will increase this season's cut by about 30,000,000 feet. The mill is lit by electricity and will run day and night.

—Bush fires have been doing an incalculable amount of damage throughout the country during the past month. The recent rains have done much, however, towards putting a quietus to the flames.

—Mr. Archie Brook's raft of 25,000 feet of square timber rafted at Belleville, has recently reached Quebec. It was a fine lot of timber and the Quebec papers note its quality in announcing its arrival.

—John Hoffs, night fireman in the Cedar mill, at Deseronto, has received notice from Washington, D.C., that he is entitled to a pension and will hereafter receive $20 per month; besides he will get $3,000 back pension.

—The Madawaska Improvement Co. is about to purchase a steam boat for use on the improvements on the Madawaska river. The company begin its operations next spring when it will bring the Madawaska drive into the Ottawa river.

—Sawdust explosions are becoming a very common occurrence in the Ottawa river. A few days ago the sawdust seemed to concentrate in one place and suddenly rose ten feet out of the water in a large column accompanied by a loud report.

—Some of the mills at the Chaudiere are being supplied with a new patent fire alarm apparatus, which will locate the exact vicinity of a fire a few seconds after it starts. In various parts of the buildings, thermometors are attached to an electric wire.

—The Upper Ottawa Improvement Company and Capt. Goulet have gathered together nearly 44,000 logs which broke loose from the tows on Deschenes Lake during the recent storm. They have been pocketed along the shores and towed into the booms.

—N. Dyment has already put in his Goderich yards 1,150,000 feet of lumber this season, and expects to handle five and six million more feet before the season is over. Besides the schooner J. N. Carter, it is expected that he will have two more boats put into the harbor carrying trade shortly.

—The drive consisting of 100,000 logs, belonging to the Messrs. Gilmour, of Trenton, now on its way down the Otonabee river, is made up of some of the best logs which have passed through these waters for a considerable time. All the drives in this direction, so far, have made good headway.

—Lumber operations in Toronto are reported quiet and likely to continue so for some time. It is said that sooner or later the manufacturers will be compelled to reduce prices as the margin for middlemen is considered very meagre. Out of town shipments are slow, freight rates being nominally the same.

—The canal statistics for 1887 shows that the Canadian Pacific and Canada Atlantic railway have become formidable competitors to the canals in the Ottawa district. The quantity carried from Ottawa by these two railways in 1886 was 89,000,000 feet, which increased last year to 100,000,000 feet, while the canal traffic decreased 22,000,000 feet in the same period.

—Mr. D. A. Martin, Messrs. Bronson & Weston's upper Ottawa agent, who returned from a four weeks' canoe voyage on the upper reaches of the Ottawa reports extensive fires on Wm. Mackay's limit near Mattawa, and also on the limit of the Messrs. Klock Bros,, near Klock's mills. There are other extensive fires, he says, on the south side of the Ottawa, but none on the north side.

—The Commission appointed by the Dominion Government to investigate the proposed course of the Trent Valley Canal have been over the ground thoroughly and will doubtless soon present their report to Parliament. The T. V. canal would if constructed prove a great boon to the section of country through which it passes, and would be of particular benefit to the lumber trade.

—The dam built by the Dominion government at the Lake of the Woods, near Rat Portage, last spring, gave way recently carrying with it the colonization bridge, built by the Ontario government. The loss will be over $10,000. The lake is very high. There is plenty of water power without the dam, to run the mills, the dam only being of use when the water is very low, in occasional seasons.

—The losses from rafting on the lakes are very great. Recently on Lake Huron a large raft belonging to Dellar, of Marquette, en route to Bay City, was run into just above Lake George in the St. Mary's river by the C. P. R. boat Athabasca, and the logs were scattered all over Lake George. The raft contained between 2,000,000 and 3,000,000 feet. It is said that a legal contest will probably determine just what rights a raft has.

—Messrs. Vansickle & Bro., of Barrie, write the LUMBERMAN that their cut of lumber this year will be about 2,000,000 feet, made up as follows: 700,000 feet of Black Ash, 200,000 feet of Basswood, 100,000 feet of Elm, and the balance of stock pine and hemlock. They expect to get through cutting about the first of October, and will then send their men to the bush, to get out another stock about the same as the present one. They report trade good so far this season.

—Some of the mills at the Chaudiere are being supplied with a new patent fire alarm apparatus, which is said will locate the exact vicinity of a fire a few seconds after it starts. In various parts of the buiding theremometers are attached to an electric wire. When the heat in the vicinity of a thermometer rises above 110 degress the glass breaks. This starts a bell in the watchman's room ringing. Each of these alarm bells has a number by which the watchman can tell exactly the location of the fire.

—West Toronto Junction is becoming quite an important lumber point, several yards being already in full swing. From what THE LUMBERMAN can learn, however, it takes about as long to transmit a car of lumber from Toronto to that point as it would if it came from across the sea. Purchasers at that junction have evidently made up their minds that in order to secure a stock of lumber by a certain date they have to give the order a month ahead. The railway company is of course to blame, and it is high time that some better service should be inaugurated.

—Messrs Barnes & Co., proprietors of the large box shook factory at the Chaudiere have received an offer from the City Council of St. Albans, Vt., of a complete new factory, fully supplied with power, exemption from taxation and in addition a bonus of $10,000 if they would consent to remove their business to that point. The offer has been refused. The firm employ about 300 hands, all of whom reside in the city of Hull and at the rate they are now manufacturing they will purchase about 18,000,000 feet of lumber a year from the Chaudiere lumbermen.

—The latest estimates of this season's cut by the Ottawa mills makes a total of 405,000,000 feet, the largest, it is said, for ten years. The estimates of the different firms are as follows: E. B. Eddy Manufacturing Co., 90,000,000 feet; J. B. Booth & Co., 75,000,000; Hurdman Bros., 70,000,000; Perley & Pattee, 60,000,000; Bronson, Weston & Co., 55,000,000; Pierce & Co., (formerly G. B. Grier & Co.) 35,000,000; Conroy & Co., 30,000,000. Down the river the Gilmours will saw about 50,000,000 feet, and Edwards & Co., of Rockland, 40,000,000. All the mills are running day and night.

—Mr. J. M. Irwin, of Peterborough, has three magnificent drives on the way to his mills at Nassau. We understand there is a total of eight million feet in all, principally made up of dimension timber. The superintendent, Mr. G. S. Thompson, informs us that they have had exceptionally good success in their stream driving this year, there being abundance of water to float all the logs without trouble. The foremen of the three drives referred to are C. Austin, G. Johnston and T. Preston. This timber comes from the Canadian Land & Emigration Company's lands in the township of Harburn, Guilford. The total cut at the Nassau mills this season will be about 14,000,000 feet.

—A raft of white pine; says the Ottawa *Journal*, belonging to Hale & Booth spoken of in those columns as passing over the Deschenes rapids on Monday last, and which was said to be of unexceptional quality and size, was yesterday sold to arrive at 38 cents per foot. This is said to be probably as big a price as ever paid for white pine on the Ottawa, and shows what quality and a clearing Quebec market will do for the enterprising lumbermen. The total amount paid for the pine was $53,000. The excellent quality is accounted for by the fact that the timber is the first cut on the new limits on the Amable du Ford, sold by the Ontario Government last season. Another raft from the same section the property of Mr. Mackay, of equal if not so large quality, is coming down in good shape. The raft was sold to Dobell & Co., of Quebec.

—Advices have been received by Messrs. Perley & Pattee from Little Basin depot, on the Bonchere river, that on Tuesday, July 17th, the bush fires which were burning there destroyed the Little Madawaska depot on the Petewawa and about $10,000 worth of provisions, stock, shanty implements, etc. The communication received by the firm here says that the fire began on the back of the limit, near Cedar Lake, and swept right across the country past Little Madawaska depot and was within a mile of Little Basin depot when Wednesday's rain damped but did not extinguish it. Had it not been for the rain on Wednesday a gang of one hundred men from the timber drives, who were engaged trying to stay the fire, might have perished about a mile from the depot. They were completely surrounded by masses of burning timber. The rain dampened the fires sufficiently to allow the men to escape from their dangerous situation.

—The Longford Lumber Co. write as follows to the *Northwestern Lumberman*:—"Our Company this season has taken out its usual stock of logs, about seventeen million feet. We found last winter to be one of the best for taking out stock, their being continual steady cold weather. Fears were entertained early that the supply of water for driving would be short, but on account of the dull backward spring the water in our streams has held up well, and our drives are fully one month ahead of other seasons. Our three mills started running about May 1st, and so far our stock is coming out fully up to the average, both in quality and manufacture. The demand for dry lumber is good, many lines being already cleared out of our yards, a large portion going to Boston by all rail route. We are anxiously waiting the action of Congress on the tariff question, and we presume our neighbors must be in the same mood, as we have not seen reports of many sales of the new cuts."

QUEBEC.

—The first cargo of white pine shipped for the season from Montreal to the River Plata, South America, cleared June 19, and amounted to about 450,000 feet.

—The E. B. Eddy Manufacturing Co. have taken a new departure in manufacuring from sawdust vessels in the shape of a pot capable of resisting heat and fire.

—Reports from Montreal go to show that there has been more activity in lumber and sales have been more frequent of late. The sales so far have been in excess of the same period last year, and prices continue satisfactory.

—The prohibition of the passage of cribs through the Grenville canal was owing to the rafts impeding boat traffic and causing injury to the canal works. In view, however, of the construction of the dam across the Ottawa river at Carillon, free passage will be given to rafts through the Carillon canal. At low water it has been decided to allow rafts to use the old Ste. Anne's canal.

—At the annual meeting of the shareholders of the Quebec and Lake St. John Railway Lumber and Trading Company, the following were elected directors: Hon. J. G. Ross, Hon. I. Thibaudeau, E. Beaudet, Sir A. P Caron, Hon. P. Garneau, Thos. A. Paddington and Gaspard Lemoine. At a subsequent meeting of the directors Hon. J. G. Ross was elected president, and E. Beaudet vice-president.

—Application has been made by Mr. J. T Lewis to admit to probate in Ontario the will of the late Hon. John Hamilton, of Montreal, lumber merchant. The personal property of the deceased gentleman in Ontario, exclusive of real estate, was sworn to at $600,000. This amount does not include the $600,000 worth of limits sold a few days ago, which are in the Province of Quebec, nor any of the other Hamilton property in Quebec.

—Mr. J. B. Charleson, inspector of forests for the Province of Quebec has returned from a lengthy examination of timber lands around the head waters of the Ottawa river. He found that a firm of square timber makers, having headquarters at Mattawa, and with whom a prominent M.P.P. is said to be closely allied, trespassed upon government limits around Lake Expanse stumpage and took therefrom 3000 valuable trees, for which no stumpage dues were paid. It is also hinted that the trespass was committed with knowledge and connivance of officials of the Crown timber office there; that the parties trespassing are not regular lumbermen, but speculators.

—R. H. Klock & Co's raft of square timber is now a considerable way below the Mountain Rapids on its way to Quebec. This timber was taken out on the shores of Lake Quinze during last winter. It is a fine lot of timber, being sound and well made. The raft consists of 135 or 140 cribs and although it was driven through the Quinze rapids, (the roughest rapids on the Ottawa river) it sustained little or no damage therein. The drive was under the management of Mr. Wm. Wade, the well known pilot of Grenville. It is credibly stated that this was the fastest drive that has ever been made without leaving a single stick behind, and it is alleged the sweep would have been less arduous had not Messrs. Gillies Bros. let down their logs on the top of the timber. Mr. Wade expects to reach Quebec before the last of July.

NOVA SCOTIA.

—It would take fifty trains of fifty cars each to transport the lumber contained in Leary's log ship. The ship will in all probability be launched before this paper goes to press. The cost of this log ship if landed successfully in New York is as follows: Timber's cost in Nova Scotia, $13,000. The towage will cost $100 per day, and the logs will be sold in New York for $50,000.

MANITOBA AND THE NORTHWEST.

—The planing mill at Selkirk, Man., is now completed, making another addition to the industries of that town.

—Owing to the dry weather, bush fires have been doing a great deal of damage lately in the timber country east of Winnipeg, in the vicinity of Whitemouth, where there are lumber mills.

—Tree-planting is being carried on to a considerable extent throughout the Northwest. The present has been a very favorable one for this kind of work. Steady cultivation when this is practicable, or a heavy mulching where the grass needs to be kept down, are necessary to complete the work well begun.

Following are the list prices, f. o. b. at Rat Portage, Keewatin and Norman:—Dimensions—2x4 to 8x8, 12 to 16 ft. long, $14; do. 10, 18 and 20 ft. long, $15; 2x10 to 12x12, 12 to 16 ft. long, $15; do. 10 and 20 ft. long, $16. Fifty cents per M advanced on each foot over the above length up to 24 feet long. One dollar per M advanced on each foot over 24 feet long. $1 per M advanced on each inch over 12 inche surface. Surfacing, 50c. per M; Surfacing and siding, $1 per M. Boards—1st, common, rough, $15.50, dressed $16.50; 2nd common rough $14, dressed, $15; Culls, rough, $10; dressed, $11; 1st common stock, 12 in. rough, $18, dressed. $19; do. 8x10 in. rough, $17, dressed, $18; 2nd common, 12 in. rough, $16, dressed, $17; do. 8x10 in. rough, $15, dressed, $16. Ten feet long and under, $1 less per M. Shiplap—10 in. $17; 8 in. $16.50. Siding, ceiling and flooring—1st, 6 in., $31; 2nd, do., $26; 3rd, do., $20; 4th, do., $17; 1st, 5 in., $31; 2nd, do., $26; 3rd, do., $19; 4th, do., $16; 1st, 4 in., $31; 2nd, do., $26; 3rd, do., $18; 4th, do., $15; 8 and 10 in. flooring, at $1 per M advance. $1 per M advance for dressing on both sides. $1 per M less for lengths 10 feet and under. Bevel siding—No. 1, 1st siding ½ in. x 6 in. $20; No. 2, do., $17. Stock—B, $35; C, $30; D, $25. Clear, 1 inch—1st and 2nd, $32; 3rd, $28. 1¼, 1½ and 2 inch—1st and 2nd, $40; 3rd, $35; selects, $30; shop, $25. Mouldings—Window Stops, per 100 feet lineal, 75c.; Parting Strips, do., 50c.; ¼ round and cove, per 100 feet lineal, 60c. Casing—4 in. O. G., per 100 feet lineal, $1.50; 5 in. do., $1.75; 6 in. do., $2; 8 in. O. G., base, $3; 10 in. do., $3.75. Lath, $1.75. Shingles—1st quality, $3; 2nd do., $2.50; 3rd do., $1.50; 4th do. $1. Dealers are requested to order by number.

BRITISH COLUMBIA.

—The Royal City Mills, New Westminster, B. C., has been shipping fir sill timber to some of the larger car works in the United States, and lately shipped a lot 65 feet long, and without knot or flaw, to the Crossen Car Works, Cobourg, Ont.

—About a month ago the collector of customs at Vancouver, in interpreting the customs law imposing an export duty on logs, included piles. In one instance the duty was exacted and paid under protest by the shippers, who held that piles were manufactured timber and as such not subject to duty. The matter has since been referred to the department at Ottawa, and information has been received that the decision of the local collector has been over-ruled and the money refunded.

—The industries and resources of Vancouver are many in number and diverse in their character. The production of lumber on Burrard Inlet is the largest on the British Pacific coast. Great as it is a considerable addition is expected to be made to its amount in a short time by the erection of one or more large mills. Within the last year sash and door and furniture factories have been started and already their productions are being shipped to the far east both to the Dominion and to the United States. Several other wood-working industries are expected to be commenced shortly.

AMERICAN NOTES.

—A syndicate of Michigan lumbermen have bought up 50,000 poplar trees in North Carolina and Tennesse quite recently.

—The present season in Cheboygan is one of the best in the way of manufacturing and shipping lumber, experienced for years past.

—The J. E. Potts Salt & Lumber Company, Au Sable, Mich., will likely extend its logging road from its pine timber in Oscoda county, to Au Sable, 50 miles below.

—In Kansas City cypress is being used for stringers for sidewalks and yellow pine for planking, and cypress is also used for the bed planking under the cedar block paving.

—Each year it takes 500,000 acres of timber land to supply cross ties for United States railroads. For all purposes the decrease of their timber area is over 50,750,000 acres per year.

—The publication of a paper has just been commenced at St. Paul, Minnesota, called the *Western Tree Planter*. The paper will advocate the planting of trees on the western prairies, and will give special directions as to tree planting.

—Mr. A. Latch, at one time engaged in the wholesale lumber trade at Toronto, Ont., but now in Mexico, has been in New York buying a complete saw mill equipment, and intends going somewhat extensively into the manufacture of mahogany.

—Fire originating in a sawdust pile at H. R. Morse's mill, Alpena, Mich., July 11th, rendered 1,500 people homeless and in a few hours had destroyed 200 houses. The loss exceeds $300,000, with but slight insurance. At least 3,000,000 feet of lumber were burned.

—A cargo of timber and deals loaded at Mobile, Ala., by Donald Bros. & Co., for Queensboro, Eng., valued at $8,000, was lost by the abandonment of the American ship Zouave, at sea. Two of those on board were drowned, and the others were rescued in a half starved condition.

—The immense raft owned by Mosher & Fisher, lost on [illegible] it is said that men are now engaged in that work. The logs are scattered for a distance of 30 miles on the north shore of Lake Superior, and also for some distance on the south shore.

There is a struggle between the buyers and manufacturers of poplar in the United States. It has been generally acknowledged that a lumber which can so successfully replace pine as poplar should sell at prices more nearly corresponding to those of pine.

American lumbermen are preparing to develop the Cuban forests. One man who several years ago bought 30,000 acres there for $50,000, is now worth $5,000,000. One half of Cuba is covered with virgin forests. Its stumpage is thought to be worth fully $15,000,000.

--One of the most extensive schemes for rafting logs on the great lakes is that proposed by a Saginaw firm. It involves floating 10,000,000 to 15,000,000 feet of logs the entire length of Lake Superior, running them down to the Sault Rapids and through the river into Lake Michigan, and thence to and up Saginaw Bay. The logs were cut by the C. N. Nelson company of Cloquet.

—White pine is arriving in New York and the West, and so far as heard prices remain unchanged. The buyers proceed carefully but do not show by their actions that they expect lower prices. They will be conservative buyers this season. Export is just middling. It cannot be called dull as there is an average amount being loaded for foreign parts, the most of it destined for the West Indies and South America.

—The lumber and shingle receipts and shipments at Buffalo, N. Y., from the opening of navigation to July 1, were as follows:

RECEIPTS BY LAKE

	1888	1887	1886
Lumber, ft	68,181,000	72,165,000	75,[illegible]
Shingles, no	4,067,000	8,385,000	14,420,000

SHIPMENTS [illegible]

Lumber, ft	12,446,700	15,435,200	13,925,113
Shingles, no	1,434,750	2,183,000	1,100,000

The exports of lumber, exclusive of hardwoods, from the port of New York, during the month of June last and since January 1, were as follows:

To West Indies	[illegible]
To South America	[illegible]
To East Indies	[illegible]
To Europe	[illegible]
Total feet	[illegible]
Previously reported this year	[illegible]
Total since Jan. 1, 1888	[illegible]
Total same time, 1887	[illegible]

EUROPEAN NOTES.

—Chartering has been active during July and most of the coast and London importers have now made fair progress towards the completion of their tonnage requirements.

—We learn from Farnworth & Jardine, of London, that the demand for both waney and square has been on a moderate scale, and quite of a retail character; prices have been steady, and the stock is now reduced within a very small compass. In red pine nothing has been done, and the stock is almost exhausted. Oak: The consumption of logs has been fair, and has consisted chiefly of prime wood, recently imported from New Orleans, for which good prices have been obtained, but in Quebec wood little has been doing and the stock is moderate. Oak planks from the States have been imported very largely, much in excess of the demand, consequently prices have declined; sales are difficult to effect, and the stock has accumulated, and is now very heavy. Elm has been rather more enquired for, and the stock is moderate. Ash is in moderate request, and the stock is light. Pine Deals: The new import has begun to arrive this month by the steamers, and so far have all been under contract, so that no wholesale transactions have been recorded; the consumption has been fairly satisfactory, and has slightly exceeded the import, and the stock is about the same as last year. In staves nothing has been doing; the stock of pipe is heavy, but of puncheon the market is bare. Speaking of New Brunswick and Nova Scotia spruce deals they say that the import has been on a moderate scale, and the deliveries from the quays have been large, having been more than double the import, leaving the market with a remarkable light stock, only half that of last year and a quarter of the previous year; in spite of this it has been impossible to establish an advance in value, although prices have been steady, and the sales during the month have consisted chiefly of cargoes to arrive; shippers should act with caution and confine their operations to a moderate compass, otherwise present values will be with difficulty maintained. Pine Deals: Nothing has been doing, and the market is somewhat bare of stock. Birch, both in the log and in planks, is in active demand, the import has been considerable, and has all gone into consumption at better prices; the market is almost bare, and moderate shipments should sell well.

Millions of Logs Lost.

Recent rains have caused the greatest flood ever known in Northern Minnesota. Along the banks of logging streams tributary to the St. Louis river millions of acres of land have been overflowed. The immense saw mills in and around Cloquet were completely flooded, with 200,000,000 feet of logs jammed together. The latest reports state that the great booms at Knife falls gave way, letting loose about 80,000,000 feet of logs, which were swept down the river to Duluth. Some of them were caught in St. Louis Bay. The whole 80,000,000 feet were carried out in less than two hours. The damage is enormous, and can only be estimated in a general way.

The loss in the sweeping away of the booms, piers, etc., to the Knife Falls Boom Company and the lumber companies of Cloquet is put at about $150,000, while the loss on lost logs, the extra expense of handling them, and to business will be $300,000, and the damage in other ways will be enough to raise the total to $500,000 at least. The C. N. Nelson Lumber Company lost about 30,000,000 feet, saving about 6,000,000 feet. The Cloquet Lumber Company lost 35,000,000 feet, saving 6,000,000 or 7,000,000 feet, and the Water Power Company 6,000,000 feet, saving 600,000 or 800,000 feet. It is hardly possible that anything like a great proportion of the logs will be saved at all.

The Fall of the "Forest King."

A woodman wended his way thro' the wood,
Till he came to a spot where a great tree stood;
The bright sun flashed on the autumn trees,
Whose gay leaves fluttered away on the breeze.
And soon o'er the hills thro' the silence awoke,
The far-reaching echo of each mighty stroke.

The timid squirrels all scampered away,
And with a shrill scream off flew a blue-jay;
But the woodman steadily wields his axe,
And the great tree groans and creaks and cracks.
There it has stood for years three score,
But the place thereof shall know it no more.

As "King of the Forest" it held its sway
O'er valley and hill for many a day—
But now it groans in anguish of soul,
As each stroke grows nearer the heart of its bole.
The breeze that so oft has passed o'er it before,
Now sadly sighs thro' its branches once more.

Its last "farewell" is a mimic gale,
That slowly dies in mournful wail;
The noble tree sways and rocks with the breeze.
And it bids "farewell" to its kindred trees.
Then straining, rending, groaning it fell
With a thundering, echoing, crashing knell.
All its stately length stretched far o'er the ground,
And the hills repeated the echoing sound.

COLLEEN BAWN.

Railway Matters.

Negotiations are said to be on the *tapis* for the purchase, by a syndicate, of that part of the C. P. R. line extending from Ottawa to Montreal and Quebec. Mr. Beemer, Hon. Mr. Church and, it is reported, Mr. Chapleau, are interested in the scheme, which is to utilize the line between Ottawa and Quebec as the basis of a huge railway system to include the various colonization railways running north. A part of the scheme is to colonize the districts the railway will traverse. The Canadian Pacific company are said to find the working of the north shores line too expensive for the receipts it gives them owing to the lively competition of the Canada Atlantic. It is said that the C. P. R. will attempt to acquire the control of the Canada Atlantic in order to thwart the plans of the G. T. R.

The fact that Sir George Stephen, president, Sir Donald Smith, director, and Mr. Van Horne, general manager of the Canadian Pacific road, together with the officials of the Duluth, South Shore and Atlantic road, accompanied by Mr. Farrar, a prominent banker of London, England, and Col. West and Capt. Rich, of Minneapolis, are making an extended and critical examination of all parts of the Duluth, South Shore and Atlantic road, gives good reason for the belief that a stupendous magnitude between the two roads is now pending. Nothing can be learned from the gentlemen as they refuse to talk. They are travelling by special car, and are extending their investigations thoroughly from the Soo to the great mines on the Mineral range line. The presence of Mr. Farrar is taken to indicate that foreign capital is interested in the deal.

Simson & Mason *vs.* the New Brunswick Trading Company.

In the Queen's Bench Division of the High Court of Justice on Tuesday, before Mr. Baron Huddleston and Mr. Justice Charles, the case of Simson & Mason *vs.* the New Brunswick Trading Company came on for hearing.

Mr. Pike said this was an appeal on behalf of the plaintiffs against an order of Mr. Justice Cave at Chambers, setting aside an order of the Master refusing defendants leave to issue a commission for taking the evidence of two witnesses on their behalf.

The learned counsel said the action was brought for fraudulent misrepresentation against the defendant company by the plaintiffs, who were also a company, and it was an action to recover £15,000, which was paid by the plaintiff company to the defendant company, upon, it was alleged, a number of false representations, which were set out in the statement of claim. One of the alleged misrepresentations, was that Guy & Co. and Stewart Brothers were separate and distinct firms, whereas, in fact, they were not. Another alleged false representation was that each of the firms was abundantly solvent, that Guy had a large property and that Stewarts were making £40,000 a year profit. Instead of that it had turned out that Guy suspended payment with a large deficiency, as had also Stewart Brothers. A material witness in the case was a Mr. Benn, who resided at Mobile, Alabama, and plaintiffs particularly wished to have him examined and cross-examined at the trial. On the other hand defendants wished that he should be examined by commission, and this Mr. Justice Cave, reversing the Master, had ordered. Hence plaintiff's appeal.

Mr. Tyrell Plaine, for the defendants, contended that, *prima facie*, a party and especially a defendant, was entitled to a commission for the examination of a material witness, who was out of the country, except in certain particular cases, where, in the interests of justice, the importance of having a witness examined and cross-examined in this country outweighed the inconvenience of bringing him from abroad. Having cited decisions to bear out his view, the learned counsel said in this particular case the defendant, who was called upon to defend himself, had shown sufficiently by his affidavit that it was impracticable, although perhaps not absolutely impossible, to bring Mr. Benn over to this country to be examined. Mr. John Stewart in his affidavit, said Mr. Benn was carrying on his business and was permanently resident at Mobile, and in his opinion would not come over to this country.

After considerable argument the Court directed that the matter should stand over, to enable a better affidavit to be filed, showing the impossibility of getting Mr. Benn over to this country. —*London Timber Trade Journal.*

An Australian Pen Picture.

Wood and Iron gives some valuable pointers about the Australian timber trade, saying that "as Australia is a large and growing market for lumber from this coast, a description of the lumber markets of the antipodes may be found interesting to those in the trade. The timber areas of Australia, which furnish trees from which the native lumber is made, are all situated on the coast between the shore and the crest or the coast range which extends along the whole eastern side of the continent—from southern New South Wales to northern Queensland. In this timber belt there are about seventy saw mills from small to large, and all the lumber used throughout this extent of country is of local manufacture. The lumber trees of this belt are cedar (so-called), various kinds of pine, and black butt (a species of eucalyptus) from which a good quality of hardwood lumber is made. The prices of native lumber vary in different places, and it sells in Sydney at the following rates when reduced to our money: native cedar $7 @ $8 per hundred feet, pine $5@ $6, and black butt, $3@ $4 per hundred. In New South Wales the duty on foreign lumber is 24 cents per hundred feet, and in the other colonies it is higher. The lumber belt of Australia is pretty well culled throughout its limited extent, and in a very few years all the Australian colonies will have to depend wholly upon American lumber. When that period arrives, Australia, including New Zealand and South Pacific Islands, will form by far the best market in the world for American lumber, and its prospective value should not be underrated."

Ottawa Shipments of Lumber.

[Reported for THE LUMBERMAN by T. W. Hotchkiss, U. S. Consul.]

Shipment of forest products from Ottawa for the 3 months ending June 30th, 1888, as declared through the U. S. Consulate.

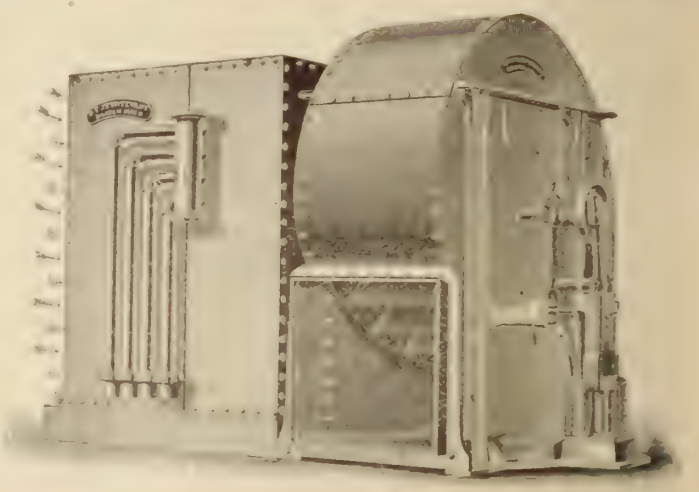
			Value.
Total Sawed Lumber, 44,425,740			$632,714.64
Shipped by Water, 23,922,012 feet			
" Rail, 20,503,734 feet		Value	
Shipped for Consumption, 30,283,760		$550,432 88	
Re export	5,142,030	$2,581 76	932,714.64
Lath M. 12,488,730			15,475.00
R. R. Ties, pcs. 87,352			18,274.95
Fence posts, 18,477			921.40
Shingles M. 683			1,093.07
Pickets			8,418.70
Match Blocks			1,276.00
Box Shooks			29,199.42
Hemlock, cords, 2,898			14,490.00
			$722,207.24

The Sturtevant System of Heating Wood-Working Establishments.

The subject of heating is one that is of interest to every wood worker, and as it is often the case that the stable door is closed after the horse is stolen, so it may be wise now that the back of a very severe winter has been broken, to consider how we might keep ourselves more comfortable and thereby be enabled to do better work. The primary consideration to which every wood-worker has to give attention in deciding upon the means of heating, is that of danger from fires. The inflamible nature of both buildings and stock is such that any protection against fire, results in a corresponding decrease in insurance rates. Stoves and furnaces although so often used are too obviously dangerous, while steam piping as it is often put up in a mill cannot be relied upon with absolute security. To avoid all danger wood work must not be exposed to a temperature equal to that of live steam of 85 lbs. pressure. Any means of heating which removes these objections has claim to introduction, provided it is equal to direct steam-heating in other respects that should be carefully considered by every interested party.

It is well known that the most certain way of heating a room or building is by securing a circulation of heated air within it. This the direct steam heating system is incapable of doing, and for this reason it is slow of action in heating up a cool building. A forced circulation of the heated air overcomes this difficulty and renders the system positive, for the air by means of ducts, flues or pipes is conducted to any desired points and compelled by the pressure behind it to do its work of heating by circulation. The only satisfactory means of compelling the air is by means of a fan of suitable construction.

From the nature of work carried on in them, wood working shops are generally provided with a system of shafting from



THE STURTEVANT STEAM HOT BLAST APPARATUS.

which such a fan may be driven. In some cases, however, where heating is desired such arrangements may be lacking and an independent engine is required for fan propulsion. Such an engine may be connected directly to the fan shaft and all loss of power through intervening shafting and belting thereby avoided. In fact, all things considered, it will be found preferable as a rule to drive the fan by a direct connected engine. It then becomes independent of any other source of power, may be run at any speed and at any time. The ordinary objection raised to this means of propulsion is that it costs to much. But a moments consideration will show that it costs practically nothing to drive the engine when the exhaust steam is utilized (as it always should be) in the steam heater connected with the fan. The heating power of live steam 70-lbs pressure, is only about three per cent. more than that of exhaust steam, hence pound for pound it makes but little difference in the expense which is employed. For this reason the engine cylinder may be considered as simply an enlargement of the steam pipe on the way to the heater, and the exhaust steam leaving it practically as efficient for heating as live steam direct from the boiler. The fan for propelling the air should be of the type which delivers the air around the periphery, for the disc or propellor fan cannot force air against pressure and often becomes negative in its effect when exposed to a strong wind. The heater fan and engine for this work are usually made up into a combined apparatus. Through the courtsey of Mr. B. F. Sturtevant, of Boston, Mass., who was the first in the country to put such an article on the market, a cut of his "Steam Hot Blast Apparatus" is here presented. He has been the pioneer in the introduction of the system to meet the requirements of which his apparatus was designed. The direct connected engine is stiff and substantial, of good workmanship and capable of running at high speeds. The fan meets the requirements of a ventilating fan, namely, abllity to handle large volumes of air at low pressure with the

expenditure of power. The heater, however, is the most distinctive part of the apparatus. It consists of a section of hollow cast iron section or bases divided by a diaphragm midway of their length and into which is screwed a triple verticle row of wrought iron pipes which by means of horizontal connecting pipes at the top (seen in the cut of the heater) serves as a means of communication between the ends. Steam is admitted at one end of these sections by independent supply pipes and finds its way up over and down through the pipes of the other end of the section whence it is removed by means of a steam trap. This arrangement insures a positive circulation of the stream through the entire heater.

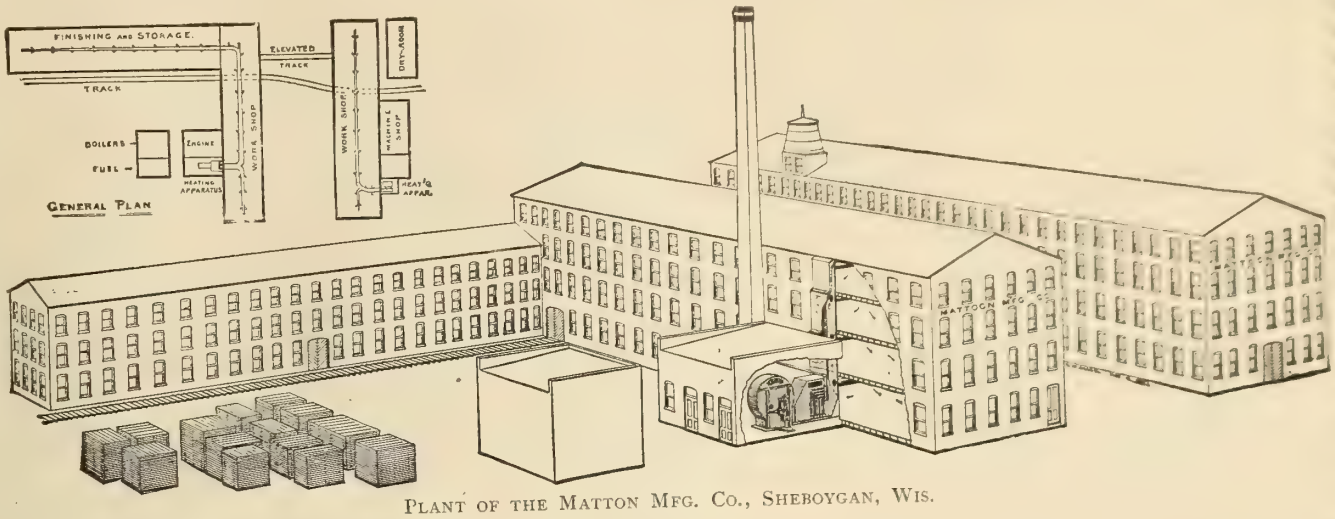
Air from out-of-doors is led by means of suitable passages to the end of the heater (or air when pure enough may be taken from the apartments in which the apparatus stands) through which it is drawn by the suction of the fan, the inlet of which connects with the heater. The steam pipes are so arranged that the air is compelled to take a more or less zig zag course in passing between them, being thereby brought into intimate contact with every foot of pipe. The result as one of the marked characteristics of this method of heating. The constant bringing of cooler air in contact with the pipes causes a condensation of the steam much greater than that which takes place in the open radiator. The amount of heat given out is measured by the weight of steam condensed, hence the greater the amount condensed per square foot, the less the number of square feet required to do a given amount of heating. In the "Sturtevant Hot Blast Apparatus" this efficiency is increased three to five-fold, or in other words 66 2-3 to 80 per cent. of the pipe is saved when the system adopted in place of one of direct radiation by means of steam coils strung around the rooms. Furthermore, instead of having air cocks and valves all over the building, and steam pipes liable to leak, freeze or cause a fire, and to which an engineer must give the closest attention, there are required in this system only a few valves on the engine and heater, and these are but a few feet apart.

The entire heater (pipes and bases) is enclosed in a steel plate jacket, entirely removed from wood work and the air leaving the blower mouth is only of moderate temperature. This point is of special importance, when the apparatus is used in a dry kiln, the reduction in insurance rates often being sufficient to pay the interest on the cost of the plant.

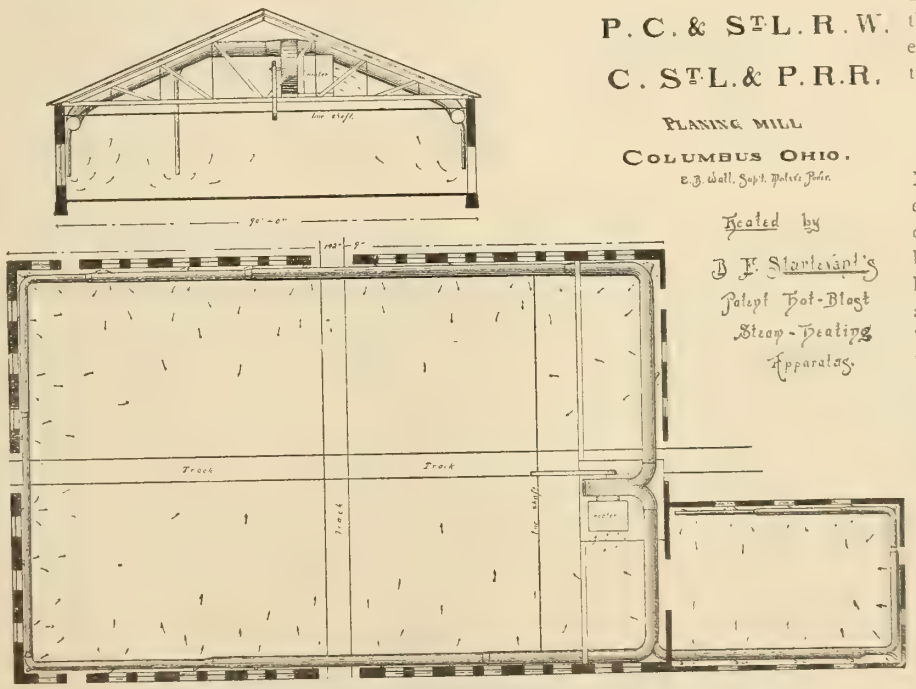
The heated air discharged from the mouth of the fan is conducted to the various parts of the building by a system of pipes or flues dependent in their arrangement upon the construction of the building and the use to which it is to be put. The entire apparatus is very compact and occupies but little space, can be made of any desired form and placed in any position. In one story shops the monitor pitch in the roof affords an excellent place for the apparatus, entirely out of the way, leaving the floor unobstructed, where such location is not possible the apparatus may be placed in any convenient position within the building or in the basement, when such exists or (as is very often the case) in a small special building adjacent to the main building.

The manner of warm air distribution in wood-working establishments is very clearly shown in the accompanying cuts which represent two decidedly different classes of structures. The one story building is the planing mill of the P. C. & St. L. R. R. at Columbus, Ohio, and forms one of the plant of six independent buildings recently fitted with heating apparatus by B. F. Sturtevant. The other cut illustrates, as arranged by the same party, the extensive furniture factory of the Matton Mfg. Co. of Sheboygan, Wis. These buildings, among many as heated by the Sturtevant system, have been chosen as typical of their classes. The former stands for the ordinary class of mill buildings of one story with pitch roof. In this case the apparatus is seen to be well out of the way, interfering with none of the machinery and being drjven direct from line shaft. The air is distributed through a system of galvanized iron pipes extending entirely around the interior of the building close to the walls and just below the level of the eaves. The complete circuit made by these pipes insures an equal and constant distribution of the air, any lack from one direction being made up from the other direction. Economy of material as well as more uniform pressure is secured by gradually reducing the sizes of the pipes (proportionately to the outlet from them) as they recede from the blower. The position occupied by these pipes is such that they are entirely out of the way, interfering neither with workmen, shafting or belting. From these mains the heated air is delivered through small verticle pipes extending down to within a few feet of the floor. By proper designing the velocity of the air, and the relative area of the pipes is such that the air is discharged with just sufficient impulse to fall to the floor which is thereby warmed. The natural circulation caused by the cooling action of the outer walls aids in this action as it also does in causing the warm air delivered from the pipes to move gradually towards the center of the building and thence to raise to the pitch of the roof where it may be allowed to escape if desired.

By placing the heating system near the outer walls the vulnerable point is attacked, and currents of cold air through crevices in the walls must encounter a warm body of air before reaching the workmen. Dampers or registers may of course be placed in the outlet pieces to regulate the delivery of the air.



PLANT OF THE MATTON MFG. CO., SHEBOYGAN, WIS.



P. C. & ST. L. R. W. PLANING MILL, COLUMBUS, O.

Although as originally designed provision was to be made fortaking fresh air from out of doors and passed it through the heater, yet up to the present time, all air has been taken from within the building itself. Owing to the comparatively small number of workmen in such shops the fresh air which enters through cracks, open doors and windows, keeps the atmosphere sufficiently pure and decided economy is secured by repeating the already warm air. The amount of steam required in the heater is proportional to the number of degrees through which the air is heated. If then air of 60 degrees temperature can be taken from the building in place of air at 0 degrees from out of doors, and if in either case it is to be heated to 120 degrees there will be a resultant saving of 50⅔ in the amount of

The plant of the Matton Mfg. Co., is representative of that class of buildings devoted to the manufacture of various articles from wood, being comparatively narrow with consider[illegible] longitudal extent, and having several floors. As will be seen by the small plan a separate apparatus was provided for each building [illegible] driven by a direct connected engine in any projections within the rooms, a deliver[illegible] building and the pipe main for the various floors are taken out from this, the vertical flue being proportionally reduced in area. On account of their narrowness a central distributing pipe was adopted from which the air is delivered through properly spaced outlets. This arrangement results in the greatest saving [illegible] relv securing both [illegible] In both cases here [illegible] Hot Blast apparatus is so closely combined that no steam piping is required throughout the building, and all valves are near at hand. Economy [illegible] one-third to one-fifth the pipe is required that would be necessary in a system of open steam coils in the various parts of the building. It costs nothing to run the engine for the exhaust steam is used in the heater. Safety — All the steam pipe is enclosed in a steel [illegible] from proximity to any wood work and [illegible] from fire is absolutely avoided. The le[illegible] often pay the interest of the plant. Efficiency — [illegible] the heated air reaches all parts of the bu[illegible] pants are not only warmed but when desired are provided with constant changing fresh air. [illegible] tem is under immediate control. [illegible] by the dampness or by c[illegible] the engine, [illegible] ent upon [illegible] the heater.

The Sault Ste. Marie Canal.

The great water power canal at Sault Ste. Marie is finally a [illegible] fact. At a very enthusiastic meeting [illegible] of the $100,000 asked from the [illegible] as a bonus, was cheerfully sub[illegible] with a like sum from the LaCrosse syndicate. The amount necessary for start will be [illegible] The work begins on the 16th inst., and will be pushed to a final com[illegible] men and money will accomplish the work and it is anticipated that it will be finished within a year. The undertaking is a great one, and in magnitude the "Soo" [illegible] canal will far exceed anything of the kind on the continent. The canal is [illegible] 14,100 feet; average width [illegible] a depth of fifteen feet. The mill pond to this great raceway is quite large, being 32,000 square miles in extent, viz., the whole of Lake Superior. This is beyond question the largest mill pond in the world, and affords an exhaustless supply of water for the multitude of industries pr[illegible] Apart from the possibilities of Niagara, that of Sault St. Marie far transcends all the world beside. The canal will give 18,000 horse-power and has a current of four miles per hour. Its course runs back of the present village, but within a few years the "Soo" will be be densely built up, so as to place the canal in the center of the fast growing city. The work of making it will be one of great labor, as for 2,000 feet it will have to be cut through solid trap rock. But the work when completed will be one for countless ages to come, and as a manufacturing centre, Sault Ste. Marie will have no successful rival in the world.

TRADE REVIEW.

Toronto, Ont.

TORONTO, July 27th, 1888.

CAR OR CARGO LOTS.

1¼ and thicker clear picks, American inspection	$34 00@35 00
1¼ and thicker, three uppers, American inspection	40 00
1¼ and thicker, pickings, American inspection	30 00
1X10 & 12 dressing and better	20 00 22 00
1X10 & 12 mill run	15 00 16 00
1X10 & 12 dressing	14 00 16 00
1X10 & 12 common	12 00 13 00
1X10 & 12 spruce culls	10 00 11 00
1X10 & 12 mill culls	9 00
1 inch clear and picks	24 00 26 00
1 inch dressing and better	18 00 20 00
1 inch siding mill run	13 00 15 00
1 inch siding common	12 00 13 00
1 inch siding ship culls	10 00 11 00
1 inch siding mill culls	8 00 9 00
Cull scantling	8 00 9 00
1¼ and thicker cutting up plank	22 00 25 00
1 inch strips 4in to 8in mill run	14 00 15 00
1 inch strips, common	11 00 12 00
1¼ inch flooring	14 00
1½ inch flooring	14 00 15 00
XXX shingles, sawn	2 40 2 50
XX shingles, sawn	1 40 1 50
Lath, Sawn	1 80

YARD QUOTATIONS.

Mill cull boards & scantling	$10 00	Dressing stocks	14 00@15 00
Shipping cull boards, promiscuous widths	12 00	Picks Am. inspection	30 00
" stocks	13 00	Three uppers, Am. inspect.	40 00
		B. M.	
Scantling & joist, up to 16 ft	13 00	1½-in. flooring, dres'd	25 00 30 00
" " 18 ft	14 00	1½ " " rough	14 00 15 00
" " 20 ft	15 00	1¼ " " dres'd	23 00 25 00
" " 22 ft	16 00	" " undres'd	14 00
" " 24 ft	17 00	" " dres'd	16 00 20 00
" " 26 ft	18 00	" " undres'd	12 00 14 00
" " 28 ft	19 00	Beaded sheeting, dressed	18 00 20 00
" " 30 ft	20 00		
" " 32 ft	21 00	Clapboarding, dres'd	12 50
" " 34 ft		XXX sawn shingles per M	2 75 2 90
	22 50@22 50	Sawn Lath	2 25
" " 36 ft	24 00	Red oak	20 00 25 00
" " 38 ft	27 00	White "	25 00 30 00
" 40 to 44 ft	30 00	Basswood, No. 1 & 2	18 00 20 00
Cutting up planks 1¼ and thicker dry	25 00 26 00	Cherry, No. 1 & 2	50 00 60 00
" board	18 00 20 00	White ash, 1 & 2	25 00 30 00
		Black ash, 1 & 2	20 00 25 00

Ottawa, Ont.

OTTAWA, July 28th, 1888.

Dimensions, Inches.			*Per M.*
Mill culls	10 X 1		
"	12 1		$8.00
"	12 1½		
"	12 2		
" selected 16 ft. long, above dimensions			8.50 to 9.00
Cull strips, 1 in. thick, 5 to 7 wide			7.00 to 8.00
Mill cut outs	12 X 1		
"	11 1½		4.00 to 5.00
"	12 2		
Scantling	2 4		
"	3 4		12.00
" culls	2 4		
"	3 4		7.00
Laths			1.25
Stock shorts, 12 X 1			10.00
1 inch siding cuts, 1¼, 1½, 2			15.00
" cuts from shorts, 1¼, 1½, 2			6.50 to 7.00
Cuts from stocks	12 X 1		
"	12 1½		10.00 to 12.00
"	12 1½		
Shingles, X			1 25
" XX			2 00
" XXX			3.00
" cedar, No. 1			2.00 to 2.50
" cedar, culls			1.25
Difference in planed lumber, in waste and planing			5.00
Ditto, on average good stock			20.00 to 25.00

Hamilton, Ont.

HAMILTON, July 28th, 1888.

Mill cull boards and scantlings	$ 9 00@10 00	Dressing stocks	$10 00 18 00
Shipping cull boards, promiscuous widths	10 00 12 00	1¼ flooring, tough	16 00 18 00
Shipping cull stocks	14 00	1¼ flooring, rough	16 00 18 00
Scantling and joist up to 16 feet	13 00	1¼ flooring, dressed	25 00
do up to 18 feet	13 50	1 flooring, dressed	21 50 32 00
do up to 20 feet	14 00	Beaded sheeting 1	25 00 30 00
do up to 22 feet	15 00	Picks, Am. inspection	32 00 34 00
do up to 24 feet	16 00	Three uppers Am. In.	40 00
do up to 26 feet	17 00	XXX sawn shingles	2 00 2 75
do up to 28 feet	18 00	Sawn Lath	2 25
do up to 30 feet	20 00	Red Oak	20 00 25 00
Cutting up plank 1¼ and thicker, dry	20 00 25 00	White Oak	25 00 30 00
Cutting up boards	20 00	Basswood No. 1 & 2	16 00 20 00
		Cherry No. 1 & 2	60 00 70 00
		White Ash No. 1 & 2	25 00 30 00
		Black Ash, No. 1 & 2	20 00 25 00

St. John, N. B.

St. JOHN, July 20th, 1888.

Deals, Boards, Scantling, etc.

Spruce deals	$12 00	Spruce boards	12 00
Pine "	15 00	Pine "	12 00@40 00
Deal ends	6 00	Oak "	40 00
Scantling	10 00	Ash "	15 00@25 00
		Hemlock "	7 50

Shingles.

Spruce, extra	$3 50	" No. 1	1 25
" clear	3 00	Pine	1 25
" No. 1 extra	2 25		

Clapboards.

Pine, extra	35 00	Spruce, extra	24 00
" clears	45 00	" clears	23 00
" 2d clears	35 00	" " No. 1	15 00
		" " No. 2	10 00

Flooring, Dressed.

6 in., No. 1	12 00	4 in., No. 1	12 00
" No. 2	10 00	" No. 2	10 00

Miscellaneous.

Staves	3 00@ 1 50	Laths	1 80
Heading, 17 in. pot	04	Pickets	6 50@15 00
" 18 in. "	04½ 05½	Railway ties	15
" 22 in. "	06		

Goderich, Ont.

GODERICH, July 28th, 1888.

PRICES IN CAR LOTS.

1 inch Mill Culls	$8 00@ 8 50
1x6-8-10 & 12, common	12 00
1x6-8-10 & 12, dressing	16 00
1x14, and wider, common	12 00
1x14, " " dressing	16 00
1¼ dressing	16 00
1½ "	16 00
1¼ Norway pine flooring	14 00
1½ " " "	14 00
1 inch clear and picks 4 to 9 inch	25 00
1 inch " " 4-in. and up	26 00
1 inch " " 9-in. and up	27 00
1¼ and 1½ clear and picks	35 00
Lath 1½x4 feet	1 80

Montreal, Que.

MONTREAL, July 28th, 1888.

Pine, 1st qual'y ₱ M	$35 00	40 00	Basswood, run of log		
Pine, 2nd " "	22 00	30 00	culls out per M.	$13 00	20 00
Pine, shipping culls ₱ M.	14 00	16 00	Oak, per M	40 00	50 00
Pine, 4th quality deals ₱ M	10 00	12 00	Walnut, per M	60 00	95 00
Pine, mill culls, ₱ M	8 00	10 00	Cherry, per M	80 00	100 00
Spruce, per M	10 00	13 00	Butternut, per M.	30 00	40 00
Hemlock, per M	9 00	10 00	Butternut, per M.	30 00	40 00
Ash, run of log culls			Hard Maple, per M	20 00	25 00
out per M	13 00	18 00	Lath, per M	1 75	2 00
			Shingles, 1st, per M	2 00	3 00
			Shingles, 2nd, per M	1 25	2 00

Saginaw, Mich.

SAGINAW, July 26th, 1888.

CARGO LTOS.

Uppers	36 00@	38 00	Norway	$ 8 50@	9 25
Common	16 00	19 00	Box	16 50	17 50
Shipping Culls	8 50	16 00	Straight measure	12 50	18 00
Mill Culls		6 00			

YARD QUOTATIONS—CAR LOTS DRY.

Drop Siding.

Clear, ⅞ in	42 00	C, ⅞ in	30 00
A	38 00	D	19 00
B	30 00		

Flooring and Siding Dressed.

Flooring, clear, d & m	40 00	Siding, clear, ½ in.	22 00
No. 1	33 00	A	23 00
No. 2	30 00	B	17 00
No. 3	20 00	C	14 00
No. 4	13 00	D	12 00

Finishing Lumber Rough.

Three uppers, 1 in.	42 00@	44 00	Fine common, 1 in.	32 00@	32 00
1¼ & 1½	44 00	46 00	1¼ & 2 in.	33 00	
Selects, 1 in.	36 00	37 00	C, 7, 8 & 9 in.	25 00	
1¼ & 2 in.		38 00	Base, 2 to 9 in. No. 1	40 00	
			No. 2	30 00	
			No. 3	20 00	
			Cullt, boards 10 in. and over	18 00	

Lath, Shingles and Timber.

12 to 18 feet	1	22 feet	12 00
20 feet	11	24 feet	13 00
Plank and Timber, 12 inches wide, $1 extra.			

Wide Select and Common Boards.

Cull No. 1 com.	130 and 140	28	Dressing 6 to 12 in.	34	36 00

Lath, Shingles and Pickets.

Lath, No. 1	1	Clear XXX	3 25
No. 1	1	Clear	2 75
Shingles five brands		Dressed 24	12
XXX	1	Dressed	2
Clear butts	2	Dressed 14	14

Philadelphia, Pa.

PHILADELPHIA, July 28th 1888.

Hard Pine.

Mich. uppers, 1 to 2 in., dry	$48 00@	1¼ to 2 in. plain, ban quality	22 50@23 00
2½, 3 & 4 in.	55 00	Common plank	20 00 22 00
Selects, 1¼ to 2 in.	42 50	B M Boards, wide	14 00 16 00
2½, 3 & 4 in.	41 00	Strips, selected	27 50
12 in. flooring quality	32 50	Culls, 12 up	16 00 17 00
barn	16 00	Wide	18 00 19 00
Edge barn, all widths	18 00	Narrow	13 00
		No. 1 moulding	30 00 38 00

Cargo Lots.

Yellow pine edge bds	14 00@	Scantling and plank	20 00 22 00
Heart face boards	16 00		

Hemlock Boards and Scantling.

Edge boards	10 50@	Scantling, 2X3 & 2X4	11 50
12 in. stock	11 50	16 & 18 ft	12 00
Fencing, 6 in., 10 ft	11 50	2X5, 2X6, 2X7, 2X8, 2X9	11 00

Shingles and Lath.

Cypress shingles, 24 in. heart, d & b	13 00@	Cedar shingles, 16 in.	
24 in., sap, d & b	16 00	Lath delivered	35 00
		Chestnut posts, 8 ft	32 00
		7 ft	28 00

HARDWOOD.

Hard.

Nos. 1 & 2, 1 in., good dry, Indiana	$87 50@	Reject or common, 1 in., 1¼ and up	60 00@65 00
1¼ & up	92 50	Culls, 1 in.	35 00
Nos. 1 & 2, ⅝ in.	72 50	1¼ in. & up	35 00

Poplar.

Nos. 1 & 2, ⅝ in., good wide, Indiana	25 00@	Nos. 1 & 2, 1¼ in. & up, good wide, Ind.	32 50
1 in.	28 00	Columns, 8X8 & up clear	35 00

Oak.

Nos. 1 & 2, 1 in., good western, straight	32 50@	Nos. 1 & 2, 1¼ in. & up, good western, straight	35 00
quartered	49 00	quartered	52 50

Ash.

Nos. 1 & 2, 1 in., good western	35 00@	Nos. 1 & 2, 1¼ in. & up, good western	32 50

Veneer Logs, Yard and Wholesale.

Sc'tlg, 2X4 to 12X14	22 00@	Flooring, 1 in., Va.	17 00
Plank, 1¼ to 2 in.	28 00	1 & 1¼ in., Ga. &	
Fl'g, 1 & 1¼ in. No. 1	27 50	Fla. cargo run	22 00

Cherry.

Nos. 1 & 2, 1 in., good	62 50	Nos. 1 & 2, 1½ in. & up, good	65 00

New York City.

NEW YORK, July 28th, 1888.

Black Walnut.

1 in., all clear	$75 00@	1¼ to 2 inch	$ 00@
1 and 1¼ inches	92 00	2½ to 4 inch	00
1¼ and thicker	95 00	Cabinet, log run	00
Reports	52 00	Log run	115 00

Poplar and White Wood.

1 in., 12 inches and over	32 00@	1¼ to 2 inch	28 00@
1 inch coffin boards	27 00	1¼ to 2 inch	24 00
1 in. b. m. inch and over	28 00	1¼ to 2 inch	22 00
1 inch, 8 in. and over	26 00	1¼ to 2 inch, all	15 00

Dressed Poplar.

½ inch panel	24 00@	1 inch	21 00@
⅝ inch panel	27 00	1¼ inch	24 00
1 inch panel	28 00	1½ inch	27 00
4 in. moulding	00	2 inch	30 00
7, 8, 9, 10 inch casing	32 00	2½ inch	00

Ash.

1 inch, white	00@	1¼ to 2 inch	28 00@
1¼ to 2 inch	37 00	2½ to 3 inch	29 00
2½ to 4 inch	40 00	4 inch	00

Oak.

1 inch, plain sawed,	00@	1¼ to 2 inch	00@
1½ to 2 inch	00	2½ to 3 inch	00
4 inch	00		
Quarter sawed, white	00		

Cherry.

1 inch, select clear	00@	1¼ to 2 inch	00@
1 inch	00	2½ to 3 inch	00
1 inch strips	00	4 inch	00
1¼ to 2 inch	00		

Mahogany.

Cuban, cargo run	00@	1¼ to 2 inch	00@
Cuban, common	00	2½ to 3 inch	00
Bass wood	00	4 inch	00
Bay wood	00		
Mexican	00	2½ to 3 inch	00
Black	00	4 inch	00
Brown, 1 to 1½ in.	00	2 inch	00
Circassian	00	4 inch	00

Boston, Mass.

BOSTON, July 30th, 1888.

Western Pine—Cargo Lots.

Uppers, 1 in.	$48 00@	1¼ to 2 in. & 3 & 4 in.	48 00@
1¼, 1½ & 2 in.	52 00	No. 1 Fencing	24 00
Selects, 1 in.	42 00	No. 2	31 00
1¼, 1½ & 2 in.	44 00	No. 3	32 00
3 & 4 in.	48 00	No. 4	25 00
Matched Boards, 7 to 11 inch, clear	37 00	Common, 1 in.	27 00
1 inch, clear	33 00	1¼ to 2 in.	30 00
1 inch, No. 1	32 00	3 & 4 in.	31 00
1¼, 1½ & 2 inch	34 00	1 inch	23 00
		1¼, 1½ & 2 inch	25 00

Eastern Pine—Cargo Car Load.

No. 1, 2 & 3	40 00@	Cuttings, 1st quality	00@
4	28 00	2nd	00
5	20 00	3rd and 4th	00
Selects, 1 in.	00	2nd quality	00
Rejects	22 00	3rd and 4th	00
Wide Uppers	00		

Western Pine—Yard Lots.

No. 1	12 00@	Clear	00@
No. 2	00	Cuttings, 1st quality	00
No. 3	00	2nd	00
Selects, 1 in.	00	3rd and 4th	00
1¼ to 2 in.	00	Common, 1 in.	00
3 & 4 in.	00	1¼ to 2 in.	00
Extra	00	3 & 4 in.	00
Extra No. 1	00	Common No. 1	00
Extra No. 2	00	Common No. 2	00

Lath.

Spruce	00@	Extra	00@
1 inch extra	00	No. 1	00
1 inch No. 1	00	Common No. 1	00

Oswego, N. Y.

OSWEGO, July 30th, 1888.

Pine.

1¼, 1½, 2 and thicker uppers	$40 00@	43 00
" " " pickings	30 00	33 00
" " " No. 1	22 00	26 00
" " " cuttings and pickings		
and mill culls	30 00	35 00
1 inch selected strings	25 00	30 00
1¼ " " "	30 00	35 00
1 & 1½ inch cull No. 2	11 00	12 00
1 & 1¼ strings No. 1 dressing and better	17 00	25 00
1X10 & 12X12 to 16 feet dressing and better	17 00	25 00
" " " shipping culls	14 00	17 00
" " " No. 2	11 00	12 00
1 & 1¼ in. strips 4 to 7 wide selected	20 00	30 00
" " " dressings	10 00	17 00
" " " No. 1	9 00	12 00
Scantling, 2X4		
1 1¼, 1½ 2 & 3 in. 1st & 2nd quality	17 00	21 00
" " " culls	9 00	11 00
Scantling, 2X4		
1 & 1¼ 1st & 2nd quality	20 00	21 00
" culls	9 00	12 00
Scantling, 2X4		
XXX 18 inch pine standard thickness to 2¼		$4 25
XX " " " " "		3 25
X " " " " "		1 10
XXX " cedar " " "		3 40
XX " " " " "		2 25
XXX 16 " " " "		3 20
XX " " " " "		2 20

Lath.

No. 1 1⅜, 1½	2 00	2 10
" 2 "	1 25	1 50

Buffalo and Tonawanda, N. Y.

BUFFALO, July 27th, 1888.

Norway Pine—Rough.

No. 1, 1 & 1¼ in.	20 00@22 00		Stocks No. 1, 1 & 1¼ in		22 00
No. 2, 1 & 1¼ in.	15 00	15 50	No. 2, 1 & 1¼ in.		17 00
No. 3, 1 & 1¼ in.	11 50	12 00	No. 3, 1 & 1¼ in.		12 00
			Scantling 2x4 to 2x12 12 to 16 ft		13 00
			Timber, 4x6 to 12x12 16 00		25 00

White Pine—Rough.

Uppers, 1 in.	$44 00@45 00		Shelving, No. 1, 13 in.		
1¼, 1½ and 2 in.	44 00	46 00	and up		29 00
2½, 3 and 4 in.	54 00	56 00	No. 2, 13 in. & up	22 00	24 00
Selects, 1 in.	36 00	38 00	Fine common, 1 in.		30 00
1¼, 1½ and 2 in.	37 00	40 00	1¼, 1½ and 2 in.	30 00	33 00
2½, 3 and 4 in.	44 00	46 00	Common, 1 in.	16 00	19 00
Cuts, No. 1, 1 in.	27 00	30 00	1¼ and 1½ in.	17 00	20 00
1¼, 1½ and 2 in.	32 00	33 00	2 in.	20 00	22 00
2½, 3 and 4 in.	37 00	40 00	Coffin boards	16 00	19 00
No. 2, 1 in.	17 00	19 00	Box, 1 in.		13 50
1¼, 1½ and 2 in.	21 00	22 00	1¼ in. & thicker		13 50
Moulding, 1 in.	30 00	33 00	A stocks, 1x10		27 00
1¼, 1½ and 2 in.	30 00	33 00	1x12		28 00
Siding strips, 1 in.		38 00	B stocks, 1x6 to 16		17 50
			C stocks, 1x6 to 16		13 50

Dressed Lumber.

	No. 1.	No. 2.	No. 3
Base and Casing under 6 inches	$33 00	$23 00	$16 00
Base and Casing, 6 inches	34 00	25 00	17 00
Base and Casing, 6, 7 and 8 inches	35 00	27 00	20 00
Flooring, 1 and 1¼ inches, 2½ to 5 in. wide	32 00	20 00	14 00
Ceiling, ⅞ in., 2½ to 5 inches wide	33 00	23 00	16 00
Ceiling, ⅝ in., 2½ to 5 inches wide	28 00	22 00	14 00
Ceiling, ½ in., 2½ to 5 inches wide	24 00	18 00	13 00
Philadelphia Fencing	36 00	25 00	17 00
Bevel Siding, 6 inches	23 00	21 00	11 00
Bevel Siding, 5 inches	23 50	19 00	14 00
Bevel Siding, 6 inches	23 00	19 00	14 00
Novelty Siding, 6 inches and over	34 00	25 00	17 00

Shingles and Lath.

Shingles, 18 in. XXX	4 10	Lath, pine No. 1	2 10 2 10
XX	3 10	No. 2	1 60
X	1 25	Norway	1 80
Shingles, 16 in. XXX	3 00	Hemlock	1 60
XX	2 10		
X	90		

Detroit, Mich.

DETROIT, July 28th, 1888.

Uppers, Selects, Stocks, etc.

Uppers, 4-4	$43 00	Shop, 5-4, 6-4 & 8-4	$25 50
5x4, 6x4 & 8x4	43 00	Fine common, 4x4	31 00
3 & 4 in	50 00	5x4, 6x4 & 8x4	33 00
Selects, 4x4	38 00	Stocks, 1x12 & 1x10, No. 1	19 00
5x4, 6x4 & 8x4	38 00	1x12, & 1x10, No. 2	16 00
Shop, 4x4	22 00	1x12, & 1x10, No. 3	13 00

Flooring, Siding, Ceiling, etc.

Flooring, select common	22 00	Roofing, D & M	16 00
No. 1 common	18 00	Siding, clear	21 50
No. 1 fencing	16 50	A	20 50
Ceiling, select common	25 00	B	18 50
No. 1 common	22 00	C	13 50
No. 1 fencing	20 00		

Bill Stuff and Culls.

Bill stuff, ordinary sizes:		26 to 28 ft	14 00
12 to 16 ft	12 00	30 to 34 ft	16 00
18 to 20 ft	12 50	Ship culls	12 00
22 to 24 ft	13 00	Mill culls	10 00

Shingles and Lath.

Shingles, clear, 18 in. Ex	3 75	6 in. stocks clear, Ex	4 00
10 in. clear, 18 in.	3 00	5 in. stocks clear, Ex	4 80
6 in. clear, 18 in.	2 75	Lath	2 10

Add for surfacing one or two sides, $1.

Burlington, Vt.

BURLINGTON, July 28th, 1888.

Canada Pine Sidings—1x8 in. and up, 12 to 16 ft. d 2 or 4 s.

Select & shelving	$46 00	Finish	$38 00
Pickings	37 00	Dressing	28 00
Pickings & better	40 00@42 00	Common	20 00@21 00

Canada Pine Stocks—1x10 in, 12 to 16 ft., d 2 or 4 s.

Selects (clear)	55 00	Pickings & better	40 00
1st shelving	42 00	As run. common out	28 00@30 00
2nd	39 00	No. 1 barn boards	25 00
3rd	30 00	Common	21 00
Pickings	38 00		

Canada Pine Stock—1x12 in. 12 to 16 ft. d 2 or 4 .

Selects (clear)	57 00	Pickings & better	44 00
1st shelving	47 00	As run. common out	33 00
2nd.	41 00	No 1 barn boards	26 00
3rd	32 00	Common	21 00@22 00
Pickings	38 00		

Canada Pine Stock—14 in. 12 to 16 ft. d 2 or 4 s.

Pickings & better	45 00	3d shelving	33 00
As run. common out	33 00	Common	22 00

Canada Pine S. B'ds—1x8 in. & up, 11 ft. and under, d 2 s or r.

Pickings & better	33 00@35 00	Dressing & common, d 2 s or	
As run. common out	30 00	d 2 s & m	20 00@21 00
		Common	18 00@19 00

Canada Pine Sheathing, d. m. & b.—1," 4 to 7", 5" & up. cb ⅞".

1st quality, 12 to 16 ft	46 00	1st & 2nd quality, 9 to 11 ft.	33 00
2d	37 00	7 & 8 ft.	34 00
3d	27 00	3rd quality, 11 feet & under	22 00
4th (selected Common)	22 00	4th	18 00

Canada (Quebec) Spruce 1 & 1½ in., 4 to 7 in. d 2 s & m.

Clear, 12 to 16 feet	32 00	No 2, 12 to 16 ft.	15 00@16 00
No 1	22 00		

Above prices delivered on a rate of $30 per car load.

The Perils of Stream Driving.

The young man who was drowned last week while working on the drive of Mr. F. Tracy, on Wassataquoick stream, was named Pray, and belonging in a town on the St. John River near Fredericton, New Brunswick. It is said that he was one of the smartest men in the crew on logs, but he could not swim. He and a number of others were working on a bad jam of logs, and when it was about complete he told his companions to go ashore as he could easily complete the job himself, and that when the timber broke away one could better reach a place of safety alone then if there were more. Acting on this advice they left the unfortunate man in the perilous position, and when the jam broke they were horror-stricken to see their comrade carried down the stream amid a rolling mass of timber lashed to fury by the foaming water. Down the stream he went till he struck another jam below, under which he was drawn and was never seen alive again. The body was soon found bruised and disfigured, and was sent to his home in the province. For some years past there have been more or less men drowned on that stream, which is said to be one of the most dangerous rivers for the lumbermen in the State. We are informed that fourteen men from the provinces who have lost their lives in this way are buried on the banks of this mountain torrent, yet no blame can be attached to anyone.

SQUARE TIMBER.

A Big Cut of the Valuable Product.

The amount of "square timber" taken out of the limits on the Upper Ottawa during last season, and now coming down the river, is larger than the cut of any previous season for four or five years.

Most Ottawa people know exactly the difference between ordinary timber or logs, and square timber. The ordinary timber or logs go to the saw mills; the square timber doesn't, but travels straight from the forests to the English markets. The logs are trees cut down cleared of their boughs, lopped into convenient lengths and rafted with their bark on to the saw mills, where they are sawed into planks. Square timber is the outcome of the selection of the finest trees on limits, cut down, cleared and hewn square with axes as they lie. Then these enormous sticks, often sixty or eighty feet in length, are rafted clear down to Quebec without touching the sawmills. There it is loaded on ocean vessels and shipped to Liverpool and other large ports. In the English market it brings a big price, pine lumber of the best quality such as is taken out of our forests in square timber being eagerly sought for.

THIS YEAR'S SQUARE TIMBER.

The increase this season in the square timber cut is due to the big demand in England for No. 1 grade, red and white pine lumber, and some of the rafts taken out this summer contain the finest quality of pine seen in the shipping booms at Quebec for a number of years.

The following is a correct list of the firms who have taken out square timber this season on the Ottawa river and its tributaries, with an approximate of the number of cubic feet in each firm's output.

Name.	*Square White Pine.*	*Waney White Pine.*	*Red Pine.*	*Total.*
(Where made)—NIPISSING.				
E. D. Moore	155,000	70,000	.....	225,000
A. Fraser	25,000	30,000	.....	55,000
Barnett & Mackey	70,000	50,000	.....	120,000
Thos. Hale	50,000	50,000	.....	100,000
G. B. L. Coy	.....	150,000	20,000	170,000
AMABLE DU FOND.				
W. Mackey	90,000	50,000	10,000	150,000
CLYDE.				
W. Mackey	100,000	.....	.....	100,000
MADAWASKA.				
McLaughlin Bros.	.....	.....	75,000	75,000
B. Caldwell & Son	70,000	35,000	.....	100,000
PETEWAWA.				
Perley & Pattee	.....	.....	100,000	100,000
McKay & Co	60,000	60,000	.....	120,000
A. Frances	150,000	20,000	10,000	180,000
WHITEFISH RIVER.				
A. Frances	80,000	50,000	20,000	150,000
CALABOGIE.				
O'Brien & Barry	100,000	.....	.....	100,000
CEDAR LAKE.				
Thistle, Carswell & Co.	140,000	20,000	10,000	170,000
RIVER ROUGE.				
F. Kavanagh	30,000	.....	.....	30,000
QUINZE.				
Klock & Son	150,000	100,000	60,000	310,000
MISSISSIAGA.				
Klock & Son	100,000	50,000	.....	150,000
COULONGE.				
J. & G. Bryson	50,000	15,000	60,000	125,000
	1,420,000	745,000	365,000	2,530,000

This timber is worth apsroximately 25 cents per foot taken all in all, so that the above estimate represents between $600,000 and $700,000. In addition the above estimate of timber taken out last winter, and which is now on its way to the Quebec market, there is also a large quantity of timber cut in the season of 1886-87 coming down. Among the firms who have this old timber coming down are Barnett & Mackey, T. Mackey, Alex. Fraser and Booth, Hale & Co.

STOCK AT QUEBEC.

The following rafts are now in Quebec, on hand and sold: Booth, Hale & Co., a raft of 1886-87 timber containing about 150,000 feet, sold for 38 cents per cubic foot; and A. Frances a raft of timber cut on Whitefish river of about 150,000 feet sold for 31¼ cents per cubic foot. The prices obtained for these two rafts are unusually large and the timber in them is considered to be the finest that has come down the Ottawa in ten years. Alex. Fraser has 300,000 feet in the market yet unsold, Barnett & Mackey 180,000 feet of their Petewaw timber and T. Mackey 130,000 feet all of which will fetch good prices. There is now about 700,000 feet of timber in the hands of the Quebec firms for sale, and the lumbermen say that inside of two months not a foot of square timber will be for sale, as all the old timber which was stuck and held back last season has this year been disposed of for good pr Nearly all the square timber is being driven down the Ottawa this season. Only a portion of Alex. Fraser's last year's cut, E. D. Moore's Nipissing timber, and a small portion of Klock & Son's cut are being brought down by rail.—*Journal.*

THE BIG RAFT SUCCESSFULLY LAUNCHED.

The 24th of July was the time set for the launch of Robertson's great timber ship on the Joggins shore, and the effort was made with the greatest success. Thousands of people, some from very long distances, were present to witness the success or failure of the undertaking. The size and general appearance of the structure have already been outlined in THE LUMBERMAN, hence it is only necessary to give it a passing description. There are no masts, but the ship, if such it can be called, has stern and stern posts of tamarac and a rudder of spruce. The raft, as completed, is 592 feet long; its greatest depth is 36 feet and its extreme width 54 feet. There are 21,300 pieces of timber in it, equal by estimate to three million feet of lumber. Its value, at the regular price of piling delivered on the Joggins shore, would be about sixty cents per stick, or $13,000. The value in New York at current prices would be say five cents per lineal foot, or $2 per tree—over $40,000. When the cost of construction and towing is paid a fine margin will be left, barring accident, notwithstanding the export duty collected and the Customs duty on chains and wire.

Mr. Robertson, who built the raft, says it contains 41 tons of chain and four miles of steel wire, which it is hoped will hold it together in spite of any possible strain at sea. It is much more strongly secured than the one lost on the passage to New York. Two huge chains extend from end to end through the middle of the raft and one passes through it transversely at every ten feet of length, while steel wire passes round the whole structure at like distances, the whole system of chain and wire being connected together.

A spectator says the raft started almost as soon as the work of wedging up commenced and ran 2,000 feet after headway was secured in less than a minute. A tug from St. John towed it out some distance and anchored it, after which the proprietor, who is described as the happiest man in Nova Scotia, drove twenty miles to the nearest station and telegraphed to Boston and New York for the big tugs, one of which he is procuring in each city.

Wood for Decorative Purposes.

It is evident that much as we know about woods there yet remains much to learn that may be of value in the arts.

The secret of making good veneers which will not warp is only now becoming known, and until lately it was considered impossible to emboss wood; but now beautiful embossed panels, whose work resembles carving and whose richness compares favorably with the more costly art, are found in many places. In these the original patterns are carved by hand, and from these molds are made on which the wood is placed after being properly softened. The wood in these molds is then submitted to 250° of heat and subjected to great pressure. Such a pressure effectually prevents all shrinkage.

Wood may be cut as thin as the 300th part of an inch, but in this state it is not useful. That which is cut to the thickness of the 100th or the 150th part of an inch and lined with paper is used for the decoration of walls and ceilings. This neither shrinks nor swells, there not being enough of it for the atmosphere to lay hold of. If it is desired to place such a veneer upon a wall, all holes and cracks must be filled up with plaster of paris, and being glue sized, the wall is ready for the wood in panels. The veneers are made damp with a preparation of glycerine and water which softens them, and when dried leaves them pliable.

A checkerboard pattern of curled maple is about as thick as a piece of cardboard. To produce this strips of wood are first woven in and out and then subjected to heat and pressure, which makes a smooth body, varied in hue as if it were made of two kinds of wood.

Cherry, oak and mahogany are highly esteemed for veneers. Occasionally these are used in bookbinding. Poems by Pope and Jean Ingelow issued last year were enveloped in a covering of wood and tied with different colored ribbons.—*Exchange.*

EXTENSIVE SALE OF LIMITS.

As announced by advertisement in the last issue of THE LUMBERMAN the big sale of the estate of Hamilton Bros., consisting of 1,700 square of timber limits and estates, at Hawkesbury, took place at the Russell House, Ottawa, on July 6th. Next to the recent sale of timber limits by the Ontario Government at Toronto, it was one of the largest gatherings of wealthy men ever brought together in Canada. It has been estimated that the combined capital of those present would foot up to the enormous sum of seventy million dollars.

Prominent among those present were: Messrs. R. Hurdman, G. B. Pattee, E. B. Eddy, E. H. McLaren, William Mackay, P. White, H. Conroy, Hiram Robinson, Alex. Fraser, Westmeath, J. Saxe, Albany, N. Y., John Monroe, Hawkesbury, C. F. Gedee, R. Klock, Geo. Perley, William Kennedy, R. Stewart, R. Nagle, Hugh Grant, P. Colton, Wm. Kennedy, Olive Latour, Thos. Mackie, H. K. Egan, R. L. McLaughlin, Arnprior, W. C. Edwards, A. Foster, A. McCormick, R. Cox, J. Gilmour, Sheriff Haggart, Chas. Reid and R. Rawley.

The property is divided into two districts one being 750 square miles on the Dumoine river and its tributaries, the Black and Schyan, and the other consisting of 935 square miles on the Gatineau and its tributaries. These limits have fine farms, plants and stock in connection with them, in addition to which there is a large property at Hawkesbury, known as the Hawkesbury mills, used for manufacturing timber from above mills. These mills are situated on the Ottawa river, Ontario, mid-way between Ottawa and Montreal consisting of four saw mills with lath and scantling mill additions, driven by water, with sawing capacity of over 2,000,000 feet weekly. Extensive wharfs and piling space for forty million feet of lumber. Large brick dwelling houses with extensive grounds; ditto stone house, and seven good houses built of wood, and one hundred tenements now occupied by employees. Valuable farm in the vicinity of over 1,000 acres, a large portion of which is covered with excellent timber.

The Dumoine river limits proved to be the favorite property. Although worked for some twenty-five years there is still a large amount of valuable timber to be cut. The Gatineau limits have been worked for over fifty years, and were not looked upon with much favor.

The whole property was put up in a lump to start with, but as the only bid—$200,000—came from Mr. W. C. Edwards, the property was taken down, the reserve bid being $650,000:

The Gatineau limits were then put up in one parcel. W. C. Edwards made the first bid—$15,000. Mr. Carter, agent of the Rathbuns of Deseronto bid $16,000. Mr. Edwards and Mr. Carter bid odd and even up to a hundred thousand dollars. Then E. B. Eddy bid $101,000. On it went up to $114,000 when John Gilmour bid $115,000. Up it went still, until Mr. Edwards bid $128,000. There was silence, and the Gatineau limits went to Mr. Edwards. The price included the lumber only, the plant, stock and provisions on the limits being extra, and having to be taken by the purchaser of the limits at scheduled prices. Following this sale the Dumoine limits were put up and after a lively competition were knocked down to H. K. Egan of the firm of W. R. Thistle & Co., for $396,000, exclusive of plant and supplies, worth about $30,000, which are to be taken at a valuation. It is said that Mr. Egan made the purchase on behalf of a syndicate composed of himself, W. R. Thistle, Hiram Robertson and Robert Blackhorn.

Mr. Edwards, M.P., proposes to commence cutting operations this fall on the limit he purchased on Friday. Lumbermen say he has got a bargain.

The Hamilton Bros. estate, including mills, limits, farms, together with the private estate of the late Hon. John Hamilton, is valued at two and three quarters million dollars. There are seven heirs, among whom the estate will be equally divided. The youngest son of the late senator has obtained a commission in the Imperial service. He is applying to be appointed to the 13th Hussars, a crack English corps. His income, it is said, will be $30,000 a year. The engagement of Mr. Caledon Gilder, of Hawkesbury, one of the trustees of the estate, and Miss Hamilton, daughter of the late senator, is announced.

The townspeople of Hawkesbury are keenly agitated over the sale of the Hamilton Timber limits. Hawkesbury a pretty village of 2,000 inhabitants situated on the Ottawa opposite Grenville, about half-way between Ottawa and Montreal, has practically been built up by the Hamilton business. In the advertisement offering the Hamilton property for sale, it is stated that there are four sawmills, a farm of 1,000 acres, six or eight good houses and 100 cottages to be disposed of. Besides the inmates of these cottages, who have all been dependent on the Hamilton business, there are scores of other families dependent on the business. If the business is stopped there wont be much left of Hawkesbury. It is stated that Hawkesbury people fully realize this, and the real estate is going a-begging in the place. There is little chance of any lumber business to speak of being now done at Hawkesbury. The timber limits have been sold to parties who do not seem to want the Hawkesbury mills. At any rate, no bid was received for them on Friday. Certainly Mr. Edwards, who has bought half the limits, does not, as he will work his timber at his own mills at Rockland. The syndicate which bought the other half of the limits, those on the Dumoine, does not seem to want the Hawkesbury mills either. In default of attached limits the mills will be of comparatively little value. The firm of Hamilton Bros., composed of the late Senator John Hamilton, of Montreal, and Robert Hamilton, of Quebec, started sawing lumber at Hawkesbury fifty years ago.

LABOR TROUBLES AMONG LUMBERMEN.

Following the celebration of "our natal day" throughout the North Shore, Georgian Bay and Midland districts, there came a re-action in the form of a strike among nearly all the mill hands in those localities. The strike is for a reduction of the hours of labor from eleven to ten. It is said that although the mill operatives commenced work at the first of the season it was not their intention to continue on the same arrangement as last year; accordingly negotiations have been going on for a reduction in the hours, and wages to be paid fortnightly instead of monthly as before. The lumbermen, it appears, would not entertain the proposition. During the last week of June a representative of the Knights of Labor visited Gravenhurst and tried to effect a settlement of the difficulties, but did not succeed. As the above was the ultimatum decided upon by the local organization and concurred in by the brotherhood generally, the next move was to go out on strike, which was done on July 3rd.

From latest reports nearly 2,000 men are now out, and the situation still continues without much change. A few of the mills have given in but the majority refuse to do so. The ranks of the strikers seem firm, and every man seems confident of victory. The mill owners it is understood, have asked the government for police protection for the men they are bringing in from Quebec and Michigan. How long this trouble may continue it is impossible to determine, but even if a settlement is made at once the loss to the lumber trade must of necessity be very heavy.

ANOTHER STRIKE AT THE CHAUDIERE.

The following particulars of the labor troubles at Ottawa are furnished by the *Journal* of that city:

"A stir was caused at the Chaudiere this morning by the shippers, carters and some of the pilers in the employ of Mr. J. R. Booth, going on strike. The strikers, some eighty in number, assembled in front of the office of the firm this morning instead of going to work, and Mr. Wilson the shipping foreman conveyed the demands of the men to Mr. Booth. It seems that among the Chaudiere lumbermen there is no scheduled scale of wages. Each firm pay their men what they think they are worth. Mr. Booth was paying the men who struck $6.50 a week and they demanded $7 and $7.50 a week according to their positions. Mr. Booth refused to comply with the demand and paid the men off.

"The strikers showed a disposition to be troublesome afterwards. They threatened the shippers and pilers who remained at work. This threat had the effect of making quite a number of men quit work. Mr. Wilson, the foreman, tried to induce them to go to work again, but the men were afraid.

"The strike is in a measure caused by the lack of an understanding among the lumber firms as to the rates of wages. Messrs. Bronson & Weston and Pierce & Co. are paying pilers, shippers and teamsters from $7 to $7.50 per week while Messrs. Perley & Pattee and J. R. Booth are only paying $6.50 and $7 for men doing the same work. The strikers have no complaint except as to wages.

"The ball was started rolling the day before yesterday, when the wheelers of the Perley & Pattee concern struck for $7 a week, and after holding out for a day got what they demanded, with some exceptions. Then the pilers and shippers employed by Perley & Pattee and J. R. Booth, began grumbling about their wages, and announced their intention of demanding the same wages as Bronson & Weston were paying their men. The strike this morning was therefore not a surprise.

"The strikers although very much in earnest and most of them fighting drunk have no organization and cannot hold out any length of time, but the ringleaders who know that they will not be taken back are doing their best to influence the other hands to strike and make the affair as big as possible. The lumbermen fear that the strike may spread through all the mills which are not paying the following schedule of wages, which prevails with Bronson, Weston & Co.:—Teamsters and shippers, $7 to $7.50 per week; laborers, $7: men in the mill from $7 to $10 according to positions; men in charge of the gates $9; edgers, $10; saw-filers, $10.50 to $15.00 millwrights, $12 to $18. The firms to which the strike may spread are Perley & Pattee, Pierce & Co., Hurdman Bros. and the E. B. Eddy Manufacturing Co.

Attention was directed to the mill gang by the organizers of the strike, and about two o'clock the 300 employees in the mill including sawyers, wheelers, loaders, edgers and carriers struck work. Mr. Levi Booth foreman of the mill asked the men if they were going to work. They replied they were not unless their demands were acceeded to. The mill was accordingly shut down. The men fully four hundred in number then assembled on the street in front of the mill."

A Floating Sawmill.

Along the bayons and lagoons of Florida grows some of the finest timber in the South, much of it in places entirely inaccessible until J. L. Maul & Son hit upon the plan of constructing a floating sawmill. This idea they carry into execution, and their mammoth mill, which now lies at the banks of Burton & Harrison's hammock, near Palatka, according to the *Southern Lumberman*, a marvel of mechanical ingenuity. It has a length of eighty and a breadth of forty feet, and is so solidly built that the motion of the machinery has no more effect on it than if it were built on solid land. Although it stands five feet out of water, its draught is only about a foot and a half, which permits it to be taken into the shallowest lagoons, where timber could not be floated. It is equipped with the latest machinery, planer, lath machine, shingle saws, and a fine forty-horse power engine and boiler. On the hurricane deck is the office for the proprietor, while the cook house, where the men board, is in the center of the deck, which is otherwise free for the piling of lumber, the machinery being all below it. This floating mill has so far proved eminently successful, exceeding the expectations of the proprietors in this respect, and is probably the pioneer of numerous craft of the same kind.

EXCHANGE ECHOES.

Chicago Timberman.

Puget Sound lumbermen are betwixt and between on the question of free trade in lumber. "They do not want free trade nor do they want a continuation of the war tariff." British Columbia has a large lumber trade in Australia, Japan, China and South America, with which the Buget Sound millmen seek to compete, but British Columbia lumbermen have the advantage in being able to sell at lower figures. These countries are the legitimate markets for Puget Sound lumber and the removal of the tariff would enable our millmen to successfully compete with their British neighbors. There is a strong measure of sensible reasoning in this, as these Puget Sound men cannot ship their board lumber east, so from this standpoint they are in favor of free lumber. On the contrary timber for car sills, bridge chords, etc., find a ready market in the western states and in consequence of the tariff prices keep up. So the dilemma presents the two horns, with the free trade in lumber one seemingly the easier of the two; but "you pays your money and takes your choice."

Chicago Timberman.

Our Manistee correspondent touches upon a feature of trade not commonly noticed in the lumber journals—the foreign demand which comes through Canadian sources. He speaks of a call for "longitudinals," an item not frequently discussed, but an important article in the list of material used for railway building in England, where the bed work of the road is laid on solid masonry; and the necessity exists for something that will "give," on which to fasten the rail. The longitudinal laid on the stone work averages 32 to 34 feet in length; in dimension 5x7, as a rule, and has to be clear stuff—good lumber.

Northwestern Lumberman.

Last week mention was made in these columns of a man in a drive who was drowned because he could not swim. To follow the drives is a dangerous vocation for a man unable to swim. A treacherous log is liable at any time to give a driver a cold bath, in a deep and wide bath tub, and it is sometimes not only necessary for him to swim upon the surface of the water, but under it, in order that the swift running logs may pass over him. No man on the drives can be to much of a water duck for his own safety. Swimming is taught too little everywhere. Every boy and girl should be taught how to swim as well as to play base ball and the piano.

Northwestern Lumberman.

The reported let up in the movement of pine stumpage is the result of the dullness in the lumber trade and the weakening of prices. With lumber stocks about $2 a thousand on the average less than last season, and the constant apprehension of a still further decline in the thermometer of the market, there is a widespread opinion that prices for stumpage must also come down from the roof upon which they have been elevated by the speculative sentiment the last few years.

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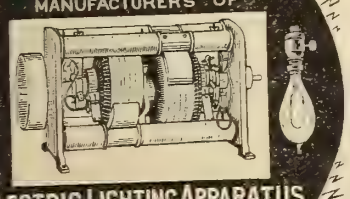
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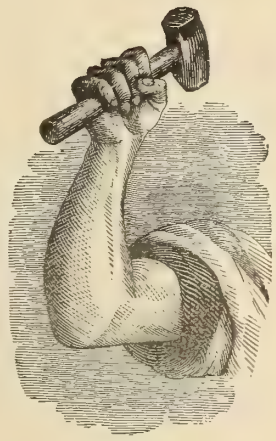

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Managing Director, Toronto.
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Lumbermen
SHOULD SEND FOR A COPY OF
Scribner's Lumber & Log Book.
OVER ONE MILLION ALREADY SOLD.
Price 35 cents post paid.
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TO MILL OWNERS, MANUFACTURERS
AND ALL WHO ARE USING
LEATHER * BELTING
IF YOU WANT BELTING
Which will Run Straight on the Pulleys,
Which is Thoroughly Well Stretched,
Which will not Tear at the Lace Holes,
Which will give Complete Satisfaction,
— SEND TO —
F. E. DIXON & CO.
MANUFACTURERS OF
PATENT LAP-JOINT STAR RIVET
LEATHER BELTING
70 King Street East, Toronto.
Sole Agents in Canada for the
CELEBRATED PHŒNIX OIL
The Only Perfect Belt Dressing.
All our Belting is sold at the Canadian price list. Please compare before purchasing. Send for Discounts and our Pamphlet on Belting.

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For shipment large quantities of
BOX SHOOKS.
Apply to, H. P.
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— MANUFACTURERS OF —
Hydraulic Cement
PARTICULARLY adapted for Dams, Smoke Stacks, Foundations, Culverts, Cisterns, Cellars, etc.
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OF EVERY DESCRIPTION FOR
Planing, Moulding & Stave Cutting.
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SAW and grist mill machinery for sale by H. W. PETRIE, Brantford, Ont.

ONE small grist or chopping mill with power, in good locality.

ONE pair 62 inch burr stones with parts.

ONE 30 inch portable burr mill.

ONE 20 inch Waterous burr chopper.

3 corn shellers by different makers.

ONE 60 inch Tyler water wheel in scroll case.

48 inch Leffel, with the sun.

48 inch Sclater wheel, new.

48 inch Tyler wheel in iron case.

TWO 42 inch Sampson water wheels

40 inch Leffel water wheel, with the sun.

35 inch Leffel wheel, left hand.

30½ inch Leffel, wheel left hand.

30 inch Burnham, a fine wheel.

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20 inch Leffel, with the sun.

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15 inch Archimedian, in iron case, left hand.

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ONE water wheel governor, Galt make.

4 head block saw mill, iron saw frame. Waterous make.

2 block saw mill, Waterous make.

4 lath mills, new and second hand.

8 shingle machines, different kinds and makes.

2 stave cutters.

ONE heading turner.

2 spoke and axe handle lathes.

5 drag sawing machine.

12 shingle jointers.

2 shingle packers, latest make,

NO. 5. Sturtevant exhaust tan.

LOT of bevel and spur gears. Send for descriptive lists.

ONE foot stave jointer.

CIRCULAR saws, 66, 60, 55, 52 and 50 inch, and several smaller sizes.

LOT of lumber and log cars.

SEND for my descriptive list of engines, boilers, iron tools, wood working machinery, etc. H. W. PETRIE, Brantford, Ont.

WANTED AND FOR SALE.

Announcements in this department will be inserted at the uniform rate of ten cents per line, each insertion, payable in advance. For three or more consecutive insertions of the same advertisement a discount of 25 per cent. will be allowed. Eight words should be counted as one line.

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TIMBER LIMITS FOR SALE IN ONTARIO, Quebec and Manitoba. W. J. FENTON & Co., 50 Adelaide Street, East, Toronto.

PINE TIMBER LIMITS FOR SALE.

Two choice Timber Limits in Northwest Territory. Canada, 100 square miles each; great bargains. Also, limits in Georgian Bay, Algoma and Muskoka districts for sale. JOHN SCULLY, Toronto, dealer in Pine Lands and Lumbermen's plant and supplies. Light iron and steel rails in stock.

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Three second-hand locomotives in working order, rails and other equipment. One locomotive boiler suitable for saw mill purposes.

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Saw and Shingle Mill.

FOR SALE—A first class saw and shingle mill in good running order: water power. For particulars apply to

WM. HAMILTON, Athlone, Ont.

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IN LIQUIDATION.

NOTICE.

The undersigned will, up to the

7th of AUGUST,

RECEIVE TENDERS

for the purchase of the

HAWKESBURY MILLS

PROPERTY AND PLANT,

the latter of the value of some $30,000, together with the

SAW-LOGS and BOOM TIMBER

now lying on the Ottawa river and bays thereof, between the mouth of the Dumoine and Hawkesbury Mills, and in Leamy's Lake, say about 150,000 pieces of White Pine Sawlogs, 12 ft. 8 in. and 13 ft. 8 in. long, and 5,000 pieces Red Pine Sawlogs, chiefly 16 ft. 8 in long, and some 200,000 lineal feet of flat timber, at a price per piece or standard for sawlogs and a price per lineal foot for the flat timber, all free of duty and delivered at Hawkesbury this season, and season of 1889.

Parties wishing to tender for logs and timber separately from mills may do so at so much per piece for the sawlogs and so much per foot for the timber, and take delivery of the same wherever they may be lying at the time of sale, count and measurement, where not already known to be established by sellers and buyers at nearest dividing booms.

Separate offers for logs and timber above Chaudiere, and logs and timber between Chaudiere and Hawkesbury Mills will be entertained, but tenders for the whole quantities afloat will receive first and more favorable consideration, and no tender for any other sub-division of the logs and timber will be received.

In all cases the lowest or any tender will not necessarily be accepted.

Terms for Sawlogs and Timber sold separately for mills will be cash on delivery thereof to purchasers, whenever such delivery may take place. More favorable terms will be granted in the case of a sale of the Hawkesbury Mills property and plant, together with the Logs and Timber.

CALEDON F. GILDER,
For Executors.

Hawkesbury Mills, July 18, 1888.

THE RATHBUN COMP'Y,

DESERONTO, ONT.,

MANUFACTURERS OF

TERRA COTTA FIRE-PROOFING

For Use in Old and New Buildings.

Endorsed by Leading Architects. Absolutely Fire-proof. About as Cheap as Wood or Brick. Weight One-Third that of Brick. Does not Crack on application of Heat or Water.

Deadens Noise. Gives Warmth in Winter; Coolness in Summer.

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LUMBERMEN'S STATIONERY

WE will supply anything in the line of BLANKS or STATIONERY for Lumber Shanties and Offices at City prices.

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AND everything necessary to a complete office outfit.

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BOOK-BINDING of every Description got up in a very Neat and Superior Manner.

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FOR Schedule of Prices address, describing the kind and quality of work desired.

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B. F. STURTEVANT'S PATENT PROGRESSIVE LUMBER DRY KILN.

RELIABLE! RAPID! CHEAP!

GUARANTEED TO DRY

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Best Manner Possible

ALL KINDS OF

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WRITE*FOR*CATALOGUE.

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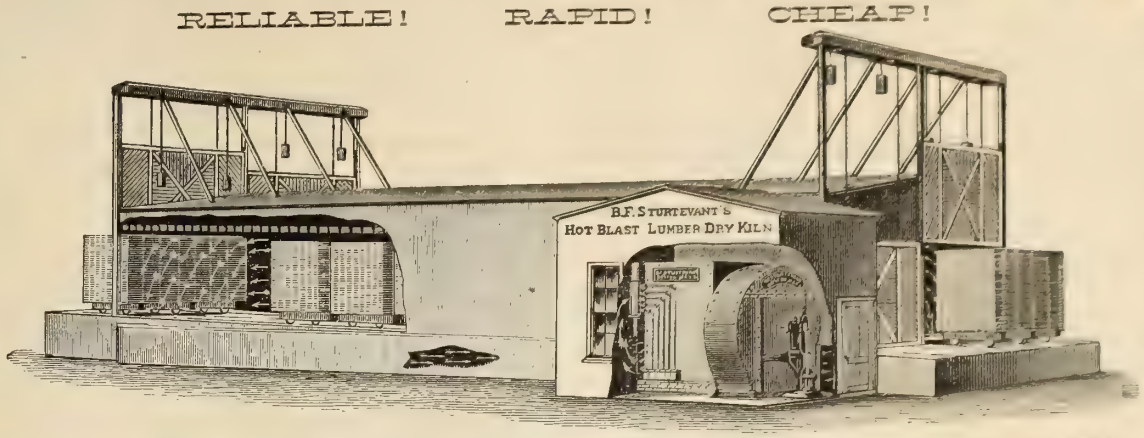

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—WITH THE—

STURTEVANT

Patent Hot Blast

Steam Heating Apparatus.

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B. F. STURTEVANT, Patentee and Sole Manufacturer, BOSTON, MASS., U. S.

ONTARIO OIL CO.,

7 Church Street, Toronto, Ont.

* * A. GOODBY, Manager. * *

[SUCCESSORS TO BOWDEN & CO.,]

SOLE CONSIGNEES OF SOUTHWICK'S CELEBRATED LUBRICATING OILS & GREASES.

We beg to advise our customers and the trade generally that having succeeded BOWDEN & CO. in this business, we shall by close attention thereto, endeavour to merit a still larger patronage than has been accorded to them in the past.

Our goods, the customers being the judges, are not equalled in the market and will continue to maintain the high position they now occupy, our aim being to still conduct the business on strictly legitimate principles.

With thanks for past favors and the request for their continuance, we are,

Yours very truly,

ONTARIO OIL CO.

ARTHUR GOODBY, Manager.

HENRY PORTER

MANUFACTURER OF

Leather Belting

VISITATION STREET,

MONTREAL, QUE.

Mill Owners will do well to write for estimates before placing their orders.

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PURCHASERS IN ONTARIO AND QUEBEC OF

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BASSWOOD AND PINE LUMBER,

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SPOONER'S

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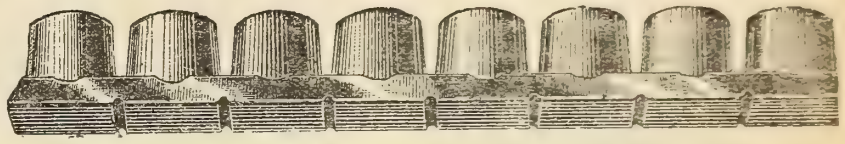

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Manufacturers of all kinds of PLEASURE, FISHING and HUNTING

CANOES Patent Cedar Rib Canoes, Patent Longitudinal Rib Canoes, Basswood Canoes, Folding Canoes, Paddles, Oars, Tents, etc., etc.

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CANOES FOR LUMBERMEN designed to carry any amount of Goods and Chattles, and Strongly Built, made to order on Short Notice.

Send 3 Cent Stamp for Illustrated Catalo.

SEALED tenders addressed to the undersigned, and endorsed "Tender for Coal, Public Buildings," will be received until Friday, 10th August next, for Coal Supply, for all or any of the Dominion Buildings.

Specification form of tender and all necessary information can be obtained at this Department on and after Wednesday the 18th instant.

Persons tendering are notified that tenders will not be considered unless made on the printed forms supplied, and signed with their actual signatures.

Each tender must be accompanied by an *accepted* bank cheque made payable to the order of the Honorable the Minister of Public Works, *equal to five per cent.* of the amount of tender, which will be forfeited if the party decline to enter into a contract when called upon to do so, or if he fail to complete the work contracted for. If the tender be not accepted the cheque will be returned.

The Department will not be bound to accept the lowest or any tender.

By order,
A. GOBEIL,
Secretary.

Department of Public Works, Ottawa, July 14th, 1888.

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for Heating Apparatus, New Departmental Building, Wellington Street, Ottawa," will be received at this office until Monday, 6th August, next, for the several works required in the fitting up, etc., of a Hot Water Heating Apparatus at the New Departmental Building, Wellington Street, Ottawa, Ont.

Specifications and drawings can be seen at the Department of Public Works, Ottawa, on and after Monday, 23rd instant, and tenders will not be considered unless made on the form supplied and signed with actual signatures of tenderers.

An accepted bank cheque payable to the order of the Minister of Public Works, equal to *fifteen per cent. of amount of tender*, must accompany each tender. This cheque will be forfeited if the party decline the contract, or fail to complete the work contracted for and will be returned in case of non-acceptance of tender.

The Department does not bind itself to accept the lowest or any tender.

By order
A. GOBEIL,
Secretary.

Department of Public Works, Ottawa, 19th July, 1888.

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Estimated to cut two hundred and fifty to three hundred thousand cubic board timber of a superior quality. One of the oldest locations for Board Pine in the States. Price and terms reasonable.

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FOR SALE.

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Apply to H. E. KAYLL,
Strathclair, P. O.,
Manitoba.

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AND ALL STEEL AMERICAN

CHOPPING

AXES

For which I am Canadian Agent, are the Best in the World and the price is lower than for other good axes, Warranted or not Warranted.

GEO. STETHEM,

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TAPER PIKE POLES

PEEVEY STOCKS AND CANT HOOK HANDLES.

The Pike Pole handles are twelve and thirteen feet long; made of the best Straight Rock Maple; are turned in a machine made expressly for the purpose, and are 1⅜ inches in diameter for one-half their length, being then tapered to one inch at small end, and chucked to fit furrel. We are the only manufacturers in the world who have the system and machinery for turning out Taper Pike Poles successfully

THEY SELL ON SIGHT AND GIVE THE BEST OF SATISFACTION.

Price of Pike Poles, Peevey Stocks and Cant Hook Handles, $25.00 per Hundred.
Sample Pole sent for 25 cents.

The following are a few of the firms who have used these poles for several seasons: D. Ullyott, Esq., J. M. Irwin, Esq., Geo. Hilliard, Esq., Peterborough; Gilmour & Co., Trenton; M. Brennan & Sons, Hamilton; Gilmour & Co., Chelsea, Que.; M. Boyd & Co., Bobcaygeon; Muskoka Mill & Lumber Co., Muskoka Mills, The Rathbun Co., Deseronto; Heath, Tait & Turnbull, Huntsville; Cookshire Mill Co., Cookshire, Que.

WM. FORSYTH,

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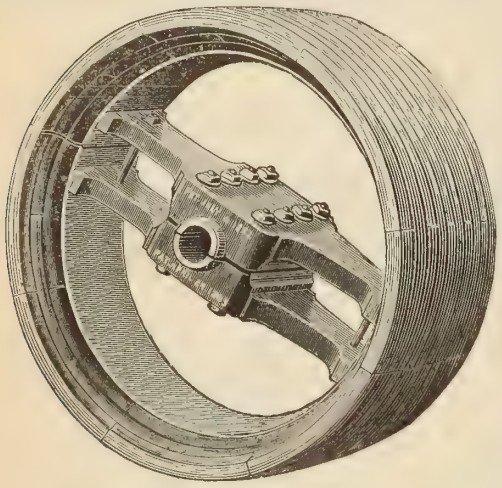
DODGE ⁜ PATENT ⁜ WOOD ⁜ SEPARABLE ⁜ OR ⁜ SPLIT ⁜ PULLEYS.



BEST BELT SURFACE, LIGHTEST, STRONGEST, BEST BALANCED AND MOST CONVENIENT PULLEY IN THE WORLD.

With our Patent Bushing System

Every pulley will fit 22 different sizes of shafting, and guaranteed to give from 30 to 60 per cent. more power from same belt and like tension than any iron or steel pulley. Every pulley a split pulley, 70 per cent. lighter than cast iron and 50 per cent. lighter than wrought iron or steel. Strong enough for any power required. Made in any size from nine inches to sixteen feet diameter.

As a material for pulleys wood is better than iron from the fact that it holds a belt much better. Most good mechanics are aware of this fact, but it may not be generally known how great is the difference, and for the benefit of our readers we give the result of two tests made and published by two of the most eminent mechanical authorities:—

Portion of Circumference embraced by Belt.	Rel. value of leather belt	
	On Wooden Pulleys.	On Iron Pulleys.
.20	1.80	1.42
.30	2.43	1.69
.40	3.26	2.02
.50	4.38	2.41
.60	5.88	2.87
.70	7.90	3.43

Morin.—Appleton's Encylopedia of Mechanical Arts.

Portion of Circumference embraced by Belt.	Rel. value of leather belt	
	On Wooden Pulleys.	On Iron Pulleys.
.20	1.90	1.40
.30	2.40	1.70
.40	3.30	2.00
.50	4.40	2.40
.60	5.90	2.90
.70	7.90	3.40

Haswell.—Engineers' and Mechanics' Pocket Book.

A Dodge Patent Wood Pulley is better than iron from the fact that it can be made very much lighter and thus save weight on the line shaft and bearings, thereby saving in expense from a saving in friction.

The advantages of the separable pulley are very apparent. By its use the necessity of taking down shafting already up for the purpose of putting on additional pulleys when needed, or to be changed, is avoided, thus saving time, trouble and expense, while their first cost is much less than any other pulley made not having these advantages.

The Compression Fastening whether used with keys in iron center or compression alone, keeps the pulley always in balance as the compression on the shaft and key is always towards the center.

The most perfect balanced iron pulley fastened with set screws or key, is invariably out of balance by being thrown from the centre, this fact is obvious to all mechanics.

The advantages of our mode of fastening over any other are: It is the only absolutely true fastening for a pulley. A pulley once properly balanced cannot be thrown out of balance in securing with this fastening. A pulley fastened with key or set screw in the ordinary way, cannot be screwed without lifting the pulley from the shaft at that point where the key or set screw is placed, thus throwing the pulley out of balance.

Manufacturers should carefully avoid any pulley with a set screw fastening for shaft; also a key unless the pulley is compressed on it. The Dodge Patent Bushing system is a great convenience to manufacturers and also to agents who carry pulleys in stock, as with the aid of the patent bushings every pulley will fit 22 different sizes of shafts.

Haswell the acknowledged authority and most quoted by American mechanics, summarizes thus: The ratio is friction to pressure of leather belts, when worn over wooden pulleys is 47, over turned cast iron pulleys, 24, thus showing the average advantage of a wood pulley over iron to be 50 per cent.

We also manufacture GROOVED HARD WOOD PULLEYS FOR TRANSMITTING POWER BY MANILLA ROPES (tallow laid) by the Dodge Patent System of applying the ropes and taking care of the slack.

Illustrated catalogues of belt pulleys and the rope transmission system will be furnished on application to

The Dodge Wood Split Pulley Co., 89 Adelaide St. W., Toronto.

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Dressing and Better Pine.

Also Hemlock in all sizes a Specialty.

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Lumber Shipped to all Parts by Rail or Vessel.

Agents for the Celebrated LUFKIN BOARD AND LOG RULE.

Prompt Delivery in all Cases. CORRESPONDENCE SOLICITED

BRYCE BROS.

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We make only the BEST in both material and workmanship.

A large variety always in Stock at our WAREROOMS,

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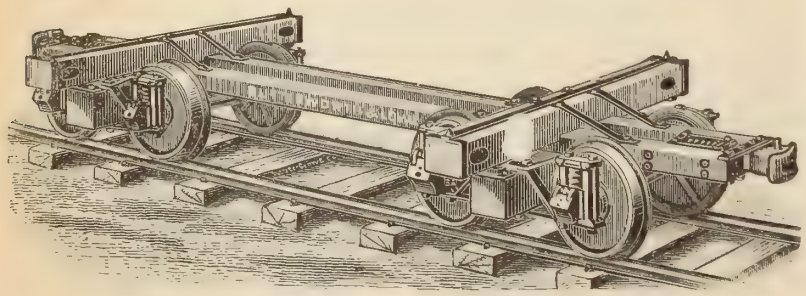

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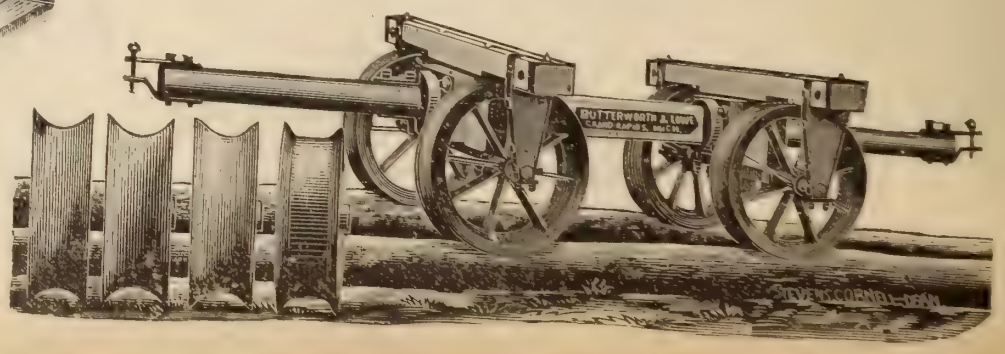

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Send for Circulars and Mention this Paper.

THE CANADA LUMBERMAN.

VOLUME VIII. NUMBER 9. PETERBOROUGH, ONT., SEPTEMBER, 1888. $1.00 PER YEAR SINGLE COPIES, 10 CENTS

THE CANADA LUMBERMAN

PUBLISHED MONTHLY BY

ARTHUR G. MORTIMER,

OFFICE: SIMCOE STREET, PETERBOROUGH, ONTARIO.

TERMS OF SUBSCRIPTION:

One Copy one Year, in Advance, - - - - - $1.00
One Copy six months, in Advance, - - - - - 50

Advertising Rates Furnished on Application.

THE CANADA LUMBERMAN is published in the interest of the lumber trade and of allied industries throughout the Dominion being the only representative in Canada of this foremost branch of the commerce of this country. It aims at giving full and timely information on all subjects touching these interests, discussing these topics editorially and inviting free discussion of them by others.

Especial pains are taken to secure the latest and most trustworthy market quotations from various points throughout the world, so as to afford to the trade in Canada information upon which it can rely in its operations.

Special correspondents in localities of importance present accurate report not only of prices and the condition of the market, but also of other matters specially interesting to our readers. But correspondence is not only welcome but is invited from all who have any information to communicate or subjects to discuss relating to the trade or in any way effecting it. Even when we may not be able to agree with the writers we will give them a fair opportunity for free discussion as the best means of eliciting the truth. Any items of interest are particularly requested, for even if not of great importance individually, they contribute to a fund of information from which general results are obtained.

Advertisers will receive careful attention and liberal treatment. We need not point out that for many the CANADA LUMBERMAN with its special class of readers is not only an exceptionally good medium for securing publicity, but is indispensable for those who would bring themselves before the notice of that class. Special attention is directed to "WANTED" and "FOR SALE" advertisements which will be inserted in a conspicious position at the uniform price of ten cents per line for each insertion. Announcements of this character will be subject to a discount of 25 per cent. if ordered for three successive issues or longer.

Subscribers will find the small amount they pay for the CANADA LUMBERMAN quite insignificant as compared with its value to them. There is not an individual in the trade, or specially interested in it, who should not be on our list, thus obtaining the present benefit and aiding and encouraging us to render it even more complete.

MANUFACTURERS of lumber in the south are beginning to acknowledge that the cost of manufacturing to them will steadily advance. One cause is that the producing territory is constantly receding from them. Another is that all the choice timber limits are in the hands of Northern speculators.

AN article has been patented, which it claimed possesses all the qualities as to hardness and durability of lignum vitæ and can be made of any soft wood. The process of manufacture consists of first saturating the wood thoroughly with an oily chemical compound of great penetrating power, and then subjecting it to a powerful compression, which so increases its density as to make it rival even iron in hardness.

FOR years Saginaw lumbermen have been in the habit of flooding the Chippewa river by means of dams in order to enable them to run their logs during July and August, thereby shutting the water off from a mill pond at Mt. Pleasant, Mich., leaving the pond dry for days at a time. This it is claimed has been the cause of much sickness, and the boards of health of the township will commence proceedings immediately to prevent the flooding. Other townships are expected to enter the contest, which promises to be an interesting fight, as many wealthy Michigan lumbermen are interested parties.

THE question of admitting Canadian lumber into the United States free of duty has lately been greatly exercising the House of Representatives. The probable fate of the bill is to be shelved in congress, and the Republicans hope when the question again comes up, the president elect will be one who will veto it, despite the favor of both houses. Canadians need not be overly anxious in the matter. While we have a great reserve of forests yet, the time is rapidly approaching when the value of our timber will be vastly greater than now, and it would not be true economy to have it rushed off too rapidly.

THE shingle makers over in Michigan, says an exchange, are reported to be engaged in cutting up every scrap of timber they can get hold of, not even the stumps escape them. A machine has recently come into use which is moved into the woods and which slices shingle-length bolts off every decent stump within a radius of 100 feet. In this way, in the language of a Michigan man, the shingle mills are becoming the scavengers of the lumber region.

LEADING Ottawa saw-millers are considering the advisability of changing their motive power from water to steam, and it is said that other lumbermen about the Chaudiere are debating the same question. Their idea is that the waste and sawdust that is now discharged into the river would supply the necessary fuel, and therefore the expense would be inconsiderable, while the change would settle the sawdust nuisance, and the water power could be advantageously used for factories of different descriptions which do not afford their own fuel.

AMERICAN oak has achieved an important conquest in England, meeting with favor in all quarters, and the number of purposes for which it is called into requisition being extensive and varied. Large quantities are being used and prices are sufficiently firm to afford great satisfaction to those handling it, who are sparing no pains to educate the English public to a thorough appreciation of the value of the wood. The trade in mahogany from Cuba has also received an impetus, and there seems to be a constantly increasing demand therefor, as indicated by latest reports from the various centres of the timber trade.

ACCORDING to some American enthusiasts, Alaska will some day furnish timber for the rest of the United States, but a correspondent of the *Mississippi Valley Lumberman*, who has seen the country for himself, says such talk is all foolishness. One cannot deny, he says, that there is plenty of timber in Alaska—for there is. But such timber! Small, scrubby spruce, growing to a diameter of 16 inches at the butt, and raising a question in one's mind where the roots and the branches begin. That's the kind of timber Alaska produces. The hills and the mountains are covered with it, as far as the eye can reach, but for building purposes it is practically useless. A curious feature of that timber is that when it reaches a certain size, viz.: 16 to 18 inches at the butt, without any apparent cause it dies; and the forests are dotted with these trees.

ALTHOUGH recent British Board of Trade returns indicate a solid revival of business generally it is not pleasing to notice that the trade between Canada and the Old Country has shown a very decided decrease. British exports to the Dominion during July were 11½ per cent. below the returns for the same month of 1887, and for the seven months ending with July the decrease was 15½ per cent. Canadian exports for the same month show a decrease in July of no less than 20½ per cent., and for the seven months, 18½ per cent. Such a state of affairs would be a serious matter at any time, but occuring as it does at a period when British Colonial trade is expanding in a remarkable manner, it certainly becomes much more so. The best deduction that can be drawn is that our commercial community of interest with Great Britain is diminishing at an alarming rate, a result which should be, if possible, averted. Whatever may be the cause of the above noted diminution of trade, if allowed to continue, the result can not but be detrimental to our commercial interests.

THE growth of the Canadian lumber export trade may be exemplified by a few quotations from the official returns of the London, England, Board of Trade. Of sawn, split, planed or dressed lumber imported from the Dominion, for the half year ended June 30th, the quantity is set down at 177,286, and the value £408,150. During the corresponding part of 1887, the figures were; quantity, 108,438, and value, £251,864: while in 1886 they were 93,135 and £224,890, respectively. In hewn lumber, however, there was a big drop both in quantity and value last year, but this year's returns show an upward tendency. The total value of Canadian lumber, exclusive of hewn, exceeded that from the United States by £54,835. The only country that leads Canada in supplying the London lumber market is Russia, whose lumber entered at London up to June 30th, aggregated in value £927,956.

A MOST gigantic lumber "Trust" has been formed in the west, which controls the principal lumber interests of Minnesota and Wisconsin. Fred. Meyerhauser, the richest lumberman in the world is at the head of the combine. The syndicate is said to control about $60,000,000 invested in lumber and pine lands, and is backed by heavy capitalists of Boston. The agents of the syndicate are scouring the country to get all the stumpage land there is in sight. The scheme is to float logs from the Upper Mississippi down over the falls at Minneapolis and erect big mills on the lower river. It is understood that some of the Chicago railroads and some southwestern lines are encouraging the deal. It should be borne in mind in this connection that while "trusts" and "combines" are usually understood to mean associations for the purpose of keeping up or raising the prices of commodities, in the lumber business they are entered into for the purpose of lessening the cost of production.

OWING to the comparatively small cut of logs in the Ottawa valley winter before last, the output of the various Chaudiere mills was rather small, and this spring saw the piling grounds completely denuded, every stick of timber being sawed and shipped and yet the contracts were not all filled. Until the drive logs of last winter's cut came down this spring most of the firms had hardly enough logs to keep the mills running on day watch only. As a consequence of this shortage unusually large gangs of men were sent to the bush last fall and more logs were cut on the Ottawa than in any previous year. Most of the firms prepared for the emergency by increasing the capacity of their mills. Last year 390,000,000 feet were sawn. This year the output is estimated to be 405,000,000. Among the firms which are the heaviest purchasers for the American market for this district are: Shepherd & Morse of Burlington, Bronson, Weston & Dunham of Burlington, Rathbun Company, of Deseronto, the Canada Export Lumber Co. and a host of concerns on the other side of the line. The Bronson, Weston & Co., J. R. Booth and Pierce & Co. ship large quantities of first grade deals to England.

THE Manitoba *Free Press* had an article recently describing the timber resoures of Lake Winnipeg, which contains much valuable information. Not only are the islands in the lake, many of which are of considerable extent, covered with valuable timber, but its shores also, and especially in the neighborhood of the numerous rivers that empty into it. The various kinds of timber in the Lake Winnipeg region are spruce, tamarac, cedar, jack pine and white poplar. The tamarac supply, described as almost limitless in extent, must some day be of immense service in furnishing the railways of the Canadian Northwest and the Northwestern States with ties that are 20 per cent. more valuable than spruce ties. There are 4,207 miles of railway in Dakota, 4,789 in Wisconsin, 4,828 in Minnesota 5,539 in Michigan, and equal or greater mileage in many other states and territories. The railway mileage of the American Northwest is something stupendous, and to renew the ties every seven years will require almost unlimited supplies of tamarac. If navigation up Red River from Selkirk to Winnipeg were improved Manitoba should soon become a large exporter of tamarac ties. For the spruce, jack-pine and cedar of the Lake there should also be large demand. The jack-pine makes excellent shingles, and seven or eight million shingles made from it were exported from the Lake last year. The spruce and cedar are most valuable, and even the white poplar can be employed both for fuel purposes and, if necessary, for the manufacture of paper pulp. The extent to which the lumber industry on Lake Winnipeg has been developed already is by no means insignificant. The Selkirk Lumber Company at Fisher River cut 2,500,000 feet in 1887, and will cut 3,000,000 feet this year. Brown, Rutherford & Nilsson at Fisker Bay cut 1,100,000 feet in 1887, and their estimated cut for this year is 1,250,000 feet. Capt. Robinson

made a cut of 1,000,000 feet at Ebb and Flow Lake last year, which will just double this year. Mr. Jonasson, whose mill is at Bad Throat River, cut 1,225,000 ft. this year. James Corcoran's cut at Humbug Bay last season was 700,000 feet, but will be 900,000 ft. this season. Wood & Co. cut 460,000 ft. at Winnipeg River last year, and their cut for this year is estimated at the same figure. Brouse & Co. also cut 250,000 feet at Bad Throat River in 1887, and will cut 200,000 ft. this season. The total cut for 1887 was 6,700,000 ft., while that for 1888 is estimated at 8,975,000 ft.; that for 1887 realized, say, $74,250, while this year's cut is expected to bring $116,676. The cut for 1887 sold at an average of $11 a thousand; while that of 1888 is bringing $13 a thousand. It is true that the timber is not of a very large size, but that is its only drawback. There are many most valuable uses, like those which have been enumerated, to which it can be put, and is being put at present. Like the great bulk of our natural resources, its natural trade movement must be southwards and across the international boundary.

THE additions to their rolling stock that are being made on the principal railways, will do much to prevent this season the shortage of cars of which complaints were made at some points last year. There has always been more or less grumbling about the want of the accommodation and the charges on the Northern and Northwestern under the old management. Now that it has come under the control of the Grand Trunk it is to be hoped that things will run more satisfactorily.

THE tariff duty on lumber taken from the New Brunswick frontier into the United States, it is said, has been a dead letter until recently. The Kennebec, Me., lumbermen considered themselves aggrieved by this laxity in enforcing the protection of their interests, and took action in the matter. Their effarts, they say, have been successful, and the law will now be stringently enforced. The amount now collected is three times what it was before the lumbermen commenced the agitation.

REPORTS from Quebec indicate a satisfactory condition of the trade. The increased demand from Great Britain, combined with the diminished output following on the low prices of the last year or two, strenghened the market and enabled old stocks that had accumulated here to be worked off. This is likely to lead to Canadian operators paying more attention next winter to the European markets. The new arrangements as to loading timber are also having a beneficial effect in the city of Quebec.

UNTIL within recent years that portion of Ontario known as the Lake Superior region was a terra incognita. Now, thanks to the enterprise that has pushed through its rocky wilds one of the greatest railroads in the world, its capabilities and possibilities are being gradually made known. That it is rich in mineral wealth and that within its bounds are numerous tracks where the agriculturist, the dairyman and the stock raiser will, in the not far distant future, flourish, is beginning to be acknowledged. But there also the lumberman will find a wide field for his operations. The rocky and rough sections, as well as the more favored spots, are covered with a forest growth of no inconsiderable value. In some parts the timber is heavy enough for sawing, and a good deal has already been manufactured into lumber, whilst the lighter timber ensures a bountiful fuel supply.

ABOUT the middle of the month there was an important caucus of Republican members of the United States Senate at the residence of Senator Chandler. There was a long discussion as to the proposed Tariff Bill, which the Republicans have planned as a means of fighting the Mills Bill and making political capital for the Presidential election. The treatment of the lumber duty was debated in a lively manner with much difference of opinion. Some Senators from treeless states strongly advocated free lumber and the abrogation of the duty. Representatives of the lumbering States, on the other hand, were as strong for continued protection and for the maintenance of the lumber duty intact. It is reported that a compromise was proposed and accepted to reduce the duty by fifty per cent., leaving it at one dollar per thousand. Evidently the action of Congress in this matter is very uncertain, depending much more upon political than economical considerations. The great lumber trust with a capital of $60,000,000, which is said to be in process of formation in Wisconsin and Minnesota, may have something to say on the question, as well as on prices, output, wages, &c. It is notorious that such rings have considerable influence upon legislation among our neighbours, by the use of their system of "lobbying" and other devices, the secret of which is sometimes divulged after a time.

THE appeal to the Judicial Committee of the Imperial Council to determine the possessorship of the Crown lands of Northwestern Ontario—whether the title is in the Dominion or the Province—was argued very thoroughly. The question largely turns upon the nature of the Indian title and the rights acquired by its extinguishment. The Judicial Committee reserved judgment, which is to be given in November, a chief cause for the delay being the time required for obtaining from Canada copies of certain Orders-in-Council, which were considered to have an important bearing on the decision. It is not of very great importance to the lumbermen as such whether they have to deal with the Dominion or Provincial authorities, but it is high time that the point should be settled one way or the other, so as to put an end to the troublesome complications now existing and to facilitate operations in this district. The present uncertainty has impeded business, which will be lively as soon the judgment is decided, whatever it may be.

THE task of towing the great Joggins' or O'Leary raft from Nova Scotia to New York has been successfully accomplished. This immense mass of timber, valued at about $13,000, and consisting of 30,000 logs, varying in length from 25 feet to 200 feet, firmly bound with chains and strong iron wire, was guided into New York harbor through Hell gate, on Saturday, August 11. Naturally enough, the event was signalized by any amount of rejoicing, for not only had predicted failure been averted, but the result demonstrated the possibility of an immense saving in the cost of transportation. The trip occupied 11 days and the cost is estimated at about $5,000, so that, even allowing a pretty wide margin, the profit will be considerable, the raft being worth at least $40,000. Had it been conveyed by rail it would have required not less than fifty trains of fifty cars each to accomplish the transportation. The smaller forwarders and dealers have all along viewed Mr O'Leary's scheme with jealous distrust, and their representations to the government had the effect of inducing the Minister of Marine to promise that if the venture proved a failure, as the one of 1887 did, he would use his efforts to secure such legislation as would give him authority to prevent any more experiments of this kind. As it has passed beyond the realm of experiment into acknowledged practicability, it is now altogether unlikely that any measure will be seriously contemplated to prohibit future rafts on this plan being constructed. The railway companies and owners of coasting schooners, as well as the smaller forwarders and shippers, will doubtless feel aggrieved, but there does not appear to be any means by which they can help themselves. By care in constructing the raft or timber ship, and by launching it when reasonably fine weather may be confidently anticipated, there does not seem to be any reason why the O'Leary rafting system should not become an established custom. The main advantages gained by means of such a raft over the custom of employing coasting schooners are these: an ordinary coaster will only carry about 500 piles, and if any are over 60 feet long or 18 inches in diameter, not many of these vessels can load the logs through the ports. The big raft contained about forty-five ordinary schooner loads and many of the pieces were of too great a size to be taken in any schooner. The net cost of towing the raft is said to be $5,000, whereas at ordinary freight rates it would cost $21,000, thus showing a saving of $16,000 in freight alone. It is now said that another raft will be built and launched before the stormy weather of November arrives.

THE recent lengthy debates in the Senate and House of Representatives at Washington on the Mills Tariff Bill and the Fishery treaty should greatly enlighten the American people—if they read the reports—on the commercial importance of Canada, and the extent of our natural resources. As a contemporary puts it, the debate has been a first class advertisement for Canada. The average Yankee has hitherto had very hazy notions on this subject, if, indeed, he ever considered the fact of the Dominion's existence at all. But the strong anti-Canadian talk of such men as Senators Hoar, Sherman, Fry, Evarts, and others in their partisan desire to embarrass President Cleveland and the Democratic Administration, will cause, if it has not already created a different impression among the masses. These men, exaggerating possibly their real feeling, have raved and ranted about the great future in store for Canada, and how if the Democratic tendency to reciprocity in trade is allowed full swing, the Dominion will ultimately overshadow in trade and manufactures, as well as material wealth, the great Yankee nation. To avert such an awful catastrophe, as that the "land of the free and the home of the brave," should by any possibility have a neighbor equal or superior to her in this respect, the Senators seem to be united, but as to the means to be employed they differ materially. While some advocate a system of exclusion and non-intercourse, others boldly take the bull by the horns by proposing to ask Mamma England to hand daughter Canada over to Jonathan altogether, that her interests, destiny and growing importance may become a part and parcel of the great American republic. And on August 6th, Senator Blair introduced a resolution, which was referred to the Committee on Foreign Affairs "that the President be requested to open negotiations with the Government of her Britannic Majesty (in which the Dominion of Canada and the several political subdivisions thereof should be represented), with a view to the settlement of all differences between her Majesty's Government and the United States, and especially to the arrangement of terms mutually just, honorable and satisfactory for political union between the Dominion of Canada, or between any of the several provinces or subdivisions of the Dominion of Canada, and the United States, subject to the approval of the people of the Dominion of Canada, or of the people of any province or subdivision thereof, who may be included in such arrangement, and to the ratification of the United States, in such manner as Congress may prescribe; such political union to be republican in form and in accord with the general system and the constitution of the United States; and the negotiations may embrace such further treaties, compacts and alliances as shall be deemed necessary for the future peace, happiness, security and general welfare of her Majesty's Dominion and of the United States." But Brother Jonathan might as well spare himself the trouble, for however strong may be his desire to possess our wealth of forest and field and mine, our people also have their aspirations, and if destiny should dissever our connection with the great Mother Country, they propose to conduct their own affairs still, and, under Providence, make not an integral part of the United States, but a prosperous, and progressive nation, a neighbor in harmonious relationship, but hardly a business partner with no voice in conducting the business.

THERE is every indication that the timber export trade from the lower provinces is at present in a much more settled and healthy condition than it has been for years. Unfortunately, the depression that existed in every branch of trade and the decrease in European demand occurred at a period when there was an overplus in stock in Quebec and a large over-production throughout Canada. But in the very nature of things this evil has worked its own remedy, for manufacturers and exporters soon saw the folly and absurdity of depleting the forests, and thus killing the goose that laid their golden eggs, at a time when such a large stock of manufactured lumber remained upon the market, while at the same time they realized that the standing timber on their lands was yearly increasing in value. For this reason, while a few firms suspended operations in the woods altogether, most of the rest curtailed their usual output. The result of this has been to place the trade in an eminently satisfactory condition. Nearly all the old stock held over has been parted with at fair prices, thanks to an increased Old Country demand. Some lots of white pine were sold at a better price than was ever before obtained. The present encouraging condition of affairs will no doubt lead to more extensive operations on the limits during the coming season, but it is to be hoped that the grand mistake of the past, overproduction, will be avoided. The Quebec *Chronicle* is of opinion that the recent indications point to a revolution in the Quebec timber trade. The old system of manufacturing the timber in the woods is to a greater or lesser extent giving away to the production of logs, destined to be converted for exportation into boards and deals. The reason is that in face of the increased values of timber and of the rapid denuding of forests, the waste resulting from the manufacture of timber is quite an item in the calculation of limit holders. The butt end logs of many of the largest trees hitherto felled in the woods have been left to rot where they were hewn, because of some decay or hollow in the heart, which unfitted them for export as timber, though the sacrifice involved the loss of any amount of excellent "sidings." Then, too, there is to be taken into account the wasted material resulting from the squaring of the logs. The only check to a complete transformation in this industry is the fact that English dealers prefer to import timber to manufactured lumber, as they find that customers like to cut it to suit themselves. But there is no reason why, if specifications are furnished from England, Canadian millers should not saw the logs to meet English requirements; but the interests of English mills and the conservative tendencies of old country dealers stand in the way of a very general change in this direction. However, a good portion of the Canadian export timber trade with England is undoubtedly giving way to the shipment of lumber to the United States, which will naturally continue to increase, more especially if the duties are removed or decreased. In the present disturbed state of the American political atmosphere, it is hard to prophesy what measures they may take regarding the duties on lumber, or how the Senate may act in the matter of a Retaliation Bill.

CASUALTIES.

Mr. Jos. Dovey, of Lindsay, had four fingers of his right hand cut off while jointing.

At Eddy's mill, Hull, a boy named Delany, while working at one of the saws had his haud badly cut.

A boy named German Asselin has been killed at Brompton Falls, Que., in a saw mill by the saw striking him in the abdomen.

A man named Lepense, aged 25 employed at Hurdman's mill, Hull, had his leg badly jammed, by getting caught among some chains.

Robert Newbury, of Belleville, who was employed in the saw mill at Deseronto, had three fingers of his right hand cut off by a buzz saw.

Lysander Johnson a Swede working in one of the camps of the West Michigan Lumber Co., near Big Rapids, Mich., had his head crushed, and died instantly.

Mr. Rogers an old man employed in the lumber mill of the Rathbun Co., at Deseronto, was severely injured by a speedy pulley striking him on the back of the head, cutting an ugly gash.

Mr. L. Gilbert, employed in J. & J. Kerr's planing mill Petrolia was badly injured by a board thrown from the saw. It is impossible to say at present whether he will recover.

A young man named Edward Begin, married, and father of a family, at Paradis' Mills, Levis, P. Q., had his thumb so severely injured by a circular saw that it is feared it may have to be amputated.

John Reynolds, a Canadian 53 years old, was run over and killed by a train on Load's logging railroad, near Mud Lake, Mich. Both his arms and legs were ground to a pulp, and he was literally scalped.

William Beadle, of the Railway Boarding House, Waubaushene, while attending his work at the burner of the Victoria Harbor lumber mill fell a distance of thirty feet and was so much injured that he died shortly after.

Alexander Miller, aged twenty-six, of Remus, was killed in the mill of the Chippewa Lumber Company, at Chippewa Lake, Mich. A slab from the edging machine struck him in the side with great force, almost disembowelling him. He died soon afterward.

John Proctor, a young man of 20, employed as apprentice in T. A. Hodgson's planining mill, Ottawa, had a piece of the thumb of his right hand cut off and three fingers cut while working at one of the machines. He was cutting a piece of board, when it flew back and drew in his hand.

Mr. T. H. Carr, lumber buyer for McCraney, McCool & Wilson, of Toronto, while assisting to load flat cars at Flesherton station was suddenly seized with an attack of heart syncope and fell from the car to the ground so violently as to sustain a fracture of the skull. Death was instantaneous.

A man named Thos. Bailey was instantly killed on August 4th in Lambert Love's saw mills at Port Sandfield. Bailey was tail-sawing and was caught on the carriage and dragged on to the saw. He was terribly cut to pieces. Bailey had lived in Port Carling for a number of years, and leaves a wife and family to mourn his loss.

While working in the Cameron Lake Mill, a gentleman by the name of William Lace got his left hand caught in the lath saw while trying to catch a pile of lath that were about to fall, two fingers were almost cut off and cutting his hand badly in other places. The unfortunate man had just recovered from a severe accident of the same kind which happened some time ago.

While Mr. M. M. Vickery, of Port Perry, was working on the slabber in Green & Ellis' Mill, at Fenelon Falls, a slab got stuck in the gate and in trying to extricate it he was drawn towards the gate which struck him, inflicting several deep wounds above his right eye, which rendered him completely insensible and he remained in this state for some time afterwards.

In the early part of August a Frenchman named P. Lugan, who was working in Mather's saw mill at Keewatin as sawyer, was struck by a slab in such a manner as to throw him upon the saw, and before any assistance could be rendered him the saw had passed completely through his body, entering on the right shoulder, and in severing his body threw one-half some ten feet from the saw.

A very sad accident occurred on Aug. 4, eight miles from Port Carling, Ont., in Mr. Love's sawmill by which Mr. Thos. Bailey lost his life. He was tail-sawing and while stooping to pick up board he was touched by the carriage on the hip. This caused him to loose his balance and fall across the saw, which entered his lelt shoulder completely severing his head and right arm from the body. The unfortunate man leaves a wife and three small children.

An employe of the Holt Lumber Co., Oconto, Mich., named Godfrey Durand, was killed by a peculiar accident. He was adjusting some part of the gang, and had his head between the spokes of the fly wheel, when the machine was started by the sawyer. Durand was caught in the wheel, and whirled around a couple of times, his head being crushed and his limbs broken. He died within a few minutes after being removed.

A horrible and fatal accident occurred in Vigars Bros. saw mill at Port Arthur, in which a sawyer named Toby Smith was almost instantly killed. It appears that a piece of slab became wedged against a large circular saw. Smith ran the log carriage back and stopped the machinery to remove the slab. He omitted, however, inserting a safety pin in the lever which controlled the steam feeder and while busy removing the slab the feeder suddenly began working and the log carriage forced him forward against the saw. It was not running but he was ground against its sharp teeth and torn and mangled horribly. The main artery of the right thigh was cut. From this he bled profusely, and death followed in a few seconds. The unfortunate man was between 50 and 60 years of age. He had only been here about three weeks, coming from Orillia, Ont., where he is said to have a wife and family.

A very serious accident occurred on the logging road of the Gratwick, Smith & Fryer Lumber Co., near Gaylord, Mich. A train of cars left the woods at 12 o'clock carrying 140 men from work to camp for dinner. For this one hour's time was allowed, and the distance being several miles, the engineer made all possible haste to get the men to headquarters. While going down grade with the throttle wide open a heavy piece of wood fell from the the tender in front of the cars, derailing five, which with their load of human freight were overturned and piled up promiscuously. A large number of men were buried in the wreck and not extricated for nearly three hours. Two of them had their backs broken and could not be moved, another was sent to the hospital at Cheboygan, but died before reaching Indian River, and many suffered from broken arms Three were killed and four others fatally injured.

FIRE RECORD.

Bush fires continue to do great damage throughout Parry Sound District.

The bush fires destroyed 240 cords of wood belonging to Mr. Mundy, of Penetang.

A serious bush fire raged at Cote St. Louis, near Montreal and the residents of the localities were in constant fear of seeing their homes and barns destroyed.

R. J. Francis' planing mill and the property adjoining, in New York city, was struck by lightning during the storm on the night of Aug. 3, and burned. The loss altogether was $175,000.

The extensive sawmills of La Frenciere, situated at Louisvllle, Que., were recently destroyed by fire. A number of logs were also burned. The loss is estimated at $100,000, partly covered by insurance.

The steam power saw mill at Eel River, Restigouche county, N. B., owned by McNair and Bros., and operated by Messrs. Hayes & Co., was destroyed by fire Aug. 11. The building was insured for $5,000.

The Muskegon Shingle & Lumber Co. lost about 2,000,000 feet of logs by a forest fire about nine miles from Big Rapids, Mich. C. J. Hamilton also lost 1,000,000 feet, and Big Rapids parties a small quantity.

Two store-houses belonging to the Georgian Bay Lumber Company, at Waubaushene, were recently destroyed by fire, as well as a boat house belonging to the same firm. Several of the employees were badly injured while fighting the flames.

During the past month quite a number of bush fires have been raging in the vicinity of Pembroke. Though comparatively small compared to the large fires in the limits, yet they were large enough to cause uneasiness to several of the farmers.

The large saw mill of the Little & Croft Lumber Co., at Evansville, Ind., one of the largest hardwood mills in the country, burned Aug. 1. The entire lumber district was threatened, but by great exertion the flames were prevented from spreading. The loss is placed at $100,000; insurance $60 000.

The mill and yards of the Eddy Manufacturing Co., at Birchton, three miles from Ottawa Ont., were totally destroyed by fire Aug. 1. William Hobbs was burned to death, and several other hands badly injured. The loss is put at $70,000 on the mill and about $250,000 on the lumber. Insurance about $100,000.

Mason's saw mill at Bedford was discovered in flames on the morning of July 29th. It spread to Moir's grist mill and elevator and the whole pile of buildings was destroyed in an incredibly short time. The loss to Moir, Son & Co. will aggregate $40,000. It was formerly well insured, but, owing to high premiums, the policy lapsed, until now there was only $2,000 in Clarkson's agency. The fire was undoubtedly incendiary.

Killam's lumber mill and the Buctouche and Moncton railway bridge at the Scotch settlement, New Brunswick, were destroyed by fire July 30th, and 50,000 feet of lumber were destroyed. The building and contents were completely destroyed. The loss on the mill is $4,000. The railway bridge burned was 200 feet long.

Charles Lee's planing mill and box factory at East Saginaw, Mich., burned Aug. 8, the fire also destroying some adjoining store sheds filled with lumber and several dwellings. Lee's loss is $75,000: no insurance. H. C. Ripley lost $12,000 and H. C. Hamilton $5,000, the latter being insured for $2,000. Other losses were on the residence property.

PERSONAL.

Mr. E. W. Rathbun and family spent a short time during August at Old Orchard Beach, Maine.

F. W. Gray, of Omaha, Neb., one of the largest lumbermen of that section, is a candidate for Congress.

Mr. Geo. E. Gladman, Sec.-treas of the Midland and North Shore Lumber Company, gave THE LUMBERMAN a call the other day.

W. J. Macauley, an old time Winnipeg lumberman, intends to build a saw mill at some point on the Pacific coast, probably at Seattle, W. T.

Mr. John Waldie, of the Victoria Harbor Lumber Co., has been nominated by the Reformers of Halton as their candidate and elected as representative of the Riding in the House of Commons

Mr. Wm. Hickey of the William Hamilton Manufacturing Co., left recently per the C.P.R. for Point Levi, Quebec, where he will erect and put in working order one of the firms' celebrated gang saw mills.

Mr. James Angus, of Pembroke, has recently been raised to the position of agent for Bronson & Weston's lumbering company on the Schyan river limit on the upper Ottawa, and left with a large gang of men for that region where lumbering is carried on on an extensive sale.

Wm. Hamilton, of the Wm. Hamilton Manufacturing Co., of Peterborough, Ont., has lately made a tour to British Columbia, with the object of introducing the saw mill machinery of the company in the province. F. S. Strickland of Westminster, has been appointed agent for the Hamilton Co.

RAILWAY MATTERS.

The purchase of the Duluth, South Shore & Atlantic railroads, will give the C.P.R. a line south of Lake Superior, to the eastern seaboard, that will be somewhat shorter and better every way than the north shore route. It will be important to the Lake Superior lumber interest in giving a direct outlet to the east for high grade stock, over a road controlled by one interest. It is probable that before long the Canadian Pacific Company will construct a line from Duluth north or northwest to connect with the main line. Without this link the through route by way of the south shore would be incomplete.

The terms of agreement between the Manitoba Government and the Northern Pacific have been made public. The chief provisions are as follows:—The Red River Valley road to be handed over to the Company with the tracklaying and the surfacing completed, but not ballasting. The Company to acquire the rolling stock now held by the government for $720,000 secured by first mortgage bonds. The Company will also receive bonuses sufficient to construct a Howe truss wooden bridge over the Assinniboine, near Winnipeg, the cost not to exceed $40,000. The Commissioner will acquire the right of way for a railway from Morris to Portage la Prairie, and also for the construction of the road, the legal title to remain with the government, which must be done before May 1889, when the right of way and the railway will be conveyed to the Company. In default of this repayment the government will assume possession. A second bridge will be constructed across the Assinniboine on this line, on the same terms as the one above mentioned. No stock to be transferred to the C.P.R., or the St.P., M. & M., or to any official of either, and no pooling contract or agreement must be entered into with either. The Company are to be exempt from taxation until the earnings are sufficient to maintain and operate the road, but this exemption is not in any case to continue longer than twenty years. Any railway company, with the exception of the St. P., M. & M., and the C.P.R., are to be allowed running powers over all these roads, and all freight rates are to be fixed by the Governor in Council.

Exporting Logs and Lumber.

The successful exporter is the exception—the man who loses is in the great majority. There is no regularity in the foreign market; the price obtained is governed not by the quality so much as by the quantity. When good prices are obtained the report encourages many new men to try a shipment, and the supply being drawn from so large a field, the late good market is at once crowded, and as usually is the case with the new shipper, he has put no price on his stock, but has merely instructed his consignee to "get the best price you can ex quay," trusting to luck that he will get the late quoted high price. If it be his first consignment his commission dealer may "save him for the next time," as it does not do to scare a new man off at the start, and the "best price" may be good enough to encourage the novice to try another and larger shipment with the same instruction as before. If the market is good, it is well, but if bad, the first profit does not nearly make good the loss. It seems that a foreign commission merchant is lacking in discretion above everything else. He will often sell stock for less money than it is worth here at home, and will step out of all responsibility by: "You told me to get the best price I could!" If he had used his discretion and held the stock, submitting the best price obtainable, and waited instruction, he would not only have protected his shipper, but would have maintained prices; for, so long as the foreign buyer can purchase his stock there as he could were he here, he is going to save all the expense of the ocean freights and the hundred and one petty charges which are tacked on in every port.

Our advice to the shipper is to go slow, know to whom you consign your stock, and, moreover, put a price limit on what you send. In many of the markets the expenses for holding stock are but little more for three months than for the first landing in store. Again, each shipper should bear in mind that what he may lose in storage he will make up in price, and a steady market thereby maintained. The successful exporter is not the one who consigns his stock to this or that market simply because he has heard that it is a good one. He first knows it is good and how long it is likely to remain so. He instructs his commission dealer to get a certain price or not sell it. He is the exporter who will not only make money for himself, but will maintain prices for his brother shippers.—*Lumber Trade Journal.*

The Redwood Forests.

"No adequate idea can be conveyed of the impression received by a 'tenderfoot' in the center of a forest where such gigantic trees stand in solid phalanx," says a tourist who recently examined some of the redwood trees of northern California. "I was impressed with a sense of fear, loneliness and littleness. Three trees, selected at random in different parts of the forest, measured respectively 80, 76 and 74 feet in circumference six feet above the roots, and the first branches appeared to be at least 150 feet above ground, to which point there is no apparent diminution of size. A comparison of those standing with others of equal size and height that had been felled prove to be more than 350 feet to the topmost leaf. To see an isolated tree of such proportion is an interesting spectacle but to be in a narrow path where they are in such close proximity to each other as to momentarily change one's course is a novel experience, yet a strangely pleasurable one."

Peculiarity of the Dismal Swamp.

There was no one at Roger's sawmill who could give us any information, so we paddled on to the village of Deep Creek, before reaching which we passed through another lock. Here the Dismal Swamp proper may be said to begin. At this lock we were again raised several feet, so that we were now, although a few miles from tidal water, probably sixteen feet above the sea level.

"Shall we pay toll here?" we asked the lockman.

"Not till you come out," he answered, making it clear that there was only one entrance and exit on this side of the Dismal Swamp.

"Does the swamp begin here?"

"Yes," says the lockman, leaning at an angle of 40 degs., and slowly pushing the great beam with his back. "It begins here, and it runs all the way to Florida."

This was true, in a way. The whole southern coast is margined by swamp lands; but the Dismal Swamp is not of them. It is high land instead of low land; its water is fresh, instead of salt or brackish. Among swamps it is an abnormality. It leans over the sea and yet contains its own moisture, like a bowl. Indeed, the Dismal Swamp is a great bowl, forty miles long and ten to twenty wide, and, strange to say, with its highest water in the center. The sides of the bowl are miles of fallen and undecaying trees, fixed in a mortar of melted leaves and mold. Deep in the soft bosom of the swamp are countless millions of feet of precious timber, that has lain there, the immense trunks crossing each other like tumbled matches, "since the beginning of the world," as a jumper cutter said.—John Boyle O'Reilly in *Boston Herald.*

TREES.

I love the trees; each hath its separate charm—
Th' enduring oak, with its out-reaching boughs'
Extended shade; the high, majestic elm;
The graceful poplar and the spreading ash;
Yet, not the least, the ever-verdant pine—
All, with their leaves of varying shades of green,
And vocal with the songs of choristers
That cheer the heart and elevate the soul.

I love to roam through Summer's shady woods,
Among the rugged columns, towering high—
Grand, unhewn, stately pillars, firm as rock—
Pillars unhewn of Naure's God-built temple,
Bearing their leafy canopy o'erhead,
And spreading their protection over all,
Fit emblem of the kindly love of Heaven.

How closely doth the history of trees
Mark out the eventful course of human life,
From the first germing of the infant sprouts,
Through all successive stages of its youth!
The youthful sapling with its gay, green crown,
Bends playfully before the evening breeze:
But later, wildly sways its leafless limbs
In writhing struggles with the northern blast;
To stand erect amid a world of storms,
Or else succumb, to be deformed and gnarled,
Until, at last, just as it is cut down,
With all its faults and blemishes, laid prone.
This is the course—this is the life of man,
And such th' eventful history of trees—
Trees which of all on earth reach nearest heaven,
True type of human privilege!

For upward from the ground, with growth on growth,
Trees emulate the sky. Upward their progress,
And upward, too, all growing nature tends—
Grass, flower and shrub, each to its height; while still
Their exaltations to the sky ascend
Like prayerful incense to the mercy seat;
So, even so, O man! thy prayers should rise—
Those real aspirations of thy being;
And thy soul upward progress to thy God.

A Monarch of the Forest.

A historic tree was felled near Taylorsville, Ohio, recently, which equaled in magnitude some of the famous trees of the Yosemite. This giant of the forest has been the attraction of that locality for many years, but it was not until a Cincinnati lumberman found the tree that an attempt was made to utilize it. The tree was 11 feet 8 inches in diameter at the base and 240 feet in height. It was hollow at the base for several feet and at least seven feet in the clear. For sixty feet there was not a limb, and it is estimated that it will yield nearly 20,000 feet of lumber. The first section of the tree was sent to Cincinnati, and placed in the Exposition hall, to be gazed at with wonder by the thousands of admiring visitors during Exposition time.

A Lumber Case.

Before a Sheriff's Jury at Dalhousie, New Brunswick, there was recently a replevin suit in which the N. B. Trading Company were plaintiffs and Henry O'Leary was defendant. The suit lasted four days and resulted in a verdict for Mr. O'Leary. The matter in dispute was half million feet of logs, principally pine. The matter is to go to the Supreme Court, unless a fair settlement is effected. Mr. O'Leary admits that a part of the logs in dispute were cut from the plaintiff's lands and has signified his willingness to have the quantity so cut determined by mutual arrangement, when he will pay for what has been illegally taken. A feature of the case was the fact that Mr. O'Leary's parties managed to have a straight-away operating road three miles long while his land only measured only one and a quarter miles along the road. The remainder of it must be on someone else's land.

Chute Landings.

The immense lumbr trade of the California coast is carried on, as far as shipping facilities are concerned, under disadvantages which few realize. There are very few good harbors anywhere on the coast line, and from those places where the lumber is shipped, there may be said to be none at all. The result is that a system has been devised for placing the lumber on the vessels, which is different from that in vogue anywhere else in the world.

Wherever there are lumber mills in small settlements, a "chute landing" is built, and at these chutes all freight by sea is handled. As there is as yet no railroad running anywhere near the coast in Sonoma, Mendocino and Humboldt counties, about all the lumber and freight traffic is done by schooners, and for them the chute landings are necessary.

As a general thing these chutes are built on the south side of the points, so as to be protected from the prevailing northwest winds of the summer months. Many of them are very expensive structures to build and maintain. At some places it is expected that the chute will be carried away by the storms of winter, so that new ones are built each season. There are other places, however, where the chutes have stood for years. At most of the landings there is only one chute, but in several instances there are two or three, where the trade warrants it. The shears or legs are firmly secured to rocks, and the apparently frail structure is secured to them, held in position and braced by strong iron cables. The old cables of the cable railways are now utilized for chute building. The lumber is slid down the chute to the vessel, and by means of a brake at the extreme end its speed is checked before it goes to the deck. In lowering freight to a steamer a sled is used, and horses draw this sled up with whatever is to come ashore from the steamer.

The outer end of the chute is so arranged that it may be raised or lowered to suit the tide or height of vessel. Many of these chutes are very long and quite expensive. Certain specified charges are made, these being fixed by law. The large mills, of course, have their own private chutes. The vessels are securely moored, so as to remain as nearly in one position as possible, but many are lost every year owing to poor harbors. Nearly all these chute landings are exposed in the winter months when the southwest or southeast gales blow. Nearly the entire lumber trade of the northwestern coast is carried on by vessels which load at these chute landings. Of course, at such places as Humboldt bay there are wharves, but the majority of the landing places, are fitted with chutes, since wharves cannot be maintained.—*Mining and Sientific Press.*

ITEMS OF INTEREST.

White pine logs were brought up from a depth of 700 feet, while drilling wells near Albany, Ga.

There is a man in Rawlins county, Kan., who is the owner of 60,000 trees all planted by himself on his homestead.

A log recently cut at a mill on Puget Sound measured 40 feet in length, scaled 100 inches, and contained 14,620 feet of lumber.

During the month of July there was received at San Francisco, 30,954,608 feet of pine, 12,504,704 feet of redwood, and 11,799,500 shingles.

There is a redwood tree on Isaac Crispin's place, near Point Arena, Cal., that measures 97 feet in circumference, and a fraction over 22 feet in diameter.

A piece of lumber 12x12, and 54 feet long is above the average, but a piece 4x12, 80 feet long, is considerably so. Both pieces were cut in Washington Territory for a school building in Chico, Cal.

A Michigan editor, who is also a member of a saw mill firm, effuses as follows:

Woodman, spare that tree,
Touch not a single bough,
In youth it sheltered me,
And it's worth nine dollars now.

It is estimated that the annual consumption of wood in the United States amounts to, in cubic measure, 2,500,000,000 feet for lumber and wood manufactures, 360,000,000 feet for feet for fencing material, 17,500,000,000 feet for fuel, making railway construction, 250,000,000 feet for charcoal, 500,000,000 a total of 21,000,000,000 cubic feet.

A delving historian, says an exchange, has dug up the fact that Colonel Bowie the inventor of the bowie knife, was a Kentucky lumberman. Once when on a sick bed his mind dwelt on the most expeditious way of disemboweling an antagonist, and he whittled out a model of the knife that he thought would best answer the purpose. This model was sent to a man who cut the blade of the first bowie knife out of a discarded saw. It illustrates of what service a lumberman on his sick bed may be to civilization when he settles down to serious meditation.

One of the queerest men in the trade at Toledo, says the *Northwestern Lumberman*, is William Peter. He belongs to Michigan about as much as Toledo, is a German by birth, and I am told once worked for $4 a month and clothed himself. I'll wager that he saved $3.50 of it, too. Forty years ago he kept a small store at Columbiaville, or Nigersville, as it was then called, a straggling hamlet on the Flint river, Mich. He started lumbering in a small way, and did business in a hand to mouth manner, but saved money, and finally got on his feet, removed to Toledo, where he owns a planing mill, sash, door and blind factory and lumber yard, a large mill and salt block at Bay City, Mich., a woollen mill and $25,000 hotel and 600-acre farm at Columbiaville, and a mill in Mecosta county, with pine timber enough to keep the wolf at arms' length for 10 years ahead. He never let a cent get away yet, and his right hand has not yet forgotten its cunning. Personally, Peter isn't very popular. I had a grudge against him once, when a ragged impecunious lad he refused to trust me for a pair of boots, but it was creditable to his business sagacity, and I long ago forgave the affront. But he "got there all the same."

THE NEWS.

ONTARIO.

—The saw mills at Edgar have shut down.

—A large saw mill is being built at Falkenberg.

—Thompson's shingle mill, at Orillia, turns out 60,000 per day.

—Thompson & Wright, lumbermen, Hamilton, have assigned.

—The Georgian Bay lumbermen are sending their men to the woods.

—No more rafts will be allowed to pass through the Grenville canal.

—Mr. John Rodd is erecting a new steam saw and shingle mill at Lindsay.

—The Emery Lumber Company's big mill at Midland cuts 100,000 feet a day.

—The Canada Lumber Company will not remove their mills from Carleton Place.

—There will be more lumber cut at Parry Sound this season than for many years past.

—The Ottawa mills are running out an unusually large amount of lumber this season.

—The *Forester* says 123 carloads of lumber and shingles were shipped from Huntsville in June.

—H. S. Mullen & Co., in the wholesale lumber trade in Toronto for the past year, have assigned.

—Lumbermen say that the Grand Trunk railway requires more sidings both at Midland and Orillia.

—The Georgian Bay Lumber Co. are shipping a large quantity of sawn square timber to Europe.

—Destructive bush fires in the Upper Ottawa region have consumed much valuable timber on the limits.

—The Rathbun Company are building a new wharf along their five lots north of Wharf street, Belleville.

—Wholesalers report trade in Western Ontario improving. In the eastern United States it is generally dull.

—E. U. Wiffen's mill, Fesserton, is running full time and he expects to turn out two million feet of lumber.

—The Waubaushene and Magnettawan lost a tow of 24,000 logs near Hope Island on the way to Collingwood.

—Brisley & Skelton, of Fesserton, report trade good. They have a fine lot of logs and expect a good turn out.

—Messrs. Davidson & Hay, of Toronto, will build a large steam saw mill on their lands at Lake Nipissing, Ont.

—A defective foundation let a pile of lumber belonging to the Rathbun Company, at Deseronto, fall into the bay.

—Waubaushene lumbermen report the sale of good pine very dull, also 16 inch shingles, 18 inch shingles sell readily.

—Work in the bush has been commenced by the lumber firms on the North Shore, says the Manitoulin *Exporter*.

—Canadian l umber exports to the United States for the first six months of the year showed a decrease of $153,000.

—Mr. Wiley, late of Midland, has leased the water power saw mill of Messrs. Irwin & Bennett, South River, Ontario.

—Messrs. Hall & Booth's Amable du Fond raft of white pine timber is the finest taken out of the Ottawa for over twenty years.

—The Emery, Victoria Harbor and Georgian Bay Lumber companies each lost a tow of logs in August, aggregating about 25,000 pieces.

—The Georgian Bay lumbermen say this has been one of the poorest towing seasons they ever experienced owing to the prevailing high winds.

—The Resolute,employed by the Emery Lumber Co.,sprang a leak and sank, but was afterwards raised, and is now in the Owen Sound dry dock.

—American lumbermen have taken up three townships in Algoma, Ont., from which they propose cutting 50,000,000 feet of logs next winter.

—Several lumbermen having finished the work of driving and delivering their logs, have already gone back to the woods to begin work for next season.

—A great many lumber firms south of Sudbury will go into camp early this year on account of portions of their limits being burned over during the drought.

—The Longford pail and tub factory at Orillia has recently commenced operations, 1500 pails and 500 tubs will be turned out per day when in full operation.

—It is said to be the intention of the Parry Sound Lumber Co. to have an iron barge built at Owen Sound after the new C. P. R. steamer has been completed.

—The John Owen with a tow of long timber from French River for Tonawanda is reported to have lost her tow in Lake Huron during a gale in the early part of August.

—Mr. Jas. Playfair, of Sturgeon Bay, is cutting some of the best pine that ever came into that place. He expects to cut from four and a half to five million feet this season.

—Destructive bush fires have raged in the timber limits in Petewawa and Chalk river districts, also in the vicinity of Brudenell and Golden Lake, and great damage is reported.

—Letters patent of incorporation have been applied for by the "Sebaskong Lumber and Mining company," with a capital of $22,000 and chief place of business at Rat Portage.

—The Jenkins Bros., have erected a new steam saw mill on Jenkin's island near Fenelon Falls. The machinery was taken from Port Perry on scows towed by the steamer Anglo Saxon.

—The Superior and Shawanaga lost a tow of 10,000 logs belonging to Victoria Harbor Lumber Co. above the Giant's Tomb on August 8th. They were gathered up again with few losses.

—The Rainy Lake Co's mill at Rat Portage continues to be hindered in its operations by high water on the lake. The fires could not be started in the furnace, as the water had entered the boiler house.

—The Manitou *Mercury* says that complaints are made at different points along the railway on account of the delays experienced in receiving shipments of lumber fromdealers in Winnipeg and elsewhere.

—The storm of August 8 was a heavy blow to some of the lumber companies on the Georgian Bay. Threee tows of logs, in all about 50,000, were tossed around the bay, the greater part of which may never be recovered.

—Wm. Ponenfant, foreman for John Mackay on the Amable du Fond, was charged before Judge Doran at Mattawa with having neglected to read the Fire Act to his men, as required by law. He was fined $10 and cost, $35.65.

—A party of American lumbermen are trying to buy a tract of pine on the Spanish River, the price being in the neighborhood of half million dollars. Several Minnesota operators are also said to be at the present time negotiating for a round block of pine on the Spanish River.

—The Ontario Government has issued orders to repair and rebuild the reformatory dock at Penetanguishene. It is supposed the long delay in proceeding with this necessary work arose on account of a question of jurisdiction between the Ontario and Dominion Governments.

—The Georgian Bay Consolidated Lumber Company have been incorporated. The partners are, Arthur M. Dodge and William E. Dodge and Cleveland H. Dodge, of New York city, Wm. H. F. Russell and James Scott, of Waubaushene, and J. W. Hartman, of Port Severn.

—During August, Mr. Frank Brabant, foreman for Messrs. Strickland, of Lakefield, brought down his third drive for the season. His drives contained, respectively, 44,000, 52,000 54,000. On Monday, August 13, Mr. Brabant ran 32,000 logs over the Point dam in twelve hours.

—Mr. W. C. Edwards, M. P., is reported as having said that he will cut about 40,000,000 feet in his mill at Rockland, this summer. He had almost decided to remove his mills from Carleton Place after the season, but operations have been so satisfactory that he will leave the mill there for the present.

—The Rainy Lake mill has received a big raft of logs and could easily be kept running its full capacity for the balance of the season, but owing to the high water, which has entered the boiler house, fires cannot be lighted. Efforts have been made to dam the boiler house, but so far have proved futile.

—Mr. Thompson, lumber merchant of Peterborough, has been engaged for some time purchasing pine trees in the townships of Manvers and Cartwright. He offered a resident of Blackstock $200 for ten, but the offer was not accepted. Mr. James Magill, of Yelverton, disposed of four at the very good figure of $60.

—Perley & Pattie's raft from the Petewawa river arrived at Ottawa recently. It is red pine and consists of 130 cribs. While the raft was in transit from Coulonge Lake, a Frenchman named Cadieux, from Sorel, was drowned, somewhere near Ryan's. It is supposed he fell down between the cribs and went under the timber.

—The large sawmill of the Dickson Company, Peterborough is in full blast, and while the logs are disappearing rapidly the piles of lumber are showing up in great shape. For the first time in years the mill started this season with a full staff of men. At present upwards of seventy find employment, and all of them are paid good wages.

—Trade statistics show that the railways have secured much of the lumber carrying trade formerly done by the canals. The quantity of sawn lumber carried from Ottawa and Hull by the Canadian Pacific and Canadian Atlantic railways for 1887 was nearly 90,000,000. For the same period the quantity carried by the Ottawa canals was, in 1886, 357,132,000 feet of sawn lumber, and last year, 335,694,000 feet.

—The lumber industry of the Ottawa district is undoubtedly by far the most extensive and renumerative in that line in Canada. The six principal firms, employ during the summer 5,620 men in their mills and about their yards, and in the winter about 3,800 in their shanties and on their limits. The Upper Ottawa Improvement Co., employ about 1,000 men during the summer months. The total number of men employed in the limits on the Ottawa River is about 15,000.

—Bush fires burned over a large area in the township of Clarendon and a settler near Card's Mills was deprived not only of his home but of all his effects. Near Levant Station, on the K. & P. Railway a great fire raged for days, cutting off communication between the front and rear by burning up the corduroy roads. The fires burned furiously north of Trout Lake. The loss would have been heavy, but for the exertions of Colonel Walsh and a force of workers acting under him. The recent drenching rains fortunately quenched the fires.

—A careful estimate places the number of hands employed during the summer by six leading lumber firms at the Chaudiere at nearly 6,000, and the same firms employ in the woods during the winter 3,800. The lumbermen say that only about 15 per cent. of the employes in the mills during the summer go to the shanties in the winter, the rest of their winter gangs are made up of outside men. Of the 3,800 men who work in the shanties during the winter about 2,000 live in Hull and about 1,000 in Ottawa, the remaining 800 are strangers.

—Not long since, at Ottawa, the tug Charlotte while towing a raft of square timber, grounded upon the big sawdust bank opposite the Parliament buildings, and with difficulty was got off. There must be at least thirty feet of sawdust, three hundred feet long and one hundred feet wide, between Pine Tree Island and the entrance to the locks upon which spring floods had no effect. A short time previously a raft was landed above Ratte's boat house, when a sawdust explosion took place at the lower end of it, which shook one of the ribs badly, and shoved the loading pieces about in all directions. A large boat tied to the raft was filled with sawdust and water.

—The Resolute with a tow of 15,000 logs for the Emery Lumber Co. Midland, sprang a leak near Hope Island during a heavy gale, and after battling with the elements for a while was obliged to cut the tow adrift and run for shelter. The water in her hold made such neadway notwithstanding the steam pumps being constantly at work that the fires were put out, when the captain beached her and she sank in 14ft. of water. The crew hung to the railing which was the only part out of water till daylight, the yawl boat having been lost, when a raft was improvised and crew reached Hope Island in safety, whence they were taken to the mainland. They had an exciting season.

—Lumbermen, in cutting logs on the Rainy Lake and tributary rivers to the Rainy river, place the logs in booms and leave them until they get the number out ready for towing to the mills. This season the water in the river has risen to an unusual height, and has raised the booms over the guards, letting all the logs in booms loose, to float promiscuously over the lake. As near as can be ascertained, the following is a correct amount of the logs which have got loose: Keewatin Lumbering and Manufacturing Company, 10,000,000; Dick & Banning, 2,000,000; H. F. Holmes, 300,000; Minnesota, and Ontario Lumber Company, 5,000,000; Rainy Lake Company, 4,500,000; Hughes & Kennedy, 100.000.

—The Chaudiere lumbermen who have limits on the Madawaska were lately informed that a quantity of timber bearing marks of Ottawa merchants had been claimed by Mr. H. Edey and his three sons who own a small saw mill on that river. The authorities were informed at the instigation of Messrs. H. F. McLaughlin & Bros., and Mr. Edey and his three sons were accordingly arrested and taken to Pembroke jail. They were arraigned before Magistrate Craig at Arnprior, and all four were committed for trial at the next assizes. Mr. Edey, the father of the family, secured bail for himself and one son, and two of the sons were obliged to go to Pembroke jail the next day to wait their trial. The Edey family are well known in Renfrew county and their arrest and imprisonment is the talk of the country. The Chaudiere lumbermen will be obliged to attend the trial to identify their private marks on the timber which has been found in the possession of the accused.

—Stewart Bros., who run a saw mill at Eastman's springs, near Ottawa left there some weeks ago and have not since returned. Several alleged creditors say the brothers left together

saying they were going on a trip. Before leaving, instructions were given to the clerk to continue selling lumber as usual. Mr. Neil Stewart, the father of the young men holds a chattel mortage of $1,200 on the mill, which was taken possession of by a North Gower money lender, who is the owner of the first mortgage. Mr. Kyle, a grocer, signed the firm's paper to the extent of $400. Before he was aware of the state of affairs. Mr. Kyle also bought some shingles which had been made as custom work for a man who had left the lumber to be made up. Another merchant bought some of these shingles. When the owner came for them he made acompromise offering to give him a pile of lumber instead. This was done, then he took out a warrant against the man for stealing his lumber. The case came up before Mr. Johnston J. P., and the man had to pay $18 for the lumber and the costs. The estate is now owned by Mr. Boyd who has bought it.

QUEBEC.

—The first sale of new wood this season at Quebec, has been reported.

—The bark Loyal, timber laden, Quebec to Liverpool, is a total wreck in the Straits of Belle Isle.

—The demand for square timber has been very brisk, and and good figures are obtained all round.

—Several timber limits on the Coulonge and Black Rivers are reported to have been destroyed by fire.

—Hale & Booth recently sold a very large raft of white pine to Dobell & Co., of Quebec, at 38 cents a foot, realizing a total of $53,000.

—Complaint is heard that the Act lately passed by the Quebec legislature abolishing forestry reserves, will injuriously affect the interests of the lumbermen of the Ottawa Valley.

—Mr. McLaren has purchased the Gilmour property in No. 5 Ward, Hull. Mr. McLaren will establish a saw mill on the place and also a cotton factory. About 250 hands will be employed when the new business is in running order.

—The Montreal market during August was the reverse of active, but this is the usual condition of matters at this season of the year and but little is expected to be done before September comes in. Trade is moderate in a jobbing way.

—Mr. R. R. Dobell, of the well known Quebec lumber firm of Dobell & Beckett, and Mr. W. M. Dobell, his son are on their way to British Columbia. They will make a personal examination of the lumbering facilities and advantages of that western land.

—A Dominion order in council has been promulgated to prevent any person cutting or carrying away from the Caughnawga or Sault St. Louis reserves, in Quebec, any maple tree or sapling unless the consent in writing of the Indian agent be first obtained.

—The Provincial Government announces a sale of timber lands in Quebec on the 17th October. The bonus and first year's ground rent must be paid in each case immediately after the sale. The area offered comprises 3,485 square miles, situated chiefly in the limits of the Ottawa, Lake St. John, Saguenay and Gaspe agencies.

—The good prices at which square timber sold this year in the Quebec market have caused quite a boom in that branch of the lumber trade and as a consequence a big lot of square timber will be made this year. Those making it, however, will keep the average not less than sixty-five feet, as it is that dimension and upward for which a demand exists.

—Before Recorder Champagne, at Hull, two young shantymen named Louiselle and Lacasse were put on trial on a charge of deserting from the employ of Gilmour and Co. According to the prosecution the men were hired for the drive, but skipped out before their contract had expired. A fine of $3, or a month in default of payment was imposed. They refused to pay saying they would go to jail, and when they got out bring the case before higher authorities.

NEW BRUNSWICK.

—The exports of lumber and timber from Richibucto, for the fiscal year ending June 30th, 1888, aggregated $118,096, or $44,684 more than all other exports combined.

—There is an immense quantity of lumber in the booms and along the shores of the St. John yet unrafted. The lumber cut of this season is far in advance of last year and many years previous. The estimated cut on the St. John this year is placed at 140,000,000 feet, which is some 40,000,000 in advance of last season. Nearly all of this large cut is now in. The work of rafting is proceeding with vigor at the booms.

—For some time past there has been a controversy between the Saint Croix cotton mill, Milltown, and the owners of the Union mill as to the passage of logs by and below the cotton mill. The log owners claim that jams are caused by the defactive passage-way in the cotton mill dam, and the mill officials maintain that the lumbermen should keep the log roll clear. Legal proceedings have been begun in the provincial court. The cotton mill having been granted temporary injunction to restrain F. H. Todd & Sons from allowing logs to remain on their lands, the decision of the court will be made later upon the motion to dissolve the injunction. The interests involved are large, and the case involves most of the law as to running logs and building dams on rivers.

NOVA SCOTIA.

—It is Mr. Leary's intention to start a third raft from Nova Scotia before the unfavorable autumn weather sets in. The prices for lumber at wholesale are already lower, and the builders believe that there is danger of the market being overstocked next year.

MANITOBA AND THE NORTHWEST.

—10,000 saw logs are still in the river above the mill at Birtle. There is a prospect that they will be cut up at Birtle.

—Mr. Christie, of Brandon, will build a new saw mill near the river close to the old Brandon planing mill. Work will be commenced on it in a week or so.

—M. Wilson, lumber dealer, Newdale, Man., reports lumber business booming. A very large amount of building is being done in the district this season.

—Lumber is scarce at Cypress River, Manitoba. Mr. Gowanlock cannot furnish the heavy demands in that line. Similar complaints are received from McGregor.

—The total cut of lumber in the Lake Winnipeg district this year is placed at 8,975,000 feet, an increase over last year product of 2,225,000 feet, and the estimated value is $116,675, being $42,425 more than last year.

—The only saw mill in operation on the Bird Tail is that of Mainwarning Wright. The Birtle *Observer* says: This mill is an excellent one, most conveniently situated, as the vast timber districts from which logs are procured begins a short distance north, while a well settled country lies to the south, east and west. The mill is kept going constantly.

—The board of trade of Portage la Prairie, has taken action on the lumber question. The board says great injury has been done that district, owing to the scarcity of lumber, which has been caused by the inability or refusal of the C. P. R. Co., to furnish manufacturers with cars as rapidly as they are required. The board has drawn the attention of C. P. R. Superintendent White to the matter.

BRITISH COLUMBIA.

—A boom of logs was towed into Vancouver harbor by the Mermaid for the Hastings Saw Mill in August.

—The steamer Mamie arrived from Duncan's Bay with 600,000 ft. of lumber for Messrs. Haslem and Lees.

—It is said that H. A. Harrison, of the Chemainus Lumber Co., whose death occurred at Vancouver recently, carried $12,000 insurance upon his life.

—The possibility of navigating the Fraser river to Westminster, B. C., having heen demonstrated, an impetus will probably be given to lumbering operations.

—The tug Alexander towed out the ship Hindostan, Capt. Welsh. She has been loading at Moodyville, and carries in all 1,217,708 feet of lumber. She is bound for Valparaiso.

—British Columbia fir, on account of its extreme length and imperviousness to decay, is found to be very valuable in bridge construction. It is stated that a truss of this wood well seasoned and painted will last 40 years.

—A gentleman named Prentiss, from Wisconsin, arrived at Westminster recently, for the purpose of finding a suitable location on which to erect a saw mill. It is understood that he will erect one provided he can obtain timber limits in the province.

—The barque Olaf Tryggason, 850 tons, registered at Helsenburg, Sweden, Capt. Meyer, cleared from Vancouver for Melbourne, Australia. She had loaded lumber at the Inlet and carries 1306 tons weight, equivalent to 1500 tons measurement.

—A. J. Bovill, of Westminster is about to erect a large saw mill below Langley on the Fraser River. The machinery has been ordered from Ontario, and expected to arrive about the middle of September, when the frame work and wharves of the mill will be ready to receive it. The mill will have a capacity of about 40,000 feet of lumber per day.

AMERICAN NOTES.

The booms on the Penobscot river, Me., use 80 tons of rope and 2,000,000 rafting pins yearly.

—The shipment of lumber from Alpena, Mich., thus far this season have amounted to 74,736,000 feet of lumber, 6,145,000 shingles and 4,060,000 lath.

—No more convict labor is to be employed in the manufacture of sash, doors and blinds at Minneapolis, say those interested, after Sept. 1. So mote it be.

—Logs to the amount of about 10,000,000 feet were driven from Eagle River, Wis., to Rhinelander in twelve and one-half hours. The distance is estimated at sixty miles.

—The Omaha City Council and leading citizens have been having quite a "confab" over the respective merits of cedar and cypress paving blocks, but have decided in favor of cypress.

—The largest raft on record by 2,000,000 feet was delivered at Bay City, Mich., recently by the tugs Mocking Bird and Music of Reid's line. It contained 9,000,000 feet of short logs.

—Leahy and Bebee's drive amounting to about 22,000,000 feet is now in the pond at Tomahawk, Wis. This drive came 160 miles in seventy days with an average crew of seventy-five men.

—Theodore Crown, of Viroqua, Wis., has patented a new machine to make an improved lath. The lath is manufactured from boards and grooved by the machine and used as siding.

—A Milltown, Me., mechanic has invented a log-sawing apparatus which was an upward as well as a downward motion. The scheme has not been fully tested yet, but, if successful, will be a time-saving invention to lumber dealers.

—Great damage has been done to the lumbering interests of Western Pennsylvania and West Virginia by reason of heavy rains. Quite a number of saw mills were washed away, considerable lumber lost, and thousands of logs sent floating seaward.

—The Penobscot Boom Co., of Bangor, Me., has already rafted some 70,000,000 feet of logs this season and is now rafting at the rate of from 1,500,000 to 2,000,000 daily. Eighty tons of cordage and 2,000,000 rafting pins are used annually.

—W. W. Bartley, a yard dealer in Newark, stopped payment last week, with liabilities of $19,000, and assets of about $9,000. The failure was anticipated by the Newark dealers, as Mr. Bartlett has neglected his business in favor of personal indulgences.

—During July there were 36 cargoes of lumber shipped from Puget Sound mill ports, aggregating 26,389,739 feet. Of this 12,929,739 feet were shipped to foreign ports, and 13,460,000, feet to coastwise ports. The total value of lumber exports from Puget Sound during the month was $300,867.55.

—Another strike is in progress at Tonawanda which bids fair to outdo the one that failed a few months ago. About 1,000 men went out by order oft he 'Longshoremen's Union. During the last month many of the outside men have been taken into the union, and the organization has been strengthened otherwise. The outlook seems favorable for the men.

—A portion of a petrified tree was discovered in a solid sandstone rock quarry at Zanesville, Ohio, the other day. The tree is about the thickness of a telegraph pole and has well-defined bark and roots. It was found while blasting or immediately after a blast, fully sixty feet below the top of the hill, and was in solid rock. Over it is the earth formation, then a species of shale, then limestone strata, followed by a conglomeration of stone, then some forty feet of solid sandstone, near the bottom of which is the petrified tree.

—"There has been a marked change in the method of moving shingles to market out of the Saginaw valley," said a steamer captain who plies in those waters. Formerly a dozen propellers plied between Saginaw and lower lake ports, carrying shingles, but now the dealers in Ohio go right up to the river and visit the mills along the railroads, and buy in car lots, having them shipped to their yards directly by rail. It has paralyzed the shingle business by water, but is a good thing for the dealers, who now buy from first hands, instead of, as formerly, making their purchases of Toledo, Sandusky, Cleveland and Buffalo middlemen.

EUROPEAN NOTES.

—The total amount of timber hewn and sawn imported into Great Britain and Ireland for the first half of 1887 was 1,754,693 loads.

—I. Laurie, of Sydney, Australia, is now in Europe as the representative of the saw mill owners of New South Wales, who are desirous of introducing in that market the various Australian woods such as Iron Bark, Blue Gum, etc. Samples of these woods are now being landed there.

—Glasgow trade reports state that there has been no public sale of Quebec timber held there during the past week. The result of recent auctions was somewhat disappointing: but a fair business is being done privately with the new imports of timber from Quebec, and, judging from the amount of shipbuilding work on hand, a substantial demand from this source is still looked for

—A Danish clergyman, Mr. Hansen has made some experiments relative to the growth of trees. Regarding the latter, Mr. Hansen has made daily measurements of the number of

trees in the garden of the institution, and has convinced himself that a period in growth in length, as represented by the branches, twigs and tops, alternates with another of increase in bulk—that is, in the circumference of the trunk—followed by a third period of equipoise or rest. In April and May the entire force of the tree was expended in lengthening the branches, while the thickness of the trunk remained stationary; all through May the most exact measurement failed to discover any increase of bulk; but in June, until the middle of July, when the new twigs had been all formed, it was the trunk that absorbed the nourishment from the roots, and bulged out. Then came the period of rest and inactivity.

—From the report of Farnworth & Jardine, Liverpool, we learn that the arrivals from British North America during the past month have been 63 vessels 52,847 tons, against 77 vessels 56,778 tons during the corresponding month last year, and the aggregate tonnage to this date from all places during the years 1886, 1887, and 1888 has been 152,720, 186,791, and 201,439 tons, respectively. The import during the month has been about an average for this season of the year; the demand continues fair, and the consumption may be considered satisfactory. Stocks generally are moderate, and owing to advancing freights and great scarcity of tonnage prices of most articles have an upward tendency. There has been more enquiry for both Waney, Square and Yellow pine; and prices are steady; the import has been large, but as it has chiefly arrived the stock may considered moderate. Oak in the log has arrived too freely; there is no improvement in the demand and the stock is ample; Elm is in dull demand and prices are rule low, but the stock is light. Ash is in demand but the import has been in excess of the requirements, and the stock is heavy; there is no change in value. Pine Deals have arrived too freely, stocks are accumulating, and are now too heavy; there has been a fair enquiry for 3rd quality, but 1st and 2nd qualities are very difficult of sale; for Regulars there is little change in prices to report, but Odd Sizes and Boards have declined in value. Quebec Staves have only been imported in small quantities, and are quite neglected.

Death of a Canadian Millionaire Lumberman.

In the death of Mr. Boyd Caldwell, says the Montreal *Star*, which occured at his residence in Lanark last week, Canada looses one of her millionaires, and the county of Lanark one of its most prominent and esteemed citizens. He was born in Lochwinnoch, Scotland, in 1818, and came to this country a few years later with his parents, who settled in Lanark, where his father, William Caldwell, carried on an extensive lumbering business. He was educated at Perth Grammar school and went into his father's business. To this business Boyd succeeded in 1848, and through his energy and business capacity increased it to such an extent that at the time of his death his estate amounted to considerable over a million dollars. The secret of his success was uncompromising integrity and honor and a resolute determination which never swerved from its aim, and increased with increasing obstruction. He never speculated nor undertook and enterprise without having amply provided for the consequences in the event of failure.

He became very widely known in consequence of the cause celebre "McLaren vs. Caldwell" which through the enactment and the disallowance of the celebrated Streams Bill led to a conflict between the legislature of Ontario and the parliament of Canada, to the ultimate defeat of the latter. He retained in that case the most eminent forensic talent in Canada, including the late Messrs. Bethune and Moss, of Toronto, and Hon. R. L. Church, now one of the judges of the Court of Queen's Bench for this province. The law costs in this case amounted to over $75,000. It is characteristic of the man that, from the moment the Dominion Government became involved in that famous controversy, he would listen to no suggested compromise, though he had not until then been indisposed to a settlement. In politics he was a Liberal, but too independent to be a political partizan, sometimes opposing his party and notably voting against it on the National Policy. He leaves a widow and five children, two sons and three daughters.

Extensive Timber Limit Sale.

An extensive sale of timber limits in the province of Quebec is to be held in the sales room of the Department of Crown Lands, in the city of Quebec, on Wednesday, October 17th, when over 3,500 square miles will be offered by auction, including limits on the Upper and Lower Ottawa, in the Chaudiere, Montmagny, St. Maurice, Rimouski, Lake St. John, Grandville, Bonaventure, Saguenay and Gaspe agencies. These limits will be offered at an upset price, and will be adjudged to the party bidding the highest amount of bonus. Further particulars may be obtained by perusing our advertising columns.

RETALIATION THREATENED.

The rejection of the Fisheries treaty in the United States Senate, though the result of a political dodge, rather than true statesmanship, has resulted in a somewhat serious state of affairs. President Cleveland immediately asked the Senate and House of Representatives, as the only consistent course left, to pass an act vesting him with additional powers on the lines indicated by the act passed last year, to enable him to prohibit the carrying of all goods duty free from Canadian to American ports, and by Canadian railways. The Senate rereived the message rather ungraciously, but the House of Representatives introduced a bill to give effect to the president's request. This new phase of the international complication has excited a great deal of comment on both sides of the line, and not the least among lumbermen. A reporter of the Ottawa *Journal* the other day interviewed some of the most prominent men in the trade at the capital. Their opinions, as might be expected, were very divergent. Mr. J. R. Booth regarded it as simply an election dodge, and that the act, even if passed, will never be put in force, but that if it should be the Americans would get the worst of it. "We have the lumber," he said, "and the Americans must get it." Mr. E. B. Eddy said he was "going to see Cleveland about it." Mr. Levi Crannell, local manager of the Bronson & Weston company, who are the largest exporters to the States on the Chaudiere, said it would prove a serious matter to their business. About 125,000,000 feet is shipped every year from Ottawa through the States to Boston for export. All this would be chargeable with duty, which would mean a loss of exactly the amount of the duty imposed to the Canadian firms, as in order to compete with Michigan lumber the prices of Canadian stocks must remain as they now are. It would be difficult, if not impossible, to handle all this export business through Canadian ports. Messrs. Hurdman, Pierce & Co. and Perley & Pattee all seemed to view the matter with unconcern. Agents of the American export lumber companies say that the bill will, if passed, necessitate the removal of their shipping yards from Boston and New York to Montreal and Halifax.

STATEMENT OF MOIRA AND TRENT RIVER DRIVES.

Through the kindness of Mr. P. J. Shannon, manager at Belleville for the Rathbun Company we are enabled to furnish a statement of the logs received at Belleville this season from the drives on the Moira, and also of those of the first drive at Trenton, the second not being as yet assorted. The total amount of harbor dues collected by the city of Belleville was $2,187.70, which is about the usual amount. There are about 100,000 pieces in a drive "hung up" owing to the low water. The following is the

STATEMENT OF LOGS, &C., RECD. AT BELLEVILLE.

Owners	Logs	Ties	Cedar Posts	Jott	Floats	L Logs
The Rathbun Co.	177872	18120	49206 45291	23583	290	264
Gilmour & Co.	165850	21	3950 1243	19071	472	233
Job Lingham	16288	4	6850 2794	804	33	470
Flint & Holton	21494		4163 1141	1436	15	154
W. Sutherland	3055			92		27
J. D. Breeze	1146					
G. Esterbrook	109					
J. Shepard	29					
E. Harrison	65					5
Canada L. C. Co.	2623		2	201	85	5
A. Sutherland	3					
J. James	19					
Total.	388551	18145	64171 50769	45187	845	1148
AT TRENTON.						
The Rathbun Co.	35188	55290	21152 1842	969	61	8
Gilmour & Co.	35112	3978	1491 163	2653	156	432

Besides the above, 103 pieces of square timber were collected at Belleville, and 440 at Trenton.

CORRESPONDENCE.

MADAWASKA. N. B., Aug. 11, 1888.

Editor Canada Lumberman.

I see in your August number Mr. James Gordon wishes to know where to secure the best grades of hard maple, in Ontario or Quebec. I may say in this county we have as fine a grade of hard maple as can be found in the Dominion, and our county joins the province of Quebec, but the New Brunswick and the W. B. railway run through it on the banks of the River St. John. Hundreds of millions of feet can be got along the line, if required. The lands are owned by the N. B. Railway Company, and drained by large streams running through the forests of hard wood, from ten to forty miles, to float lumber through as fine land and growth of hard wood as can be found in the Dominion.

Connors big drive of about fourteen millions of lumber is on the River St. John, and owing to the low water he stopped the drive, fearing to jam the falls. But more or less kept floating down, and they are now piled over the pitch, and look quite romantic.

P. O. BYRAM.

THE BIG RAFT REACHES ITS DESTINATION.

From Hell Gate, New York Harbor, to the battery, all the water front was on the watch Saturday morning, August 11, for the appearance of the great Joggins-Leary raft from Nova Scotia. With day break came scores of boats of all descriptions from the surrouuding shores, filled with people anxious to inspect the great mass of floating logs.

No such forest of lumber had ever passed through Hell Gate. If the 3,000,000 feet of spruce timber were packed in schooners for shipment it would have loaded a fleet of fifty vessels. The Boston tug Underwriter, which helped to bring the raft from Joggins, took a line off the bow and led the fleet, and the Ocean King, the Underwriter's consort, stuck her prow into the stern of the raft, and the procession began.

It was noon when Flood Rock was reached and the craft entered Hell Gate. Two more tugs were at hand and made fast to the floating forest. With this escort she moved easily past the dangerous points, holding [illegible] to the west shore. Flags were floating from all the tugs, and a Union Jack and an American flag were floating in the light breeze fore and aft from the spars of the raft itself.

The task thus safely accomplished, everybody was happy, but none more so than Mr. Robertson and Capts. Riley and Cantain, who had been in company with the raft since she started from Joggins for this port.

"Didn't I tell you so?" shouted Capt. Riley as he almost danced a jig on top of the pilot house of his ocean tug, "just as I expected. I tell you I can take the largest ship afloat now through Hell Gate without any trouble.

It was twelve o'clock as the procession passed Hell Gate, and eighteen days after the raft had been launched. The next thing in order were general congratulations, and Mr. Robertson, Capts. Riley, Cantain and Babb recived their due share of it. The raft was towed down the East River, and aided by a swift ebb tide which had just begun, the procession steamed along among the general saluting of the crafts which passed it. Along the shores and docks people could be seen who had come out to see the novel craft; there were more people out to see the new raft than there were in the Blaine procession. At 1.45 John Roach's old shipyard was passed, and the raft was then making five miles an hour speed. At the Brooklyn navy yard the tars turned out en masse. They were all anxious to see the novel ship, and the jolly jacks waved their white hats in appreciation of the great enterprise. The Brooklyn bridge was literally crowded with people, and as the raft passed beneath the great structure at 1.20 p.m. the crowd cheered so loudly that it almost seemed to drown the noise caused by the monster concert of blowing steam whistles. As the raft passed the Battery the Staten Island ferry boat Southfield started out from her dock on her way down the bay. She was like a human beehive, overloaded with passengers, and as they all rushed to the port side to get a glimpse of the new craft, it looked as though the steamer would capsize. When the tugs neared Erie Basin a number of sailing vessels were at anchor in the bay along the Brooklyn shore. The Underwriter was compelled to cast off her towlines and assist the other tugs in pushing the raft over for fear that she might drift into the ships at anchor. It was a narrow escape, but the raft just steered clear, and by three o'clock amid the blasting of all the steam whistles in the vicinity, the monster Leary raft was towed into Erie Basin, where she touched bottom. Mr. Leary, the owner of the raft, was not there to greet Mr. Robertson as he had gone to New London the night before. The breaing up of the raft commenced nextday. It is supposed that the price paid by Mr. Leary to Mr. Lukenback for towing the raft is $5,000.

Branching Out from Brantford.

H. W. Petrie, of Brantford, has built up a business in new and second-hand machinery second to none in Canada, and now he is adding to it a Toronto branch, which is located at the corner of York and Esplanade streets, near the Union Station. The Toronto concern is under the management of Mr. Alfred Rubbra.

Bought a Redwood Forest.

Messrs. John M. Dollar and Wm. Fraser have returned from a trip to the Pacific coast. In California, not far from Sanf Francisco, they purchased a red-wood forest to the extent of about sixty million feet, of which they propose to take possession about the 1st of November. Mr. Dollar is well and favorably known to the lumber trade of Canada, as manager for the Ontario Lumber Co., and his ability, energy and geniality have rendered him a peculiarly acceptable man in that position. Mr. Fraser has held the position of local manager for the same company at French River. THE LUMBERMAN extends its best wishes to both gentlemen in their new venture.

TRADE REVIEW.

Toronto, Ont.

TORONTO, August 30,—Trade in both the city and Western Canada has been comparatively dull during the holiday season, but the prospects are good for a fair fall trade. The September trade though it may be interfered with to some extent by the Exhibition, promises to be considerably better than during the past two months. The demand for upper grades of pine is confined almost entirely to the local trade. Tennessee whitewood seems to be, for the present at least, taking the place of clear pine for finishing purposes, in the United States markets.

During the past few weeks several failures of some importance have occurred in Toronto and Hamilton, two or three of the younger and weaker houses having succumbed to the pressure of hard times. Dealers will act wisely in carefully scrutinizing credits during the coming fall.

The principal grievance complained of by lumbermen is the apparent breakdown of all carrying facilities on the Northern and Midland divisions of the Grand Trunk railway. Not only does the supply of cars continue to be entirely inadequate to meet the wants of the trade, but cars even when shipped linger for days on the road, and even after reaching Toronto are usually detained many days, and sometimes even weeks, before the consignee can have the opportunity of unloading his stuff. This state of affairs has done an immense amount of damage to the trade, as the dealers are at the mercy of the dilatory railroads, and find it impossible to fill their orders, many of which during the present season have been cancelled, thus entailing a serious loss and striking a disastrous blow at the lumber industry.

Another very serious grievance is in the freight bills. It is customary with the Grand Trunk Railway to charge for 30,000 lbs for each car by the rule of guess, though very rarely does the load come within several thousand pounds of weighing that amount, but the "guess" of the freight agent is sure to be on the right side for the company. A dealer lately received two car loads one of which was billed 7,000 lbs more than the other, though there was only a difference of 500 feet in the measurement. It is customary for the weight to be taken only at one point, and even when a re-weighing has been demanded it is customary to certify to the first weight even when found incorrect. Dealers claim that there should be scales at all shipping points, and the lumber weighed there, for it often happens that carloads are detained long enough to absorb several thousand pounds of moisture, &c, for which, of course the dealer must pay freight. Not only ought the lumber be weighed at the point of shipment but the cars should be weighed also, for the tare marked is often astray, as dealers sometimes find several inches of solid manure on the bottom after the lumber is removed, and of course they pay freight on this also. Quite recently, one consignee could not understand why a certain carload weighed so high until after a minute examination, chunks of hardened lime weighing several thousand pounds were found adhering to the bottom of the car.

The railways need more cars, a greater number of locomotives, and some powerful incentive to more speedy delivery.

CAR OR CARGO LOTS.

1¼ and thicker clear picks, American inspection	$34 00@35 00
1¼ and thicker, three uppers, American inspection	40 00
1¼ and thicker, pickings, American inspection	30 00
1x10 & 12 dressing and better	20 00 22 00
1x10 & 12 mill run	15 00 16 00
1x10 & 12 dressing	16 00 18 00
1x10 & 12 common	12 00 13 00
1x10 & 12 spruce culls	10 00 11 00
1x10 & 12 mill culls	9 00
1 inch clear and picks	24 00 26 00
1 inch dressing and better	18 00 20 00
1 inch siding mill run	13 00 15 00
1 inch siding common	12 00 13 00
1 inch siding ship culls	10 00 11 00
1 inch siding mill culls	8 00 9 00
Cull scantling	8 00 9 00
1¼ and thicker cutting up plank	22 00 25 00
1 inch strips 4in to 8in mill run	14 00 15 00
1 inch strips, common	11 00 12 00
1¼ inch flooring	14 00
1½ inch flooring	14 00 15 00
XXX shingles, sawn	2 40 2 50
XX shingles, sawn	1 40 1 50
Lath, Sawn	1 80

YARD QUOTATIONS.

Mill cull boards & scantling	$10 00	Dressing stocks	16 00@20 00
Shipping cull boards, promiscuous widths	12 00	Picks Am. inspection	30 00
" stocks	13 00	Three uppers, Am. inspect.	40 00
Scantling & joist, up to 16 ft	13 00	B. M.	
" " 18 ft	14 00	1½-in. flooring, dres'd	25 00 30 00
" " 20 ft	15 00	1½ " " rough	14 00 15 00
" " 22 ft	16 00	1¼ " " dres'd	23 00 25 00
" " 24 ft	17 00	" " undres'd	14 00
" " 26 ft	18 00	" " dres'd	16 00 20 00
" " 28 ft	19 00	" " undres'd	12 00 14 00
" " 30 ft	20 00	Beaded sheeting, dressed	18 00 20 00
" " 32 ft	21 00	Clapboarding, dres'd	12 50
" " 34 ft	22 50@22 50	XXX sawn shingles per M	2 75 2 90
" " 36 ft	24 00	Sawn Lath	2 25
" " 38 ft	27 00	Red oak	20 00 25 00
" 40 to 44 ft	30 00	White "	25 00 30 00
Cutting up planks 1¼ and thicker dry	25 00 26 00	Basswood, No. 1 & 2	18 00 20 00
" board	18 00 20 00	Cherry, No. 1 & 2	50 00 60 00
		White ash, 1 & 2	25 00 30 00
		Black ash, 1 & 2	20 00 25 00

Ottawa, Ont.

OTTAWA, Aug. 28th, 1888.

Dimensions, Inches.	*Per M.*
Mill culls 10 x 1	
" 12 1	
" 12 1½	$8.00
" 12 2	
" selected 16 ft. long, above dimensions	8.50 to 9.00
Cull strips, 1 in. thick, 5 to 7 wide	7.00 to 8.00
Mill cut outs 12 x 1	
" 11 1½	4.00 to 5.00
" 12 2	
Scantling 2 4	
" 3 4	12.00
" culls 2 4	
" " 3 4	7.00
Laths	1.25
Stock shorts, 12 x 1	10.00
1 inch siding outs, 1¼, 1½, 2	15.00
" outs from shorts, 1¼, 1½, 2	6.50 to 7.00
Outs from stocks 12 x 1	
" " 12 1¼	10.00 to 12.00
" " 12 1½	
Shingles, X	1.25
" XX	2.00
" XXX	3.00
" cedar, No. 1	2.00 to 2.
" cedar, culls	1.25
Difference in planed lumber, in waste and planing	5.00
Ditto, on average good stock	20.00 to 25.00

Hamilton, Ont.

HAMILTON, Aug. 30th, 1888.

Mill cull boards and scantlings	$ 9 00@10 00	Dressing stocks	$16 00 18 00
Shipping cull boards, promiscuous widths	10 00 12 00	1¼ flooring, rough	16 00 18 00
Shipping cull stocks	14 00	1½ flooring, rough	16 00 18 00
Scantling and joist up to 16 feet	13 00	1¼ flooring, dressed	25 00
do up to 18 feet	13 50	1½ flooring, dressed	32 00
do up to 20 feet	14 00	1 flooring, dressed	21 50 23 00
do up to 22 feet	15 00	Beaded sheeting 1	25 00 30 00
do up to 24 feet	16 00	Picks, Am inspection	32 00 34 00
do up to 26 feet	17 00	Three uppers Am. In.	40 00
do up to 28 feet	18 00	XXX sawn shingles	2 60 2 70
do up to 30 feet	20 00	Sawn Lath	2 25
Cutting up plank 1¼ and thicker, dry	20 00 25 00	Red Oak	20 00 25 00
Cutting up boards	20 00	White Oak	25 00 30 00
		Basswood No. 1. & 2.	16 00 20 00
		Cherry No. 1 & 2	60 00 70 00
		White Ash No. 1 & 2.	25 00 30 00
		Black Ash, No. 1 & 2.	20 00 25 00

St. John, N. B.

St. JOHN, Aug. 29th, 1888.

Deals, Boards, Scnatling, etc.

Spruce deals	$12 00	Spruce boards	12 00
Pine "	15 00	Pine "	12 00@40 00
Deal ends	6 00	Oak "	40 00
Scantling	10 00	Ash "	15 00@25 00
		Hemlock "	7 50

Shingles.

Spruce, extra	$3 50	" No. 1	1 25
" clear	3 00	Pine	1 25
" No. 1 extra	2 25		

Clapboards.

Pine, extra	35 00	Spruce, extra	24 00
" clears	45 00	" clears	23 00
" 2d clears	35 00	" " No. 1	15 00
		" " No. 2	10 00

Flooring, Dressed.

6 in., No. 1	12 00	4 in., No. 1	12 00
" No. 2	10 00	" No. 2	10 00

Miscellaneous.

Staves	3 00@ 4 50	Laths	1 80
Heading, 17 in. per pr.	04	Pickets	6 50@15 00
" 18 in. "	04½ 05½	Railway ties	15
" 22 in. "	04½ 06		

Goderich, Ont.

GODERICH, Aug. 28th, 1888.

There is quite a lull in this market. It seems to be general, at least over this section of the Province, and judging by the greater than customary desire shown by American mill owners in Ontario to dispose of more of their stock than usual in Canada, the market over the border is not any too brisk. There is a tendency to lower prices on most grades, but it is not yet sufficiently developed to warrant a change in price lists. Lumber drummers are now almost as numerous, and are rapidly developing, so the dealers think, into as a great nuisance as Book, Sewing Machine, and Insurance Agents.

PRICES IN CAR LOTS.

1 inch Mill Culls	$8 00@ 8 50
1x6-8-10 & 12, common	12 00
1x6-8-10 & 12, dressing	16 00
1x14, and wider, common	12 00
1x14, " " dressing	16 00
1¼ dressing	16 00
1½ "	16 00
1¼ Norway pine flooring	14 00
1½ " " "	14 00
1 inch clear and picks 4 to 9 inch	25 00
1 inch " " 4-in. and up	26 00
1 inch " " 9-in. and up	27 00
1¼ and 1½ clear and picks	35 00
Lath 1½x4 feet	1 80
2 inch pine joist	11 50 12 00
2 inch Norway joist	11 00

Montreal, Que.

MONTREAL, Aug. 29th, 1888.

Lumber business has been fairly good this season as building trade has been brisk, but in consequence of the high wages of building mechanics, and enhanced prices of material, the cost of building is too high to return a fair revenue and is being now curtailed, Lumber is very plentiful now, but prices are firm. Lumber in lots is sold here at a very small advance on the cost, especially before it is removed from the wharves, or cars. Seasoned hardwood is scarce and prices firm. The prices in the list are not the cost or actual retail prices, but about the figures that rounds lots are disposed of to consumers.

Pine, 1st qual'y ₱ M	$35 00	40 00	Basswood, run of log		
Pine, 2nd " "	22 00	25 00	culls out per M	$16 00	20 00
Pine, shipping culls ₱ M	14 00	16 00	Oak, per M	40 00	50 00
Pine, 4th quality deals ₱ M	10 00	12 00	Walnut, per M	60 00	65 00
Pine, mill culls, ₱ M	8 00	10 00	Cherry, per M	75 00	80 00
Spruce, per M	10 00	13 00	Butternut, per M	30 00	40 00
Hemlock, per M	9 00	10 00	Butternut, per M	30 00	40 00
Ash, run of log culls out per M	16 00	18 00	Birch, per M	18 00	25 00
			Hard Maple, per M	20 00	25 00
			Lath, per M	1 50	1 75
			Shingles, 1st, per M	300	1 25
			Shingles, 2nd, per M	1 50	2 00

Saginaw, Mich.

SAGINAW, Aug. 28th, 1888.

The Saginaw market has been fairly active during the latter part of August, the transactions being considerably in excess of the same period last year. It is known that several million feet have changed hands. There is a good demand for the coarse grades. An active movement in lake shipping will be commenced immediately. Wholesale prices are :

CARGO LOTS.

Uppers	36 00@38 00	Norway	8 50@ 9 25
Common	16 00 22 00	Box	10 50 11 00
Shipping Culls	8 50 10 00	Straight measure	11 00 18 00
Mill Culls	6 00		

YARD QUOTATIONS—CAR LOTS DRY.

Drop Siding.

Clear, ⅞ in	42 00	C, ⅞ in	30 00
A	38 00	D	19 00
B	36 00		

Flooring and Siding—Dressed.

Flooring, clear, d & m	40 00	Siding, clear, ½ in.	22 00
No. 1	33 00	A	23 00
No. 2	30 00	B	17 00
No. 3	20 00	C	14 00
No. 4	13 00	D	12 00

Finishing Lumber—Rough.

Three uppers, 1 in.	42 00@45 00	Fine common, 1 in.	32 00@32 00
1¼ & 1½	44 00 46 00	1¼ & 2 in.	36 00
Selects, 1 in.	36 00 37 00	C, 7, 8 & 9 in.	26 00
1¼ & 2 in.	38 00	Base, 2 to 9 in. No. 1	40 00
		No. 2	30 00
		No. 3	20 00
		Coffin boards 16 in. and over	18 00

Joist, Scantling and Timber.

12 to 18 feet	10 00	22 feet	12 00
20 feet	11 00	24 feet	13 00

Plank and timber, 12 inches wide, $1 extra.

Wide Select and Common—Rough.

C (No. 1 com.) 13in. and up 28 00 D (common) 14 in. and up . 16 00

Lath, Shingles and Pickets.

Lath, No. 1	1 50	Country brands XXX	3 25@ 3 35
No. 1	1 00	Clear butts	2 25 2 35
Shingles, river brands		Pickets, 2 to 2½ in rough	12 00 13 00
XXX	3 40@ 3 50	Dressed	20 00
Clear butts	2 40 2 50	1½ in. square, dressed	14 00 19 00

Philadelphia, Pa.

PHILADELPHIA, Aug. 29th 1888.

The fall demand for lumber has set in strong, especially with regard to white and yellow pine. One reason for this is that dealers fear that the election will go for a protective tariff, and in that event prices will advance. The white pine trade has been active during the past few months. A little eastern spruce is handled, but it is being crowded out by other woods. The business outlook from this place is bright.

White Pine.

Mich. uppers, 1 to 2 in., dry	$48 00@52 50	1¼ to 2 in. plank, barn quality	23 00@25 00
2½, 3 & 4 in	60 00 65 00	Common plank	20 00 22 50
Selects, 1¼ to 2 in.	42 50 45 00	⅞ box boards, wide	16 00 17 50
2½ 3 & 4 in	47 00 52 50	⅝ siding, selected	30 00 32 50
12 in. flooring quality	30 00 35 50	Culls, 12 in.	16 50 18 00
barn	22 00 23 00	Wide	17 00 18 00
Edge barn, all widths	19 00 21 00	Narrow	15 00
		No. 1 moulding	37 50 40 00

Cargo Lots.

Yellow pine edge bds	14 00@16 00	Scantling and plank	20 00 22 00
Heart face boards	20 00 22 50		

Hemlock Boards and Scantling.

Edge boards	10 50@11 50	Scantling, 2x3 & 2x4, 12 in. stock	12 50 14 00
Fencing, 6in., 16 ft.	12 50 14 00	16 & 18 ft	12 50@14 00
		3x4, to 12, 12 to 20 ft.	11 00 12 00

Shingles and Posts.

Cypress shingles, 24 in. heart, d & b	13 00@17 00	Cedar shingles, 30 in. hand dressed	35 00
24 in. sap, d & b.	10 00 12 00	Chestnut posts, 9 ft.	35 00

HARDWOOD.

Walnut.

Nos. 1 & 2, 1 in., good dry, Indiana	$87 50@ 95 00	Reject or common, 1 in., 1¼ and up	60 00@65 00
1¼ & up	92 50 100 00	Culls, 1 in.	35 00 37 50
Nos. 1 & 2, 5/4 in	72 50 77 20	1¼ in. & up	35 00 40 00

Poplar.

Nos. 1 & 2, 5/4 in. good wide, Indiana	25 00@27 50	Nos. 1 & 2, 1¼ in. & up, good wide, Ind.	35 00 37 50
1 in	28 00 32 50	Columns, 5x5 & up clear	35 00 37 50

Oak.

Nos. 1 & 2, 1 in., good western, straight	32 50@35 00	Nos. 1 & 2, 1¼ in. & up, good western, straight	35 00 37 50
quartered	47 00 52 50	quartered	54 50 55 00

Ash.

Nos. 1 & 2, 1 in., good western	37 50@40 00	Nos. 1 & 2, 1¼ in. & up, good western	32 50 42 50

Yellow Pine—Yard and Wholesale.

Sc'tlg, 2x4 to 12x14	22 00@23 00	Flooring, 1 in., Va.	17 00 19 00
Plank, 1¼ to 2 in.	23 00 27 50	1 & 1¼ in., Ga. & Fla. cargo run	22 00 24 00
Fl'g, 1 & 1¼ in. No. 1	27 50 30 00		

Cherry.

Nos. 1 & 2, 1 in., good	62 50 70 00	Nos. 1 & 2, 1½ in. & up, good	65 00 75 00

New York City.

NEW YORK, Aug. 28th, 1888.

The early part of August was marked by dulness, business was drummed to death. Just think of $40 a thousand for rift-gain flooring delivered at Montreal. That was the bid of a local handler, on an alleged order of 100,00 feet made last week. Such stock is worth $55 a thousand, if it is worth a cent. Not many years ago it sold at that price, and everybody paid it willingly. The general buisness situation is practically unchanged. The tendency generally seems to be toward improvement, and there is strengthening of confidence all around. Real estate is dull, but the projections for new buildings and plans for alterations during the week exceed those of the same week of 1887. With the home industries that consume lumber and timber in a prosperous condition, and the export movement continuing, the outlook for the future is more promising than man expected it would be.

Black Walnut.

5/8 in., all clear	$78 00@	82 00	Culls, 1 inch	$35 00@	37 00
1 and 1¼ inches	92 00	97 00	Culls, thick	37 00	38 00
1½ and thicker	98 00	105 00	Counter tops, 18 in.		
Rejects	52 00	55 00	and over	110 00	150 00

Poplar, or White Wood.

5/8 in. 10 inches and over	22 00@	24 00	1¼ to 2 inch	29 00@	31 00
¾ in. coffin boards	27 00	28 50	2½ and thicker	31 00	33 00
1 inch, 10 inch and over	28 00	30 00	Common 1 to 2 inch	21 00	22 50
1 inch, 8 in. and over	26 00	28 50	Saps, 1 inch & thicker	22 00	25 00
			Culls, all thickness	15 00	18 00

Dressed Poplar.

½ inch panel	24 50@	25 00	⅜ in. clg. 4 to 6 in	21 00@	21 50
5/8 inch panel	27 00	28 00	½ in. clg. 4 to 6 in	24 00	24 50
¾ inch panel	29 00	30 00	5/8 in. clg. 4 to 6 in	27 00	28 00
4, 5, 6 inch casing	30 00	31 00	¾ in. clg. 4 to 6 in	29 00	30 00
7, 8, 9, 10 inch casing	32 00	33 00	⅞ in. clg. 4 to 6 in	30 00	31 00

Ash.

1 inch, white	36 00@	38 00	Strips, clear	26 00@	28 00
1¼ to 2 inch	37 00	39 00	Black ash, good	26 00	30 00
2½ to 4 inch	40 00	41 00	Black ash, culls	10 00	12 00

Oak.

1 inch plain sawed,	36 00@	39 00	inches and over	46 00@	49 00
1¼ to 2 inch	37 00	40 00	Thicker	48 00	50 00
Thicker	38 00	40 00	Strips under 6 in.	38 00	40 00
Quarter-sawed, white, all clear, 6-					

Cherry

5/8 in., white & clear	65 00@	70 00	2½ and thicker	85 00@	90 00
1 inch	76 00	80 00	Counter tops, 18 in.		
1 inch strips	40 00	42 00	and over	100 00	115 00
1¼ to 2 inch	80 00	83 00	Culls, all thickness	18 00	20 00

Miscellaneous.

Chestnut, clear	35 00@	38 00	Hickery, old growth	50 00	60 00
Chestnut common	20 00	23 00	Hickery, 2nd growth	70 00	80 00
Basswood white	28 00	32 00	Elm	20 00	22 00
Basswood common	20 00	23 00	Sycamore	24 00	27 00
Maple, clear	25 00	30 00	Sycamore quartered	35 00	40 00
Birch, clear	32 00	36 00	Gum	36 00	41 00
Birch, 1s and 2s	26 00	30 00	Butternut	45 00	50 00
Cottonwood	20 00	22 00			

Boston, Mass.

BOSTON, Aug. 30th, 1888.

The spruce manufacturers by underselling their agents have managed to lower the market. The handlers of yellow pine, likewise sell the rift sawed grades at $10 less that the real value. Timber sells at better prices than in other eastern markets. Pennsylvania hemlock is causing a commotion among wholesalers since the mill men of the Keystone State got freight rates down. Prices rule wholesale as follows :

Western Pine—by car load.

Uppers, 1 in	$48 00@	50 00	Fine com., 3 & 4 in	46 00@	50 00
1¼, 1½ & 2 in	47 00	50 00	No 2, 1 in. Fine com.	29 00	31 00
3 & 4 in	58 00	60 00	1¼, 1½ & 2 in	30 00	32 00
Selects, 1 in	42 00	44 00	No. 1 strips, 4 to 6 in	42 00	44 00
1¼, 1½ & 2in	43 00	45 00	No. 2	35 00	36 00
3 & 4 in	50 00	53 00	No. 3	25 00	27 00
Moulding boards, 7 to			Cut ups, 1 to 2 in	26 00	30 00
11 inch clear	37 00	38 00	Coffin boards	20 00	23 00
60 per cent clear	34 00	38 00	Common all widths	20 00	25 00
Fine common 1 inch	36 00	38 00	Shipping culls	15 00	16 50
1¼, 1½ & 2 inch	38 00	40 00			

Eastern Pine—Cargo or Car Load.

Nos. 1, 2 & 3	40 00@	43 00	Clapboards, 4 ft., sap		
4	28 00	30 00	clear	40 00	45 00
5	23 00	26 00	Sap, 2nd clear	33 00	35 00
Ship'g bds & coarse		16 00	Heart extra		55 00
Refuse		13 00	Heart clear		50 00
West'rn pine clapbds					
4 ft. sap extra	45 00	50 00			

Spruce—by Cargo.

Scantling and plank,			Coarse, rough	9 50	10 00
random cargoes	12 00@	13 00	Hemlock bds., rough	10 00	10 50
Yard orders, ordinary sizes	12 00	13 50	dressed	11 50	12 00
Yard orders, extra sizes	13 25	14 00	Clapbds., extra, 4 ft.	27 00	29 00
Clear floor boards	19 00	20 00	Clear, 4 ft.	25 00	27 00
No. 2	16 00	17 00	Second clear	20 00	21 00
			No. 1	14 00	16 00

Lath.

Spruce	1 75@	1 90			

Shingles.

Spruce	1 25@	1 50	Cedar, sawed, extra	3 30@	3 50
Pine, 18 in. extra	4 30	4 50	Clear	3 00	3 00
Pine, No. 1	3 10	3 40	Extra, No. 1	1 75	2 25
			Cypress, No. 1, 18 in.	5 00	5 00

Buffalo and Tonawanda, N. Y.

BUFFALO, Aug. 27th, 1888.

Less lumber is being handled this year than last, which is accounted for by the fact of uneasiness regarding the tariff question, and the excitement of the presidential election. The effect it has on Canadian lumbermen is shown by a sudden activity among them. They come to Tonawanda with figures and maps in their possession, and they want to sell pine lands. And it is a fact that they are listened to with attention by some of the most prominent dealers who are noted for keeping an eye open for the main chance, and though nothing may be done now, there are those who stand ready to spring at a moment's notice. Prices remain stationary.

Norway Pine—Rough.

No. 1, 1 & 1¼ in.	20 00@	22 00	Stocks No. 1, 1 & 1¼ in		22 00
No. 2, 1 & 1¼ in.	15 00	15 50	No. 2, 1 & 1¼ in.		17 00
No. 3, 1 & 1¼ in.	11 50	12 00	No. 3, 1 & 1¼ in.		12 00
			Scantling 2x4 to 2x12 12 to 16 ft		13 00
			Timber, 4x6 to 12x12 16 00		25 00

White Pine—Rough.

Uppers, 1 in.	$44 00@	45 00	Shelving, No. 1, 13 in.		
1¼, 1½ and 2 in.	44 00	46 00	and up		29 00
2½, 3 and 4 in.	54 00	56 00	No. 2, 13 in. & up	22 00	24 00
Selects, 1 in.	36 00	38 00	Fine common, 1 in.		30 00
1¼, 1½ and 2 in.	37 00	40 00	1¼, 1½ and 2 in.	30 00	33 00
2½, 3 and 4 in.	44 00	46 00	Common, 1 in.	16 00	19 00
Cuts, No. 1, 1 in.	27 00	30 00	1¼ and 1½ in.	17 00	20 00
1¼, 1½ and 2 in.	32 00	33 00	2 in.	20 00	22 00
2½, 3 and 4 in.	37 00	40 00	Coffin boards	16 00	19 00
No. 2, 1 in.	17 00	19 00	Box, 1 in.		13 50
1¼, 1½ and 2 in.	21 00	22 00	1¼ in. & thicker		13 50
Moulding, 1 in.	30 00	33 00	A stocks, 1x10		27 00
1¼, 1½ and 2 in.	30 00	33 00	1x12		28 00
Siding strips, 1 in.		38 00	B stocks, 1x6 to 16		17 50
			C stocks, 1x6 to 16		13 50

Dressed Lumber.

	No. 1.	No. 2.	No. 3
Base and Casing under 6 inches	$33 00	$23 00	$16 00
Base and Casing, 6 inches	34 00	25 00	17 00
Base and Casing, 6, 7 and 8 inches	35 00	27 00	20 00
Flooring, 1 and 1¼ inches, 2½ to 5 in. wide	32 00	20 00	14 00
Ceiling, ⅞ in., 2½ to 5 inches wide	33 00	23 00	16 00
Ceiling, 5/8 in., 2½ to 5 inches wide	28 00	22 00	14 00
Ceiling, ½ in., 2½ to 5 inches wide	24 00	18 00	13 00
Philadelphia Fencing	36 00	25 00	17 00
Bevel Siding, 6 inches	23 00	21 00	11 00
Bevel Siding, 5 inches	23 50	19 00	14 00
Bevel Siding, 6 inches	23 00	19 00	14 00
Novelty Siding, 6 inches and over	34 00	25 00	17 00

Shingles and Lath.

Shingles, 18 in. XXX	4 10	Lath, pine No. 1	2 10
XX	3 10	No. 2	1 60
X	1 25	Norway	1 80
Shingles, 16 in. XXX	3 00	Hemlock	1 60
XX	2 10		
X	90		

Oswego, N. Y.

OSWEGO, Aug. 30th, 1888.

Trade had been very dull since our last. For the past ten days, however, there has been quite an improvement, and dealers are now receiving orders quite freely, and the prospect for an improvement is good. Prices, however, are a little off and purchasers are asking and getting concessions.

Pine.

1¼, 1½, 2 and thicker uppers	$40 00@43 00
" " " pickings	30 00 33 00
" " " No. 1 cutting up	22 00 26 00
" " " cuttings up pickings and uppers as run	30 00 35 00
1 inch selected sidings	25 00 30 00
1¼ " " "	30 00 35 00
1 & 1½ box or No. 2 culls	11 00 12 00
1 & 1¼ sidings No. 1 dressing and better	17 00 25 00
1x10 & 12x12 to 16 feet dressing and better	17 00 25 00
" " " shipping culls	14 00 17 00
" " " No. 2 "	11 00 12 00
1 & 1¼ in. strips 4 to 7 wide selected	20 00 30 00
" " " dressings	16 00 17 00
" " " box	9 00 12 00

Brown Ash.

1 1¼ 1½ 2 & 3 in. 1st & 2nd quality	17 00 21 00
" " " culls	9 00 11 00

Basswood.

1 & 1¼ 1st & 2nd quality	20 00 21 00
" culls	9 00 12 00

Shingles.

XXX 18 inch pine standard thickness 5 to 2¼	$3 75
XX " " " " "	2 50
X " " " " "	75
XXX " cedar " " "	3 00
XX " " " " "	2 00
XXX 16 pine " " "	3 00
XX " " " " "	1 90

Lath.

No. 1 1⅜, 1½	1 80	2 10
" 2 "	1 10	1 50

Detroit, Mich.

DETROIT, Aug. 28th, 1888.

Uppers, Selects, Stocks, etc.

Uppers, 4-4	$43 00	Shop, 5-4, 6-4 & 8-4	$25 50
5x4, 6x4 & 8x4	43 00	Fine common, 4x4	31 00
3 & 4 in	50 00	5x4, 6x4 & 8x4	33 00
Selects, 4x4	38 00	Stocks, 1x12 & 1x10, No. 1	19 00
5x4, 6x4 & 8x4	38 00	1x12, & 1x10, No. 2	16 00
Shop, 4x4	22 00	1x12, & 1x10, No. 3	13 00

Flooring, Siding, Ceiling, etc.

Flooring, select common	22 00	Roofing, D & M	16 00
No. 1 common	18 00	Siding, clear	21 50
No. 1 fencing	16 50	A	20 50
Ceiling, select common	25 00	B	18 50
No. 1 common	22 00	C	13 50
No. 1 fencing	20 00		

Bill Stuff and Culls.

Bill stuff, ordinary sizes:		26 to 28 ft	14 00
12 to 16 ft	12 00	30 to 34 ft	16 00
18 to 20 ft	12 50	Ship culls	12 00
22 to 24 ft	13 00	Mill culls	10 00

Shingles and Lath.

Shingles, clear, 18 in. Ex	3 75	6 in. stocks clear, Ex	4 00
10 in. clear, 18 in.	3 00	5 in. stocks clear, Ex	4 80
6 in. clear, 18 in.	2 75	Lath	2 10

Add for surfacing one or two sides, $1.

Burlington, Vt.

Canada Pine Sidings—1

Select & shelving
Picking
Pickings & better. . 40 00@42 00 Common . . . . . 20 00@21 00

Canada Pine Stacks—1x10 in, 12 to 16 ft., d 2 or 4

Selects (clear) . . . . . 55 00 Pickings & better
1st shelving
2nd
3rd
Pickings 38 00

Canada Pine Stock—1x12 in. 12 to 16 ft. d 2 or 4

Selects (clear) . . . . . 57 00 Pickings & better 44 00
1st shelving . . . . . 47 00 As run, common out . . .
2nd. . . . . 41 00 No 1 barn boards. 27 00
3rd . . . . . 32 00 Common . . . . . 21 00@22 00
Pickings 38

Canada Pine Stock—14 in. 12 to 16 ft. d 2 or 4 s.

Pickings & better . . . . . 45 00 3d shelving 33 00
As run, common out . . . . 33 00 Common 22 00

Canada Pine S. B'ds—1x8 in. & up, 11 ft. and under, d 2 s or r

Pickings & better . . 33 00@35 00 Dressing & common, d 2 s or
As run, common out . . . . 30 00 d 2 s or

Canada Pine Sheathing, d. m. &

1st quality, 12 to 16 ft . . . 40 00 1st
2d. 37
3d 27 00 3
4th (selected Common) . . 22
Canada (Quebec) Spruce
Clear, 10 to 16 feet . . . . .
No 1 22
Above prices delivered

OUR TIMBER EXPORTS TO BRITAIN.

Since the last issue the [illegible] have been reported entered at the [illegible] ports :—

At BELFAST, July 17.—Charger, f[illegible] 5 do. oak, 71 do. birch and 7,397 [illegible] Miramichi, 11,454 deals and ends. [illegible] Miramichi, 18,327 deals and 11,900 p[illegible] Quebec, 489 pieces hewn pine. [illegible] 6,542 deals. Norden, from Quebec, 18,708 deals and [illegible] from Miramichi, 14,142 deals and ends. Albion, fr[illegible] pcs. hewn pine, elm and birch. July 24.—Tondaung. M[illegible] 2 lds. firewood. July 25.—Try. Campbelltown. 16,251 [illegible] palings. Thornhill, Quebec. 810 pcs. hewn fir, oak and [illegible] pcs sawn fir. July 31.—Siddaratha. St. John. N. B.. [illegible] ends. Stada. Miramichi. 21,190 deals. 6,500 palings. [illegible] Campbelltown 17,787 deals, 2,625 palings. Marie. Bay V[illegible] pcs sawn fir. Prinds Oscar, Miramichi, 21,677 pcs. [illegible] Thantha. Miramichi, 26,312 deals and ends. 8,755 palings.

At BRISTOL.—Iron Acton. Quebec, 269 pcs. hew timber. 15,807 pine deals and ends, 5,907 spruce deals, 3,600 staves. Arizona. Sackville. N. S., 16,744 deals, battens, scantlings and ends. 677 bundles palings. July 23.—Hilda, from Sheet Harbor N.S., 14,314 deals. Urania, Quebec. 187 pcs oak. 1,387 white pine. 2,136 pine deals, 867 pine ends. Superior, Quebec 1,091 pcs fir., 270 oak. 2,275 deals.

At GLASGOW,—Corean, Quebec, 4,572 deals. Circe. Montreal. 21,262 deals, 293 pcs. oak lumber.

At GREENOCK,—Dronningen, Quebec. 3,696 pine deals. 36 pcs. oak, 339 pcs. birch, 222 pcs. red pine, 938 pcs. white pine. 108 pine deal ends.

At CARDIFF, July 24.—42,017 pcs sawn fir. 14,553 deals.

At COLERAINE, July 24.—13,316 pcs sawn fir.

At CORK, July 24.—17,592 deals and battens. 15,000 pcs sawn fir 575 pcs hewn fir and elm.

At FLEETWOOD,—Mirjam, Bay Verte. 21,003 deals. July 27.—86,225 deals. July 31.—19,156 deals.

At LIVERPOOL,—Sarah, Pugwash. 21,121 deals, battens and ends. Reciprocity, Quebec, 983 logs, 10 pcs. oak, 6 pcs. walnut, 2,400 pipe, 7,200, w. o. staves, 3,000 deals, 328 pcs. waney, 84 square pine. 20 pcs. ash. Polynesian. Montreal. 11,621 deals. Silistria. Quebec. 50 pcs. rock elm, 117 oak. 287 square, 230 waney white pine. 1,511 pine deals, 740 pine deal ends. Lake Nepigon, Montreal, 14,290 deals, 50 logs timber, 200 bundles strips. Montreal, Montreal, 6,061 deals, 3,764 pine boards, 5,296 strips and ends, 10,344 boards. Iris. Bay Verte, 839 deal ends, 15,859 deals and battens. Active, Bay Verte, 22,811 deals, 1,572 ends. Gindo. St. John, 957 stds. deals. 165 stds. ends. Sinken, Bay Verte, 23,619 deals, boards and ends Juno, Quebec, 724 pieces timber, 2,105 pipe staves. 3,361 pine deals. Elida, Bay Verte, 24,348 deals and ends. Carl Johah, Dalhousie. 28 pcs. birch, 10,079 deals, 2,674 scantlings, 13,485 deal ends. July 28.—299,419 deals and battens, 12,554 scantlings, 3,183 birch planks, 3,082 pcs elm, cherry, oak, &c., 220,800 palings, 2,800 strips. 21,276 pcs lumber, 359 maple blocks, 450 maple squares. Aug. 1.—73,081 deals, 1,464 birch staves, 291 bdls pickets, 1866 scantlings, 12,590 boards, and 29,981 pcs pine, oak, birch, &c.

At LLANELLY, July 26.—2,411 pcs sawn fir, 7,973 pcs timber.

At LONDON, July 27.—473 pcs birch, ash, oak and pine, 113,975 pine deals. Aug. 2.—955 pcs elm, oak, birch and pine, 1,500 pipe staves, 162 deck planks, deals and ends.

At RAMSEY, (Isle of Man) July 27.—5,792 deals.

At SLIGO, July 24.—22,623 deals. July 31.—11,405 deals and battens.

At SWANSEA, July 26.—24,218 spruce deals, 10,586 deals and battens, 3,191 pcs sawn fir.

At TROON, July 24.—8,816 deals. Aug. 1.—14,441 deals and ends, 2,010 pcs oak, elm and white pine.

At WATEREORD, July 31.—38,926 deals.

At YARMOUTH, July 26.—28,600 deals and ends, 432 spruce boards.

At ABERDEEN, July 24.—474 pcs yellow pine, oak elm, ash and birch, 11,950 pcs sawn pine, 2,400 oak staves.

Lack of space forbids an extended report being continued, but up to August 15th the following additional timber imports from Canada were entered at the various ports of thd United Kingdom : Pine and spruce deals and ends, 763,046, palings, 7,500, scantling, 2,185, birch and spruce planks, 22,652, boards, 23,976, sidings, 822, and oak, ash, walnut, pine, cherry, &c., logs and hewn or squared timber, 65,511 pcs.

WOODS FOR FURNITURE.

There are many crazes in the furniture business in respect to the different woods and their imitations, which are extensively used. For many years walnut was a wood that held absolute predominance over all other woods for furniture. But while other woods have become very popular, and walnut is apparently on the decline,- yet, really, walnut will be always a fashionable wood. The price will gradually increase, for the large demand is fast consuming the supply. In many states fifteen years ago the farms were emclosed with walnut rails, as the wood was not so valuable in those days. But in these where walnut grows, the lumber that would formerly have been cast aside with the "culls" is to-day sold for high prices. Even the small limbs of walnut trees are now sawed up into materials for rungs and posts of parlor chairs. The old snarled limbs and knots of walnut trees are sought after with avidity by buyers through the country districts, who sell them to firms that manufacture them into ornaments for antique shelves, fancy hassocks and other similar furniture. Rail fences in these districts are now a rarity in the extreme.

But as to the various woods that are used in the manufacture of furniture, maple, ash, poplar, gum and cherry comprise the list. What is known as quarter oak is the latest craze. Quarter oak is first made by sawing a log from end to end through the middle. Then each half is sawed from end to end through the middle, thus leaving four quarters. Each quarter has only three sides, one the bulge part of the log, and the other two being flat and coming to a sharp edge. The boards are sawed off the sharp edge, and each sawing, therefore, throws off a board wider than the one before it. Sawing the quarters of the log in this manner the lumber is beautifully cross-grained. The cross-grained lumber is "worked" into the finest parlor furniture at present. The wood is susceptible of of a very fine polish, and the cross grain produces an effect made by both nature and the saw, that is far superior to the art of the most experienced grainer.

But one of the prominent features still in the furniture business is the staining of wood. There are tricks in all trades, and this is the greatest one in the furniture manufactories. A very simple preparation, composed of crude oiland lampblack, is rubbed on the highly polished surface of oak, and when it soaks into the pores of the wood the wood then takes on a dark hue. The varnish is then applied, which gives a neat finish to the wood, and this is then a fair imitation of antique oak. The common gum is often stained to represent cherry. Cherry itself is very valuable, and is left in its own natural color, although it is sometimes stained to represent rosewood. Soft maple, poplar and gum are stained with preparations of burnt umber, crude oil and lamplack, to produce an imitation of mahogany. Ash has a very pretty grain that stands out prominently under color, and it can be stained to imitate red cherry. Sycamore is a wood largely used for bed posts, and it stains nicely in imitation of walnut.—W. L. Mitchell in *Globe-Democrat.*

EXCHANGE ECHOES.

Mississippi Valley Lumberman.

The Canadians are unmistakaby in favor of free lumber, whatever may be the diverse opinion of their American competitors.

Chicago Timberman.

It may be said that it is a mistake to suppose that by taking the duty off Canadian lumber, the United States government is only contributing to the wealth of the foreign holders of timber. In the first place, much of the Canadian timber is owned in this country ; secondly, while the new market opened to Canada may result to its behoof in giving it more independence as to where it shall sell lumber, the rule will work both ways.

Canadian Trade Review.

The manufacture of pianos has been a declining trade in Great Britain for years past, owing to the number of cheap instruments imported from foreign countries, duty free. The quantity of Ash, Spruce, Whitewood, Rosewood, Mahogany, Cedar, Bird's-eye Maple, Walnut, etc., used in this particular industry is becoming less, but their use is extended to many new purposes. Every piano calls for 500 feet of unprepared lumber, besides which, almost every instrument must be furnished with a packing case. These figures include the waste.

The Lumber World.

Reports from important lumber-trade centres do not indicate hilarously profitable trade at this season of the year. Prices, which have for some months been strong and steady, with an upward tendency, now show signs of dropping. Most of the reports tacitly admit that the present is a dull season, and most of them show that better things are hoped for the autumn. It is to be hoped that all the bright anticipation will be realized. It is unpleasant to see market quotations drop and to hear that general trade is dull. The one encouraging feature of the situation is the absence of complaint about collections. These are generally reported good. This is a heathful sign, showing that the lumber and and work-working business is sound and that the trouble at p resent is in outside influences, such as the free-trade agitation operating to the damage of all business.

The St. Catharines Saw Works.

We would particularly call the attention of our readers to the advertisement on page 12 of R. H. Smith & Co., limited. This factory, the oldest of its kind in Ontario, has for over one-third of a century held its own in spite of active and honorable competition, and is now producing a Cross-cut Saw which they style the "Leader," and which they claim excels any saw of that description yet manufactured in style, durability, finish and rapidity of cutting, andthey put it on the market as the "King of Cross-cuts." This institution has lately made a change in its man agement, and is now organized as a joint stock company, of which R. H. Smith, Esq., is president. Mr. John A. Cox, an old hardware man of St. Catherines, vice-president, Mr. W. A. Rawlings—who has been connected with Mr. Smith for over thirty years—secretary, and Mr. Geo. Cox, of St. Catharines, treasurer. The new company starts out under the best of auspices, having at its service the brains and experience of the old firm and a paid-up capital of $75,000. Their determination is to leave nothing undone to retain their already well-established reputation, and to cater to the needs of the trade generally in a manner that will, no doubt, be satisfactory. Their business extends from the Atlantic to the Pacific, and their export trade is already a large one.

The above company manufacture Saws of every description, all of which are tempered under the "Simonds" process which insures a perfect uniformity throughout the plate. Their Circular Saws are universally acknowledged to be *unequalled*, while in Hand Saws they make the largest assortment of any firm in the Dominion, and keep ahead of the times by constantly adding new and improved machinery, being determined to keep pace with any other manufacturer

"THE LEADER"

CROSS-CUT SAW.

Manufactured only by

R. H. SMITH Co. LTD.,

ST. CATHARINES, ONTARIO.

A Gauge is furnished with each Saw to regulate the Clearing Teeth.

Full directions for Setting and Filing are etched on every Saw.

The above Saws are made from the best Double Refined Silver Steel, warranted four gauges thinner on back than front, and the only Saws on the market that are a perfect taper from the front of the teeth to the back.

They are tempered by the Simonds Patent Process, insuring a perfect uniform temper throughout the plate, and stand without a rival as the best, fastest and easiest-cutting Saw known. *For Sale by the Trade generally.*

ST. LAWRENCE CANALS.

NOTICE TO CONTRACTORS.

SEALED TENDERS addressed to the undersigned and endorsed "Tender for the St. Lawrence Canals," will be received at this office until the arrival of the eastern and western mails on Tuesday, the 25th day of September next, for the construction of two locks and the deepening and enlargement of the upper entrance of the Galops Canal. And for the deepening and enlargement of the summit level of the Cornwall Canal. The construction of a new lock at each of the three interior lock stations on the Cornwall Canal between the Town of Cornwall and Maple Grove; the deepening and widening the channel way of the canal; construction of bridges, &c.

A map of each of the localities together with plans and specifications of the respective works can be seen on and after Tuesday, the 11th day of September next, at this office for all the works, and for the respective works at the following mentioned places :—

For the works at Galops, at the Lock-keeper's House, Galops. For deepening the summit level of the Cornwall Canal, at Dickenson's Landing : and for the new locks, &c., at Lock-stations Nos. 18, 19 and 20, at the Towu of Cornwall. Printed forms of tender can be obtained for the respective works at the places mentioned.

In the case of firms, there must be attached the actual signatures of the full name, the nature of the occupation and residence of each member of the same, and further, a bank deposit receipt for the sum of $6,000 must accompany the tender for the Galops Canal works, and a bank deposit receipt for the sum of $2,000 for each section of the works on the summit level of the Cornwall Canal : and for each of the lock sections of the Cornwall Canal a bank deposit receipt for the sum of $4,000.

The respective deposit receipts—cheques will not be accepted—must be endorsed over to the Minister of Railways and Canals, and will be forfeited if the party tendering declines entering into contract for the works at the rates and on the terms stated in the offer submitted. The deposit receipts thus sent in will be returned to the respective parties whose tenders are not accepted.

This Department does not however, bind itself to accept the lowest, or any tender.

By Order.

A. P. BRADLEY,
Secretary.

Department of Railways and Canals,
Ottawa, 8th August, 1888.

TAPER PIKE POLES

PEEVEY STOCKS AND CANT HOOK HANDLES.

The Pike Pole handles are twelve and thirteen feet long ; made of the best Straight Rock Maple ; are turned in a machine made expressly for the purpose, and are 1⅛ inches in diameter for one-half their length, being then tapered to one inch at small end, and chucked to fit furrel. We are the only manufacturers in the world who have the system and machinery for turning out Taper Pike Poles successfully.

THEY SELL ON SIGHT AND GIVE THE BEST OF SATISFACTION.

Price of Pike Poles, Peevey Stocks and Cant Hook Handles, $25.00 per Hundred.

Sample Pole sent for 25 cents.

The following are a few of the firms who have used these poles for several seasons : D. Ullyott, Esq., J. M. Irwin, Esq., Geo. Hilliard, Esq., Peterborough ; Gilmour & Co., Trenton ; M. Brennan & Sons, Hamilton ; Gilmour & Co., Chelsea, Que. ; M. Boyd & Co., Bobcaygeon ; Muskoka Mill & Lumber Co., Muskoka Mills, The Rathbun Co., Deseronto ; Heath, Tait & Turnbull, Huntsville ; Cookshire Mill Co., Cookshire, Que.

WM. FORSYTH,

PETERBOROUGH, ONT.

PROVINCE OF QUEBEC.

Department of Crown Lands.

WOODS AND FORESTS.

Quebec, 9th August, 1888.

Notice is hereby given that, conformably to the clauses of the Act 36 Victoria, chapter 9, the following timber limits will be offered for sale at public auction in the sales' room of the Department of Crown Lands, in this City, on Wednesday, the 17th October next, at 10.30 A.M., subject to the conditions mentioned below, namely:

Upper Ottawa Agency.

Limit No. 7,	1st range Block A	16¾	Sq. miles.
" 8,	"	16	"
" 9.	"	29½	"
" 11,	"	40	"
" 12,	"	37¾	"
" 10,	2nd range	50	"
" 11,	"	50	"
" 12,	"	50	"
" 2,	3rd range	50	"
" 3.	"	50	"
" 4,	"	50	"
" 5,	"	50	"
" 6,	"	50	"
" 7,	"	50	"
" 8,	"	50	"
" 9,	"	50	"
" 10,	3rd range Block A	50	"
" 11,	"	50	"
" 12,	"	50	"
" 502,	River Coulonge	3	"
" Rear,	River Gatineau	58	"
"	Calumet Island	3⅔	"
Total.....		904⅔	"

Lower Ottawa Agency.

Limit L River Rouge	25	Sq. miles.
Limit Township Beresford	6⅓	"
Limit Township Chertsey	9½	"
Total.....	40 5/6	

Chaudiere Agency.

Limit Township Langevin No. 2	38	Sq. miles.
" " " No. 3	29	"
Total.....	67	

Montmagny Agency.

Limit Township of Bellechasse 9⅔ Sq. miles.

Saint Maurice Agency.

Limit Batiscan No. 7 East 24 Sq. miles.

Rimouski Agency.

Limit Rear River Humqui	8	Sq. miles.
" Nemtaye No 2	48½	"
" Rear Awautjish	38	"
" River Causapscul No 1 north	6	"
" Township Saint Denis	15	"
Total... ..	105½	

Lake St. John Agency.

Limit River Petite Peribonka No. 120.	25	Sq. miles.
" River Petite Peribonka No. 121.	50	"
" River Petite Peribonka No. 122.	50	"
" River Petite Peribonka No. 123.	50	"
" River Petite Peribonka No. 124.	50	"
" River Peribonka No. 125	40	"
" " No. 126	42	"
" " No. 127	50	"
" River Mistassini No. 128	2	"
" River aux Iroquois No. 129	15	"
" River Ha ! Ha ! No. 130	10	"
" River Shipshaw No. 61	9	"
" Ouiatchouan East No. 131	12	"
" " No. 132	13	"
" " Ouest No. 133	13	"
" " No. 134	8⅓	"
" Rear " No. 135	16	"
" " No. 136	20	"
" Lac des Commissaires South East No. 137	30	"
" Rear Lac des Commissaires South East No. 138	20	"
" Lac des Commissaires South West No. 139	24	"
" Rear Commissaires South West No. 140	20	"
" Metabetchouan No. 141	37	"
" Metabetchouan No. 142	25	"
" Lake Kiskisuik No. 143	18	"
" Metabetchouan No. 144	40	"
" Lake Kamamintigougne No. 145	36	Sq. miles.
" N. E. branch of river Ste. Marguerite No. 146	79	"
" N. E. of river Ste. Marguerite No. 147.	89	"
" Township Ducreux No. 148	53½	"
" Township Dequen No. 149	12½	"
" Township Dequen No. 150	23	"
" Township Dequen No. 151	23	"
" River Pikauba No. 152	18½	"
" Rear River Peribonka East No. 153	34	"
" Township Boileau No. 154	32½	"
" Township Boileau No. 155	13	"
" Township L'Allemant No. 156	16	"
" Township Ferland No. 157	4½	"
" Township Ferland No. 158	13	"
Total.....	1,146⅓	

Granville Agency.

Limit No. 1, 1st range East Lake Temiscouata	36	Sq. miles.
" Township of Parke No. 1	24	"
" Township Raudot	6⅔	"
" Township Demers A	6⅔	"
" Township Demers B	18	"
" Township Armand	19	"
" No. 45 River St. Francis	14	"
" No. 46 River St. Francis	16½	"
" No. 47 Black River	38	"
Total.....	178 5/6	

Bonaventure Agency.

Limit Tom Ferguson's Brook	16	Sq. miles.
" River Escuminac	9	"
" Glen Brook	2	"
" Marchall Brook	3¼	"
" River Andre	4⅓	"
" Township of Carleton	1	"
" Township of Hope South	5	"
" River Nouvelle No. 2	50	"
" " No. 3	24	"
" " West Branch	30	"
" Rear River Nouvelle West	10	"
" " " East	16	"
" River Maun East	25	"
" " West	25	"
Total.....	220 7/12	

Saguenay Agency.

Limit Rear Cailliere	18	Sq. miles.
" Township Sagard	31⅓	"
" North East of the N.E. Branch of River St. Marguerite	15	"
" Tadousac East	5	"
" River Manitou No. 1 East	30	"
" River Manitou No. 2 East	30	"
" River Manitou No. 3 East	30	"
" River Manitou No. 1 West	30	"
" River Manitou No. 2 West	30	"
" River Manitou No. 3 West	30	"
" Township Saguenay East	32	"
" River Grande Trinite No. 1 East	50	"
" River Grande Trinite No. 2 East	50	"
" River Grande Trinite No. 1 West	50	"
" River Grande Trinite No. 2 West	50	"
" Petite Trinite No. 1 East	14	"
" Petite Trinite No. 2 East	14	"
" Petite Trinite No. 1 West	14	"
" Petite Trinite No. 2 West	14	"
" River Calumet No. 1 East	25	"
" River Calumet No. 1 West	25	"
" Township Lafleche	18	"
" No. 86 Petite Bergeronne West	7	"
" No. 1 East Petite Bergeronne	4	"
Total.....	614⅓	

Gaspe Agency.

" Gaspe Bay South	11	Sq. miles.
" Gaspe Bay North	12¼	"
" Township Blanchet	9	"
" River York North	3	"
" River York South	6	"
" Sydenham South	22	"
" Township Rameau	21⅔	"
" Township Malbaie South	4	"
" River St. John n° 1 South	12	"
" River St. John n° 2 South	10	"
" River St. John North	14	"
" River Dartmouth South	24	"
" River Dartmouth North	19½	"
" Rear River Dartmouth North	32	"
Total.....	200 5/12	

CONDITIONS OF SALE.

The above timber limits at their estimated area, more or less, to be offered at an upset price to be made known on the day of sale.

The timber limits to be adjudged to the party bidding the highest amount of bonus.

The bonus and first year's ground rent per square mile, to be paid in each case immediately after the sale.

These timber locations to be subject to the provisions of all timber regulations now in force and which may be enacted hereafter.

Plans of these timber locations will be open for inspection in the Department of Crown Lands, in this city, and at the offices of the local Agents, up to the day of sale.

E. F. TACHE,
Assistant commissioner
of Crown Lands.

N.B.—According to law, no newspaper other than those named by Order in Council, are authorized to publish this notice.

WANTED AND FOR SALE.

Announcements in this department will be inserted at the uniform rate of ten cents per line, each insertion, payable in advance. For three or more consecutive insertions of the same advertisement a discount of 25 per cent. will be allowed. Eight words should be counted as one line.

TIMBER LIMITS FOR SALE.

TIMBER LIMITS FOR SALE IN ONTARIO, Quebec and Manitoba. W. J. FENTON & CO., 50 Adelaide Street, East, Toronto.

PINE TIMBER LIMITS FOR SALE.

Two choice Timber Limits in Northwest Territory, Canada, 100 square miles each; great bargains. Also, limits in Georgian Bay, Algoma and Muskoka districts for sale. JOHN SCULLY, Toronto, dealer in Pine Lands and Lumbermen's plant and supplies, Light iron and steel rails in stock.

FOR SALE.

At a very reasonable sum one half interest in the Strathclair Saw and Grist Mills, situated on the Little Saskatchewan River, six miles from Manitoba & Northwestern Railroad in the district of Riding Mountain Timber Limits, comprising 22 square miles, river running through the center only 14 miles from the mills. All owned by Whimster & Kayll, Mr. Kayll wishing to retire. A first class opening, good references can be obtained.

Apply to H. E. KAYLL,
Strathclair, P. O.,
Manitoba.

Deck Lumber Wanted—Seasoned.

30 M 4 x 3½ inch NORWAY PINE.
2½ M 4 x 3½ inch WHITE PINE.
35 M 4 x 2½ inch WHITE PINE,
in 30 to 40 ft. lengths, free from sap, shakes and black knots.

POLSON IRON WORKS CO.,
TORONTO, ONT.

J. K. POST & Co.,
LUMBER MERCHANTS
And Shipping Agents.
OSWEGO, N. Y.

TIMBER BERTHS

Estimated and plans carefully prepared. Experienced men, References given.

Address,
J. B. BENSON,
164 ROBERT STREET, TORONTO.

B.4. ANY
AXES made of Norway Iron and best English Steel.
$14.00 per dozen.

B.4. ANY
AXES made of all Steel.
$15.00 per dozen.

B.4. ANY
AXES made specially to stand Hemlock, *Single Bitt.*
$16.00 per dozen.

The best axes made in the world. Warranted good or new axes given to replace. Sample axes sent on application.

GEO. STETHEM,
ONLY SOLE AGENT FOR CANADA,
Hardware Merchant, PETERBORO'.

Eckardt, Kyle & Co.

IMPORTERS AND
WHOLESALE GROCERS.

We beg to call the attention of [illegible] to our

TEAS, SUGARS, SYRUPS.
TOBACCOS. ETC.

INSPECTION INVITED

No. 3, FRONT STREET EAST,
TORONTO.

ESTABLISHED 1871

J. W. LANG & CO.
Wholesale Grocers & Importers,
33. Front St. East. Toronto.

We shall be pleased to have you write to us for samples and prices of

TEAS, TOBACCOS, SUGARS, SYRUPS. RICE. Etc.

We can and will cut prices fine to large buyers.

We have a
GOOD, SOUND, FINE FLAVOURED TEA at 12½ cents.

Write for sample chest. Addre[illegible]

J. W. LANG & CO.,
TORONTO.

BARGAINS
— IN —
MACHINERY

ONE Iron Key Seating Machine.
ONE Wood Shaper (two spindles).
ONE Bolt Cutter.
ONE Iron Turning Lathe, 14-inch Swing by six feet.
ONE Reliance Saw Rig to cut 25-ft.
ONE Heavy Circular Saw Rig latest improvements, with "Prescott's Direct Acting Steam Feed" to cut 30-ft.
ONE Heavy Circular Saw Rig to cut 20-ft. with Rope Feed.
ONE Gang Lath Mill.
ONE Bolter.
ONE Shingle Jointer.
ONE 60-inch Solid Tooth Circular Saw, Iron Pulleys up to 8-ft. diameter.
ONE 56-in. second hand Leffel Turbine.
ONE 52-in. second hand Leffel Turbine.
TWO 48-in. New Leffel Turbines.
TWO 30½-in. second hand Leffel Turbines.
TWO 26½-in. second hand Leffel Turbines.
ONE 23-in. second hand Leffel Turbine.
ONE 15¼-in. second hand Leffel Turbine.
ONE 10-in. second hand Leffel Turbine.
ONE 30½-in. second hand Vulcan Turbine.
ONE 17½-in. second hand Vulcan Turbine.

For particulars address,

PAXTON, TATE & CO.,
PORT PERRY, ONT.

Our readers will confer a favor by mentioning this Journal when writing Advertisers.

MACHINERY FOR SALE

H. W. PETRIE'S list of Sawmills and general wood-working machinery for sale.

ONE new 2 or 3 block sawmill, with 6-inch saw.

ONE sawmill, with timber limit in Parry Sound.

ONE 2-block mill. Butterfield build.

ONE 2-block mill, small portable size.

ONE automatic sawing machine, Bavley make.

ONE 66-inch inserted and 64-inch solid saws.

TWO stave cutters with parts-61.

ONE gang lath mill, new.

ONE Waterous self-feed grist mill and bolter.

ONE Goldie & McCulloch Hall self-acting shingle machine.

ONE self-acting shingle machine, Green Bros. make.

ONE Waterous self-acting shingle mill and jointer.

ONE Eureka self-acting shingle machine and jointer, I. Frenchette, maker, St. Hyacinthe, P. Q.

TWO Doherty hand swing machines.

ONE upright swing, with 40-inch saw.

EIGHT wheel jointers, various makers.

THREE drag saw machines.

ONE heavy 24-inch planer and matcher, Rogers' make.

ONE new eclipse planer, matcher and moulder, Galt make.

ONE 24-inch planer and matcher. Picton make.

TWENTY-inch planer and matcher.

EIGHTEEN-inch planer and matcher.

LITTLE Giant pony planer and matcher.

NEW Economist 24-inch planer and matcher.

ONE 27-inch revolving bed double surfacer, Galt make.

ONE 24-inch surfacer, McKechnie & Bertram.

ONE 24-inch poney planer, Frank & Co. build.

ONE 20-inch poney planer, Frank & Co. build.

TWENTY-four-inch surfacer, Kennedy's make.

TWENTY-four-inch surfacer, hardwood bed.

TWENTY-two-inch surfacer, wood bed.

EIGHTEEN-inch surfacer, all iron and steel.

SIXTEEN-inch buzz planer, Galt make

THREE-side moulder, all brass heads, Rogers' make.

THREE-side moulder No. 2, Cant, Gourlay make.

TWO one-side moulders, McKechnie & Bertram make.

ONE one-side moulder, wood frame.

NEW 3-side moulder, Cant Bros, make, Galt.

TENONING machine, double cope, Goldie & McCulloch.

ONE J. A. Fay tenoner, small size.

TWO Ross tenoners.

ONE double cope tenoner, McKechnie & Bertram.

BLIND slat tenoner, Cowan build.

POWER mortiser, Goldie & McCulloch make.

TWO power mortisers for heavy work.

LARGE stock of foot mortisers, new at $15 each.

UPRIGHT boring machine with column.

SIX power scroll saws, various makes.

ONE 34-inch band saw, Hamilton Tool Co.

TWO new band saws, Galt make

NEW 34-inch pedestal and 24-inch bracket band saws.

ONE upright Goldie & McCullock shaper.

NEW iron Top shaper, Cowan make.

SHAPER, heavy iron column, Cant Bros. make, Galt.

ONE wood frame shaper and counter shaft.

ONE velocipede foot power shaper, Hornes.

ONE automatic handle lathe, Sheldon Bros.

ONE handle or gauge lathe, Bailey.

ONE axe handle or spoke lathe, new.

ONE Blanchard spoke lathe, Fay make.

ONE broom handle lathe, wood frame.

NEW wood splitting machine. Send for photo.

BOBBIN lathe with cutters for cotton and woollen mills.

SET of hoop machines, Goderich make.

SET match machinery for round matches.

LOT of lumber and log cars for sawmill use.

FOUR pole road cars, 7 feet, 10 inches gauge.

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FOOT mitering machine, Cant Bros. make.

SIX saw benches, cut off and ripping.

TWO new wood turning lathes with rests, &c.

LOT of moulding and matcher cutter heads.

ONE iron bowl machine, American make.

ONE choir mortising and boring machine.

ONE set spoke machines, Fay make, Cincinnati.

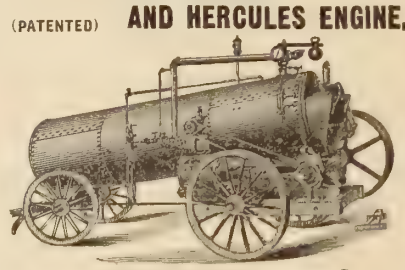
ONE knife grinder, Galt make.

ONE hand wiring machine.

ONE beading and moulding attachment for planer and matcher.

SEND for lists 13 and 14, and mention wants. Address H. W. PETRIE, Brantford, and No. 9 York street, Toronto, opposite Union Station.

THE MONARCH BOILER (PATENTED) AND HERCULES ENGINE.



Portable from 6 to 70 horse power. Surpass portable steam power heretofore produced for strength, durability, compactness, and the ease with which they can be moved.

The 70 horse power can be taken over the roughest roads, or into the forest, and set up as easily and quickly as an ordinary 20 horse power portable engine, and as firm as a brick-set stationary engine. Engines and boilers of every size and description. Rotary Saw Mills, Shingle and Lath machines, Law Grinders, Planers, etc. Mill machinery and supplies of every description. Every boiler insured against explosion by the Boiler Insurance & Inspection Co. of Canada. Write for circulars.

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SAULT STE. MARIE CANAL.

NOTICE TO CONTRACTORS.

SEALED TENDERS addressed to the undersigned, and endorsed "Tenders for the Sault Ste. Marie Canal," will be received at this office until the arrival of the eastern and western mails on TUESDAY, the 23rd day of October, next, for the formation and construction of a canal on the Canadian side of the river, through the Island of St. Mary.

The works will be let in two sections, one of which will embrace the formation of the canal through the island; the construction of locks, &c. The other, the deepening and widening of the channel-way; construction of piers, &c.

A map of the locality, together with plans and specifications of the works, can be seen at this office on and after TUESDAY, the 9th day of October, next where printed forms of tender can also be obtained. A like class of information relative to the works, can be seen at the office of the Local Officer in the Town of Sault Ste. Marie, Ont.

Intending contractors are requested to bear in mind that tenders will not be considered unless made strictly in accordance with the printed forms and be accompanied by a letter stating that the person or persons tendering have carefully examined the locality and the nature of the material found in the trial pits.

In case of firms, there must be attached the actual signature of the full name, the nature of the occupation and residence of each member of the same; and further, a bank deposit receipt for the sum of $20,000 must accompany the tender for the canal and locks; and a bank deposit receipt for the sum of $7,500 must accompany the tender for the deepening and widening of the channel-way at the ends piers, &c.

The respective deposit receipts—cheques will not be accepted—must be endorsed over to the Minister of Railways and Canals, and will be forfeited if the party tendering declines entering into contract for the works, at the rates and on the terms stated in the offer submitted.

The deposit receipt thus sent in will be returned to the respective parties whose tenders are not accepted.

This Department does not, however, bind itself to accept the lowest or any tenders.

By order,
A. P. BRADLEY,
Secretary.

Department of Railways and Canals,
Ottawa, 8th August, 1888.

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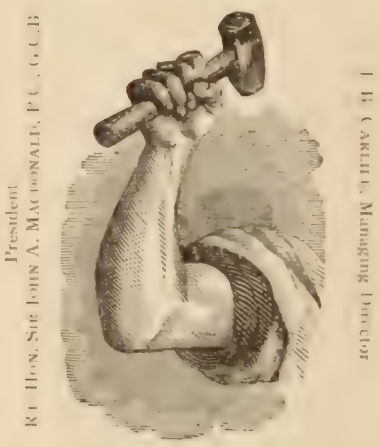

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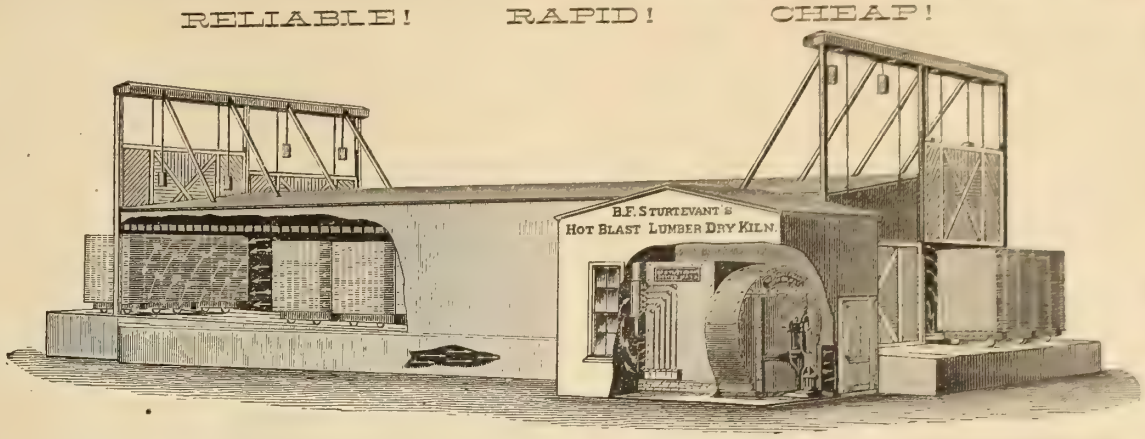

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Apparatus.

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Our goods, the customers being the judges, are not equalled in the market and will continue to maintain the high position they now occupy, our aim being to still conduct the business on strictly legitimate principles.

With thanks for past favors and the request for their continuance, we are,

Yours very truly,

ONTARIO OIL CO.

ARTHUR GOODBY, Manager.

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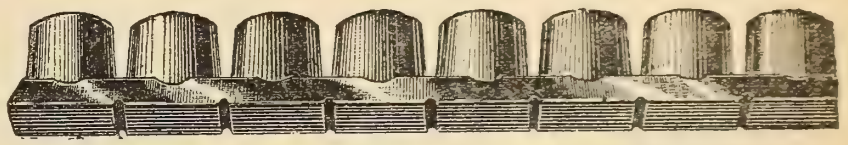

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Which will Run Straight on the Pulleys,
Which is Thoroughly Well Stretched,
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Which will give Complete Satisfaction,

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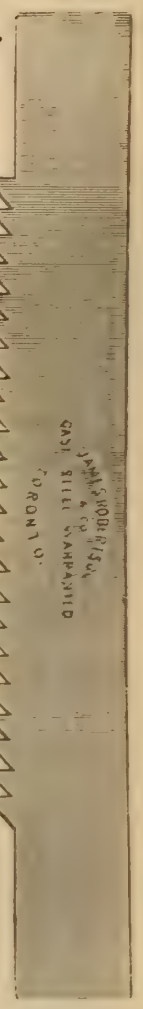
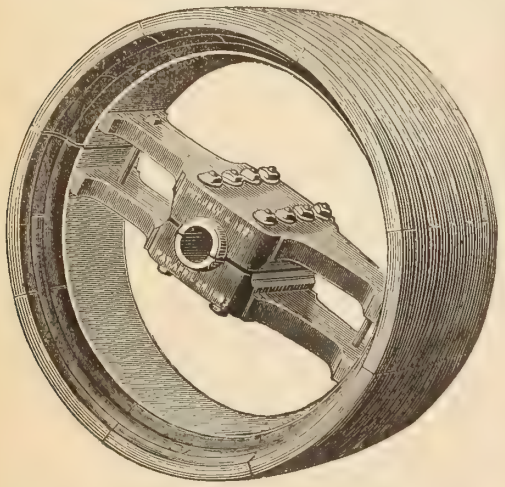


DODGE PATENT WOOD SEPARABLE OR SPLIT PULLEYS.



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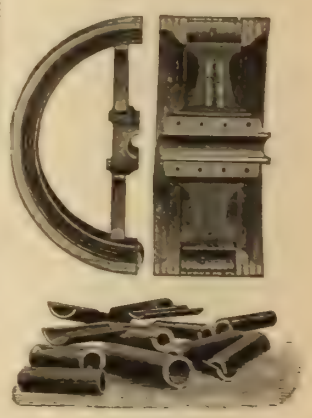

With our Patent Bushing System

Every pulley will fit 22 different sizes of shafting, and guaranteed to give from 30 to 60 per cent. more power from same belt and like tension than any iron or steel pulley. Every pulley a split pulley, 70 per cent. lighter than cast iron and 50 per cent. lighter than wrought iron or steel. Strong enough for any power required. Made in any size from nine inches to sixteen feet diameter.

As a material for pulleys wood is better than iron from the fact that it holds a belt much better. Most good mechanics are aware of this fact, but it may not be generally known how great is the difference, and for the benefit of our readers we give the result of two tests made and published by two of the most eminent mechanical authorities :—

Portion of Circumference embraced by Belt.	Rel. value of leather belt	
	On Wooden Pulleys.	On Iron Pulleys.
.20	1.80	1.42
.30	2.43	1.69
.40	3.26	2.02
.50	4.38	2.41
.60	5.88	2.87
.70	7.90	3.43

Morin.—Appleton's Encylopedia of Mechanical Arts.

Portion of Circumference embraced by Belt.	Rel. value of leather belt	
	On Wooden Pulleys.	On Iron Pulleys.
.20	1.90	1.40
.30	2.40	1.70
.40	3.30	2.00
.50	4.40	2.40
.60	5.90	2.90
.70	7.90	3.40

Haswell.—Engineers' and Mechanics' Pocket Book.

A Dodge Patent Wood Pulley is better than iron from the fact that it can be made very much lighter and thus save weight on the line shaft and bearings, thereby saving in expense from a saving in friction.

The advantages of the separable pulley are very apparent. By its use the necessity of taking down shafting already up for the purpose of putting on additional pulleys when needed, or to be changed, is avoided, thus saving time, trouble and expense, while their first cost is much less than any other pulley made not having these advantages.

The Compression Fastening whether used with keys in iron center or compression alone, keeps the pulley always in balance as the compression on the shaft and key is always towards the center.

The most perfect balanced iron pulley fastened with set screws or key, is invariably out of balance by being thrown from the centre, this fact is obvious to all mechanics.

The advantages of our mode of fastening over any other are : It is the only absolutely true fastening for a pulley. A pulley once properly balanced cannot be thrown out of balance in securing with this fastening. A pulley fastened with key or set screw in the ordinary way, cannot be screwed without lifting the pulley from the shaft at that point where the key or set screw is placed, thus throwing the pulley out of balance.

Manufacturers should carefully avoid any pulley with a set screw fastening for shaft ; also a key unless the pulley is compressed on it. The Dodge Patent Bushing system is a great convenience to manufacturers and also to agents who carry pulleys in stock, as with the aid of the patent bushings every pulley will fit 22 different sizes of shafts.

Haswell the acknowledged authority and most quoted by American mechanics, summarizes thus : The ratio is friction to pressure of leather belts, when worn over wooden pulleys is 47, over turned cast iron pulleys, 24, thus showing the average advantage of a wood pulley over iron to be 50 per cent.

We also manufacture GROOVED HARD WOOD PULLEYS FOR TRANSMITTING POWER BY MANILLA ROPES (tallow laid) by the Dodge Patent System of applying the ropes and taking care of the slack.

Illustrated catalogues of belt pulleys and the rope transmission system will be furnished on application to

The Dodge Wood Split Pulley Co., 89 Adelaide St. W., Toronto.

THE CANADA LUMBERMAN.

VOLUME VIII. NUMBER 10. PETERBOROUGH, ONT., OCTOBER, 1888. TERMS, $1.00 PER YEAR. SINGLE COPIES, 10 CTS.

THE CANADA LUMBERMAN

PUBLISHED MONTHLY BY

ARTHUR G. MORTIMER,

OFFICE: SIMCOE STREET, PETERBOROUGH, ONTARIO.

TERMS OF SUBSCRIPTION:

One Copy one Year, in Advance, - - - - - $1.00
One Copy six months, in Advance, - - - - - 50

Advertising Rates Furnished on Application.

THE CANADA LUMBERMAN is published in the interest of the lumber trade and of allied industries throughout the Dominion being the only representative in Canada of this foremost branch of the commerce of this country. It aims at giving full and timely information on all subjects touching these interests, discussing these topics editorially and inviting free discussion of them by others.

Especial pains are taken to secure the latest and most trustworthy market quotations from various points throughout the world, so as to afford to the trade in Canada information upon which it can rely in its operations.

Special correspondents in localities of importance present accurate report not only of prices and the condition of the market, but also of other matters specially interesting to our readers. But correspondence is not only welcome but is invited from all who have any information to communicate or subjects to discuss relating to the trade or in any way effecting it. Even when we may not be able to agree with the writers we will give them a fair opportunity for free discussion as the best means of eliciting the truth. Any items of interest are particularly requested, for even if not of great importance individually, they contribute to a fund of information from which general results are obtained.

Advertisers will receive careful attention and liberal treatment. We need not point out that for many the CANADA LUMBERMAN with its special class of readers is not only an exceptionally good medium for securing publicity, but is indispensable for those who would bring themselves before the notice of that class. Special attention is directed to "WANTED" and "FOR SALE" advertisements which will be inserted in a conspicious position at the uniform price of ten cents per line for each insertion. Announcements of this character will be subject to a discount of 25 per cent. if ordered for three successive issues or longer.

Subscribers will find the small amount they pay for the CANADA LUMBERMAN quite insignificant as compared with its value to them. There is not an individual in the trade, or specially interested in it, who should not be on our list, thus obtaining the present benefit and aiding and encouraging us to render it even more complete.

THE new Joggins raft will be constructed on the same plan as the last one, but all the bottom and lower side logs will be carefully peeled of their bark, in order to render resistance to the water as small as possible. The 21,300 sticks of which the late raft was composed were sold before the breaking up was completed.

ACCORDING to the Algoma *Advocate* the coming season promises to be one of the most important in lumbering circles that has been for many years. Besides the firms that have heretofore operated there will be numerous others on a smaller scale. Altogether it may safely be stated that within the neighborhood of the village of Thessalon there will not be far short of 1,000 men employed. Wages also promise to be a little higher than previous seasons, and a lively winter may be anticipated.

THE *Northwestern Lumberman* pokes fun at Mr. William Little, of Montreal, who five years ago published an article in *Forestry*, London, in which he prophesied that if the reckless and wanton rate of cutting were kept up, the United States would be denuded of White Pine in seven years. Mr. Little, no doubt, greatly underestimated the quantity of pine lumber in existence, but his warning was not uncalled for, and though the seven years should stretch to fifty, or even a century, waste should be carefully avoided.

A NUMBER of Saginaw, Mich., lumber manufacturers have large interests in the Georgian Bay district, and from their actions it is evident that they anticipate the passage of the Mills bill, or else believe it possible to pay an export duty of $2 per thousand on their logs and still have successful financial results. The purchase of a large block of pine lumber on Fitzwilliams Island by the Saginaw Lumber & Salt Company possesses significance in this direction and emphasizes the fact that eastern Michigan lumbermen are intensely interested in the question of Canadian timber, no matter what legislation may or may not be passed.

NEARLY all of the largest of the Spruce trees that once occupied the valley of the St. John in New Brunswick, up to the mouth of the Aroostook, have either been cut down or destroyed by fire, and except a few limited areas, the large trees of that species are now confined to the upper waters of the St. John, in Quebec and Maine. The largest spruce trees on this river are to be met with on the tributaries of Lake Temiscouata, Quebec, which is skirted by the River du Loup railway, connecting the New Brunswick with the Intercolonial railway.

THE Omaha *Republican* is sadly exercised about where the railway ties are now to come from. The Southern Pacific railway company want 3,000,000 badly, but they cannot be got just now. Ties have gone up and 40 cents apiece are charged for good redwood, and the company cannot get them fast enough at that. The enormous mileage of railways requires an immense number of ties for renewals, construction of feeders, sidings, etc. A Michigan lumberman asserts that there is now more timber lying beneath the iron rails than was to be found twenty-five years ago in the construction of all the houses. No practicable substitute for wood for ties has been proposed. Iron or steel cannot be used with safety, as its lack of elasticity wears out the rolling stock in a very short time.

WRITERS in some of the United States lumber journals have been boasting of rafts of timber which largely exceed in bulk the first Joggins, or O'Leary, "timber ship," and declaring that the method used in that raft will never become general on the lakes. The difference in the circumstances has evidently not been taken into account. While such a structure as the Joggins raft would be an utter absurdity on the lakes, the western methods would be an imposibility on the Atlantic coast. A less substantial structure would not answer for the trip from the Bay of Fundy to New York, and the cost, enormous though it be, is very small in comparison with the only other methods of transportation between the same places. As a successful experiment in a new direction, the invention of Mr. Robertson is entitled to all the comment bestowed on it.

UNITED STATES Consul Hotchkiss, of Ottawa, has made a report to the State department at Washington on the lumber industry of the Ottawa Valley, in which he comes to the conclusion that admitting lumber free at the present time would not materially benefit the American consumer by cheapening prices. The timber forests of Canada are not sold outright to individual purchasers as in the States, but are leased by the Provincial Governments for a limited term, by public auction, under certain conditions and regulations. Timber licenses are granted, and a regular tariff of dues exacted. Col. Hotchkiss argues that the remission of the duty of $2 would simply enable Canadians to lay down their lumber at that amount less per M. and obtain for it precisely what the Americans would. This advantage to the Canadian manufacturer, he thinks, would be brief, as the local governments would raise the licenses sufficiently to absorb that $2 into the Provincial treasuries. Making lumber free, he says, would not greatly increase the export of logs, because they would be, to a large extent, manufactured into lumber at the place of growth.

IT would appear that the majority of American lumbermen and dealers believe, or affect to believe, that the importation of Canadian lumber duty free into the United States would not affect to any appreciable extent the price of lumber. There are some, however, who believe that if the policy of retaliation indicated in the President's message be adopted, higher prices for lumber are sure to follow. One such individual said to a representative of the *Timberman:* "If Grover Cleveland will just cut off the Canadian shipments of lumber at once, without more ado, lumber will advance $2.50 per thousand all around. The lumber imported from Canada last year—700,000,000 ft. —amounted to one-eleventh the entire product of the three lumber producing states, and if this supply was cut off, prices would advance, most naturally." That of course is the view of one interested solely in American timber and his belief is no doubt shaped by his wishes, as an advance of $2.50 all round might mean a big thing to him. At present prices are steady, with a slowly advancing tendency, a much more healthy condition, than sudden fluctuations, which, while they may bring wealth to individuals, have a tendency to demoralize the trade.

YEARS ago the pine lumber market was as uncertain as Wall Street, and operations in pine as much of a speculation as dealings in a bucket shop. For the last year or two, however, the fluctuations in prices have been barely perceptible, and handlers of pine, on this continent at least, content themselves with a narrow margin of profit, the very existence of which is dependent upon careful manipulation of their business. In 1879-80 the sudden rise of from $6 to $8 or $10 per M. for ordinary dimensions made dealers grow dizzy with excitement, and many merchants were suddenly enriched. Such an occurrence is not, however, likely to again happen. The great benefit to the lumber business of the steady [illegible] that it makes it safe. A man investing in [illegible] secure against sudden or great loss by a [illegible]. He may not be able to make an extraordinary interest on his investment, but if he be a good business man he runs little risk of ruinous failure. There is only one contingency that may lead to another period of unsettled and fluctuating prices. The effect of the rivalry of Southern pine has not as yet been fore-told, but if there should be a great rush of Northern enterprise and capital in the lumber manufacturing business in the South, it might cause an excessive output that would tend to lower the prices of Northern and Canadian pine.

THE commonly received idea that Manitoba and the Northwest territories consist of vast treeless plains is not altogether a correct one. In previous articles we have alluded to the great spruce forests surrounding Lake Winnipeg, from which this year not less than 9,000,000 feet of lumber will be taken. This area is capable of great development, and in the near future will supply a vast amount of lumber, not only to Manitoba but to the Western States. Another heavily timbered district surrounds the Lake of the Woods, where since the construction of the C. P. R. no less than six mills have been put in operation. These mills supply not only Winnipeg but the entire country as far west as Regina, and this summer the trade has been very active. About seven mills operate on Lake Winnipeg, the largest being that of the Selkirk Lumber Company. West of Regina the lumber is supplied by mills at Calgary, which is the centre of a considerable lumber industry. Calgary is the headquarters of the Bow River, Eau Claire and Calgary lumber companies, which all have mills along the Bow River. Small mills operate at various points in Manitoba to supply local wants, but the timber is inferior for building purposes, consisting mainly of poplar and scrub oak. But in the northern portion of the province, as well as in Alberta and Saskatchewan, large areas are covered with timber and saw mills have been erected at the most important points. In this connection it may be stated no timber has been imported into the "prairie province" from the States for four or five years.

STATISTICIANS say, and statisticians are sometimes right, that every five days in the year an area of land equal to the State of Rhode Island is shorn of its trees in the United States, or 50,570,000 acres a year, the timber on 500,000 of which is required for railroad ties alone. We do not know what the Canadian figures are, but as we supply one-eleventh of the American markets, besides our European exports and home consumption, the area denuded in the Dominion must be pretty extensive. Our timber resources are pretty well known, and there are not now many large tracts of timbered lands to be discovered. Attention, however, is being directed, as mentioned in our last issue, to the spruce and tamarack belt of Lake Winnipeg. In time, with the improvement of navigation on the Red river of the north, the products of these forests will be exceedingly valuable, not only for Manitoba, but for the American northwest. Tamarack is especially adapted for use as railroad ties, and Prof. Sargent says of it that it is the most elastic wood that grows, and the supply of it in these timber belts is almost limitless. The railroad mileage of the northwest is something enormous. Michigan, Minnesota, Wisconsin, and the territory of Dakota having about 20,000 miles of railroads at this time, and this mileage is increasing

rapidly. To renew the ties on these roads every seven years will require vast quantities of timber, and for this purpose the almost untouched tamarack forests of Lake Winnipeg will be invaluable. When the navigation of the Red river is perfected so that barges can come through without unloading their cargoes, the increasing demand that the coming years are sure to bring will certainly develop a great traffic southward.

PINE lands in Minnesota and Wisconsin which had been denuded of their timber, and were, consequently, considered practically valueless, are now being bought up by a syndicate which proposes to put colonies of settlers upon them. The result is that instead of desolation following in the wake of the lumberman, prosperous communities are being formed. Several of the older lumber companies have followed this system from the start, with the best results.

ACCORDING to the Annual Report of the Bureau of Iendustries for the Province of Ontario, for 1887, which has recntly-appeared, workmen in lumber mills are shown to work the longest hours, the average per week being 65.83 hours; Railway employees (road) come next with 64.25. But in wages, no less than ten classes of workmen exceed the saw mill hands. The total average yearly earnings of a mill hand, including extra work and wife's and children's earnings, is set down at $331.03, and the cost of living $337,63 so that somebody must be getting into debt. The average number of days work is 207,93, so that the presumption is that the mill hand occupies much of the balance of the working days in other occupations, the renumeration from which is not included in the statement.

PARTIES consigning lumber to New York dealers have for years complained of the treatment meted out to them. Many of the mill men declared that the "skin game" of the dealers was ruining them. Private inspectors, employed by the dealers, worked strictly in the interest of the dealers, and if the consignees grumbled at the result of the inspection they were told that they might take their lumber away, but meantime the charges against it would have accumulated to such an extent that it was better to let it remain and accept the inevitable. Continuous agitation by the lumber journals led to the formation of a trade organization and the adoption of rules for inspection. This mended matters a little, but lately the methods of this organization have reverted to the old condition of affairs.

IT is a shame, says the Parry Sound *North Star*, the way many of the most beautiful islands of the Parry Sound Archipelago are being burned over and destroyed, greatly marring the beauty of the scenery as well as rendering the islands burnt over utterly valueless. The editor of that journal, in company with others, near Moose Island, came upon a deserted Indian camp, from which the Indians had but a short time previously departed, leaving their camp fire burning. The fire had communicated with a dead tree and was rapidly spreading over the island, and would doubtless have destroyed it but for the timely arrival of the party, who promptly extinguished it. While it is true that Indians are very careless many of their white brethren are equally so. The local Government should appoint one or more fire-wardens during the dry season for the purpose of extinguishing fires and detecting and punishing parties who are the means of starting them.

IN answer to the questions of a reporter the other day, a New York ship-carpenter gave a long and interesting list of the various kinds of wood entering into the construction of a wooden vessel. According to this authority the keel is make out of white oak, although rock maple, yellow birch and southern black gum are sometimes used; the keelsons are of yellow pine, sometimes of hardwood; the ribs of the frame are oak, chestnut or tamarack; the stern and sternpost always of white oak; the apron, inside the stern, live oak; the planking, exterior of the frame, yellow pine; the ceiling, the interior of the frame, yellow pine; the transoms and knees hackmatack and white or red oak, formerly live oak; the deck frame, yellow pine; upper deck, white pine; lower deck, yellow pine; rails and all finishing timber, white oak; tree nails, with which timbers are dowled together, yellow locust invariably; house or cabin, whitepine, whitewood, or fancy hardwoods—the interiors are generally finished to order, and may vary—the deck, bowsprit and masts are always made out, of Norway pine; spars are always of spruce; steering apparatus—wheel—various hardwoods; rudder of oak; rigging parts in wood, tackle blocks, white ash or gum; mast-hoops, oak; dead-eyes, etc., lignum vitæ; belaying pins, oak or hickory, and the fids always of hickory. In most modern vessels the list, when made to include all the different varieties which may be used in the finish and decorations, would probably be much larger.

MANY towns have risen rapidly through the lumber trade centering in them, and have fallen and gone to decay with equal, if not greater, celerity, when the decline in the timber output has been felt. The ephemeral character of "sawdust cities" is not, however, an unavoidable necessity. While some places have fallen back into a state of primitive poverty through the removal of the mills and money to other places, there are still many towns which while they largely owe their prosperity to the lumber trade are not at all likely to collapse when, in the nature of things, lumber manufacturing operations in their neighborhood are curtailed. When lumbermen and others who have profited by the lumber business have invested to a considerable extent in local improvements, their interests have become so identified with those of the town that they must, as a matter of self-protection, endeavor to make the place self-supporting when the lumbering boom is a thing of the past, thus assuring a growth that is permanent and not dependent on the lumber yard or the saw mill. The recognition of the necessity of this course has caused that competition among lumber towns for the establishment in them of new and prospectively lucrative enterprises, which are not dependent on the existence of contiguous pine forests or a flourishing lumber trade. There are, of course, towns which, comparatively speaking, always will be lumber towns, but the competition we speak of, even in such places, is an indication that the beginning of the end has been foreseen, when lumbering will cease to be the only, or even the main, business to contribute to the wealth and advancement of the community.

THE English lumber markets during the latter part of the season have slowly but materially improved. The demand has kept the dealers' stocks down to small proportions, though they were constantly replenished. In the London markets dealers were evidently under the impression that prices would fall still lower, and, consequently, held off, but as the season advanced, quotations not only held their own, but rose, and higher prices were asked and given. There is now little probability of a weakening, as stocks are very low and freight rates continue very high, so much so, indeed, that several Canadian contracts had to be cancelled, particularly of spruce. The arrivals from Swedish ports, St. Petersburg and the White Sea, have been about the average, and some cargoes of pitch pine from Montreal, Metis and Pentecost have been disposed of. At Liverpool a very large quantity of Canadian spruce has been received, and the price for this valuable timber has steadily advanced. At Glasgow, Quebec shipments have been finding a more ready sale, and prices have accordingly advanced. On the whole, the prospect is very encouraging for Dominion shippers, the main drawback being the heavy freights charged. The hardwood market also furnishes an encouraging report, showing a decided tendency to improvement. Owing to the steady demand the stocks held are not heavy. The cabinet manufacturing industry, in particular, is being carried on on a large scale, and the general furniture trade has been doing fairly well. The manufacturers of coaches and carts and railway rolling stock have had large demands for their output, and, consequently, the volume of trade in this direction has been extensive. The very wet weather of the summer season operated very adversely in the matter of house-building, the demands in this direction not being at all equal to anticipations. This refers to new buildings, for in the direction of improvements, etc., there has been no falling off. The ship-building trade has been in a remarkably healthy condition, and the Clyde ship-builders have been in full swing, and with orders still coming in. This is also true of all the West Coast ship-building trade. There is more animation also in this line at Leeds, Huddersfield and Halifax. As regards prices, the upward tendency is slow, but the improvement in this direction is steady.

IN an article headed "Save our Forests," the *Nova Scotian* of Halifax, says that it is disposed to agree with the opinion advanced that the success of the Joggins raft is likely to stimulate the work of wholesale devastation in the Maritime Provinces unless some effectual means of restraint are adopted. "The prospect," it says, "is not one to be contemplated with out strong misgivings for the future of our forests. The question is what sort of restraint is to be employed. We do not believe in export duties, but we think it is possible to apply some law that will, while not interfering too much with a great and important industry, have the effect of saving our forests from absolute destruction. We save our lobster fisheries from exhaustion by legislative regulation, and why may not our forests be kept alive by the same process? It is a matter of self preservation and should be of as much, if not greater, interest to those directly engaged in the business of lumbering as to the general public." A writer in the New York *Journal of Commerce* calls attention to the manner in which the lumbermen are destroying the forests in the White Mountains. Portable saw mills are moved up and down the slopes, and the work of slaughter is carried on without the slightest regard either to economy of the rich but not inexhaustible stores, or the effects upon the climate, fertility and beauty of the country. The same agency has wrought great havoc in the forests of the New England States, and is doing a large amount of damage in New Brunswick and Nova Scotia. These portable saw mills are simply forest killers, when used recklessly. Young and half-grown trees are sawn up as well as those of full growth, involving fatal results to the future. It is a common thing for the owners of these mills to pay so much for the timber on a given area of land, and then they strip it bare of every stick, large or small, that can find a market for any purpose whatever. If no check is put upon this sort of thing, before this generation passes away there will hardly be a decent stick of timber left in Nova Scotia. In some localities in that province a few years ago, timber was plenty, and now there is scarcely enough left to build pig pens with. The local legislature passed a law a few years ago for the purpose of preserving the forests from destruction by fires, as far as it is possible to do so. There would be difference of opinion about regulating the use of portable saw mills,, or doing anything else that would interfere with those engaged in lumbering, but it does not follow that the subject should not be dealt with. It is a very important one and demands thoughtful consideration.

NOVA SCOTIA TIMBER LAND.

A Nova Scotian correspondent of the New York *Lumber Trade Journal* says that the successful arrival of the great raft of Spruce logs from Nova Scotia at the port of New York will, no doubt, give increased value to the lands situated on the shores of the Bay of Fundy, the timber from which can be delivered cheaply at the seaboard in such a position as will admit of the construction of similar rafts. From $1 to $2 per acre has been about the value of ordinary Nova Scotia timber lands which were prized merely for the wood which grew upon them.

The Spruce which grows in Nova Scotia is of a very strong and lasting character. It is Black Spruce, and for all purposes where strength and durability are concerned, is much superior to the White Spruce of the Upper St. John. Nova Scotia Hemlock, which is an abundant wood there and of which little has yet been exported, is of excellent quality. This is especially true of the long, clean and smooth White Hemlock which are found growing near the banks of the rivers there. I have such trees in that province holding their size as well as any Spruce which I have ever seen, and attaining an equal height in proportion to the diameter at the base.

That part of Nova Scotia which is productive of timber has commonly a soil of little value for farming purposes, being often but a mass of small bowlders which have from time to time, in prehistoric ages, been carried down from the granite belt which, running in a northeasterly direction, extends through the whole length of that province, forming a sort of back bone upon which the ancient gold bearing states of Nova Scotia, which form an area of 3,000 square miles, rest. The little soil which covers these states is ordinarily poor, and fire has destroyed much of the timber which grew upon this district which had been remarkable for the quantity which covered it.

Should the transportation of logs from the provinces to the United States become a permanent business, there is no reason why the excellent Hemlock of Nova Scotia should not be transported there in the same way. The same will apply to pulp wood of any kind.

Hardwood of various kinds and of excellent quality are found in great abundance in various parts of Nova Scotia contiguous to the sea, and there is also no reason why rafts of Spruce should not have a proportion of hardwood built up in them, so that the specific gravity of the latter wood should be counterbalanced by that of the much lighter Spruce.

The lumbermen who now bring rafts of Birch timber down the St. John take care to secure to the rafts a sufficient quantity of soft wood logs or timber so as to render the whole raft so buoyant that it is easily transported at the mouth of the river.

THE UNITED STATES FORESTRY REPORT.

Mr. Fernow, chief of the forestry division of the United States department of Agriculture, has issued his second annual report which not only contains a brief account of forest conditions and interests in each State, but some advice on the pursuance of practical forestry. Among other things he says that the lumbermen in the States are using up the natural wood crop at a greater rate than it replaces itself. Even the "lumberman's" papers, which had ridiculed the very idea of a possible diminution of supplies, have begun to change their tone and, with the exception of some reckless advocates of a policy of extermination, begin to realize that the interest of the great lumbering industry would be subserved by a more careful and

more rational utilization of the material at hand and by greater regard to the production of a future crop.

Referring to the mooted withdrawal of the import duty on manufactured lumber, he states that from an inspection of the import statistics it appears that the import duty laid upon manufactured lumber in 1872 had the effect at first of decreasing importations from Canada by from fifty to sixty per cent. in 1876 or 1877, when again an upward tendency of imports begun. Comparing the importations of the last three years with those of the preceding three, however, there is noticeable again a decline in all classes of forest products from the amounts to which the same had gradually increased up to 1884, when the importation of manufactured lumber reached nearly the same amount that was imported in 1872.

For the decrease in unmanufactured wood the Canadian export duty of $2 on logs may serve as explanation, but other causes must have worked to effect the reduction in manufactured lumber in the face of decided enchancement of value of the pine product. Difficulty of access and increased distance from the market is probably the explanation.

This decline in importations appears as follows :

Importation.	1882-'84.	1885-'87.	Per cent. Decline.
Manufactured lumber.....	$21,510,765	$19,184,504	10.8
Wood, unmanufactured.....	10,404,474	8,502,165	18.3
Manufactures of wood.....	5,653,040	4,801,404	15
Fire-wood, hop-poles, railroad ties (no duty).....	3,008,945	2,099,415	32.5

That the existence of the tariff would have had any other effect upon our forest resources than to hasten to their depletion could not very well be expected. It is also reasonably certain that the larger margin created by the import duty and the consequent stimulated home competition have induced a more wasteful utilization of the standing supplies, while competition of foreign raw material might have necessitated a closer working or delayed the opening of distant forest areas.

At the present stage of development, however, it seems, so far as the saving of standing supplies is concerned, there need be no fear nor hope from foreign competition, for 'the quantity of standing pine in the United States and Canada is reduced to a condition of absolute control; it is held in strong hands on both sides and will not be lightly frittered away.' The stumpage price, which has lately advanced as never before, will necessitate the upholding of present values of manufactured lumber, and an advance of prices is as certain as a decrease of supplies. He concludes that an unbiased weighing of the arguments advanced on both sides leads to the conclusion that the removal of the tariff on lumber would have no appreciable effect upon the price to the consumer, not be detrimental to the lumberman's or sawmill business, nor in the least affect the laboring man; but at the same time no appreciable benefit towards preservation of forest and forest supplies need be expected at this date from such removal. Possibly positive local advantages may be gained, if by such competition local manufactures were encouraged and the shipping of raw material made less profitable.

OUR WOODS AND FORESTS.

The report of the Ontario Commissioner of Crown Lands for the year 1887, under the heading "Woods and Forests," contains some very interesting information.

The total amount collected from this department for 1887 was $990,855.43, or, excluding the sum paid on account of the sale held in December, $590,897.07, as the revenue from timber dues, ground rents, etc. This sum was considerably less than the estimated amount, and the shortage is attributed to the quantity of logs "hung up" in the streams, owing to the lowness of the water consequent upon the exceedingly dry season. Besides, a good deal of the winter's cut was left in the woods, owing to the extraordinary depth of snow, which rendered hauling difficult and expensive. For these reasons many mills were obliged to shut down early in the season.

The lumber trade of the year was, on the whole, satisfactory; there was no period of inaction, and sales were brisk. The early part of the season proved dull for waney and white pine, and prices were unsatisfactory, but later prices stiffened and a healthier feeling prevailed.

Certain districts on the Muskoka and Petewawa waters having become dangerously exposed to fires, on account of settlements taking place upon and contiguous to them, a sale was held of the more exposed portions, aggregating 459 square miles. This sale was attended by representative lumbermen from all parts of Ontario and the United States, and the prices obtained were satisfactory, being much in advance of any previously obtained. The sum of $1,313,750.50 was realized for the 459 miles, giving an average of $2,859 per square mile.

The tariff of dues upon timber was raised from 75 cents to $1 upon sawlogs, and upon square or waney timber, from 1¼ to 2 cents per cubic foot. These changes came into effect on the 1st of May.

The employment of Fire Rangers cost $15,000, a much larger sum than either of the two previous years, which is accounted for by the drouth. As the licensees pay one-half the cost of the service, the net cost to the Department was only $7,500. From the reports received it is estimated that by 110 distinct fires 200 millions of feet, board measure, of pine were badly damaged, and the total loss was placed at $70,000. There is no doubt, says the report, that the presence of the Rangers, and the prompt and active measures taken by them, materially prevented and substantially reduced the losses.

Not only so, but the licensees were supplied with reliable information as to the quantity of timber damaged, its situation and the force necessary to handle it this season before the grubs had time to seriously damage it, by which an enormous um was saved the province and the licensees.

The principal causes of fires are stated to be carelessness of settlers clearing land, river drivers making fires for cooking, smudges, etc., careless hunters, fishermen, tourists and explorers, and, in one or two instances, sparks from locomotives. The Commissioner urges the necessity for reducing the danger from these sources to a minimum, as "the careless throwing down of a match might cause millions of dollars' worth of the timber wealth of the province to vanish in smoke," and is of opinion that timber berths should be sold by government as soon as danger is threatened by the advance of settlement, as by such a sale a bonus is at any rate obtained and a closer supervision exercised. No serious fires were reported in the unsettled regions of Algoma, Thunder Bay, or Rainy River districts.

ARTISTS IN THE LUMBER TRADE.

They have interesting methods for working the lumber business down in Surveyor General Mitchell's County and its vicinity. A Calais, Me., despatch to the *Bangor Commercial* reports on it as follows :—

Down the St. Croix river are annually floated immense quantities of logs from the logging camps along its course. The mills at which these logs are converted into lumber are located at Fredericton, Edmundston, Woodstock, Benton, Deer Lake and Magagudavic in New Brunswick, and at other points nearer the mouth of the river. The proprietors of these mills are also owners of wharves at St. Stephen, on the New Brunswick side, and in Calais on this, to which they transport the lumber as fast as manufactured. From St. Stephen this lumber is floated in rafts or scows across the river to Calais, and then stored for future sale or immediately loaded upon American schooners, owned by these lumbermen, for transportation to other American ports. On the face of this, all is legitimate.

Lumber, the product of American forests, is admitted free of duty, while upon foreign lumber, the product of foreign forests, various rates of duty are imposed. Rough logs are also duty free. Hence an American mill owner may import Canadian trees and convert them into American lumber and pay no duty. The Canadian mill owner may import American trees and export the product to America duty free. During the investigation it has been learned that the mills at Deer Lake, Benton, Magagudavic and Edmundston, N.B., are stocked entirely with Canadian logs, while those at Woodstock, and Fredericton and others near Calais, are partially stocked with American logs, many of them, only approachable from Canadian territory, and have always been regarded as located in Canada. Yet it is asserted by those well acquainted with the matter here that these mills have for years been operated as American mills and their products admitted free.

In order to evade the duty these properties have been denationalized and practically annexed to the United States. This business began some 20 years ago and was practiced as lately as two years ago.

Until the abrogation of the reciprocity treaty the mills at "Upper Mills," opposite Baring, Me., were Canadian mills, and located in Canada. Since the expiration of that treaty these mills have become American and the ground they stand upon a portion of United States territory.

To such an extent has the practice of changing nationality of real estate and entering lumber by false declaration obtained that it is believed here that the total amount of which the government has been defrauded will reach millions. For example at this port alone, in the last quarter of the fiscal year ending June 30, 1886, over 6,000,000 feet of lumber and laths were entered. Of this amount over 3,000,000 were admitted free; as original product of the State of Maine. Under this provision, the entire timber product of the Dominion could be admitted to free entry. The lumber kings of this vicinity have not been slow to take advantage of their opportunities. They are mill owners in Canada and log owners in Maine. One tree looks like an [illegible] shippers in Canada and consignees in the United States, and when, as often happens, to antagonize them is to destroy local interest, there is but slight check upon the efforts to defraud. Treasury regulations provide for a verification of the timber cut in Maine and manufactured in New Brunswick by special instruction. This has been found to be impossible, however, and now practically the only voucher for the American origination of the lumber is a statement of the survey usually by a Canadian, in the employ of the [illegible]

To this the Miramachi *Advance* adds: "The far-[illegible] operators of the St. Croix lumber regions bought up the Crown Lands on which they operate, years ago, and it is their influence, together with that of the other private owners—such as Mr. Gibson, The New Brunswick Railway [illegible] and the Nova Scotia Land company—that prev[illegible] Brunswick government from relieving the [illegible] operators in other parts of the province of [illegible] stumpage tax which is still levied upon them."

WINTER SHIPMENT OF LUMBER.

At a recent meeting of the St. John Board [illegible] the matter of railway freight on lumber was brought up, and the statement was made that if lumber was carried from th[illegible] Shore to St. John in the winter at the same low rates that coal was carried to the upper provinces that a great deal of lumber would be sent to St. John for shipment instead of being held over till the opening of navigation in the spring.

Hon. Pugsley, says the Miramachi *Advance*, said that in conversation with a large lumber merchant from the North Shore he had learned that after the ports of the North Shore are closed it is necessary for the operators to hold their lumber over until the following spring. The gentleman to whom he had spoken thought it of greatest importance to the port of St. John that the government should cheapen the freight on lumber to St. John. By this means from $50,000 to $60,000 of additional business would be done in St. John during the winter season. The arrangement would benefit both railways and the city. He moved seconded by Mr. McCready, as follows :

Resolved, That the Intercolonial railway authorities be urged to take into their favorable consideration the matter of fixing special reduced rates with a view of enabling shipments from points on the North Shore to be made through the port of St. John, and that a similar request be made to the New Brunswick Railway Company and the Northern and North-Western Railway, with a view to encouraging the bringing of lumber over those railways to this port for shipment. Carried.

When it Pays to Advertise.

In this time of dullness and depression in business it becomes every good, solid, and far-sighted business man to advertise freely and largely in the trade journals. When such time as these come buyers are anxiously and carefully scrutinizing their pages to find the best places to purchase. In flush times with money plenty, they don't care so much, but now when all the corners are cut, and every dollar expended carefully and economically, those firms who advertise get the full benefit of their advertising. Go into any city and you will find that the only firms whose order books are filled are those who advertise liberally and persistently. It is this, and not occasional and spasmodic, that pays. Fairbanks used to say that he advertised all the time, and as much when his books were full as when demand was dull; that he maintained his business at an even, steady flow by keeping his goods and name constantly before the public, never allowing them to be forgotten, and his success justified his course. An even and steady demand caused by constant and regular advertising, a demand that can be counted on, and preparation made for it, is much better and more profitable than the same amount of orders received in an irregular and uneven manner, sometimes running overhanded, and sometimes shorthanded, taking and discharging workmen according to business.—*Southern Lumberman.*

THE LONGFORD MILLS.

On Thursday, Aug. 30th, the Longford mills were inspected by the president of the Grand Trunk Railway, Sir Henry Tyler, and party. Sir Henry Tyler, Jos. Hickson, Esq., General Manager, S. Barker, Esq., and Mr. Sargent, General Traffic Supt. of the Grand Trunk walked through the mills and were astonished at the magnificent display of well manufactured lumber in the beautifully put up piles that grace the two yards —one of the finest displays they have had the pleasure of witnessing. Sir Henry and party expressed themselves highly delighted, and were very pleased to think that the very large output of this gigantic enterprise all passe over their system of railways.

ABOUT FORESTRY.

In writing on forestry, says the Cincinnati *Commercial, Gazette*, Gen. James S. Brisbin, U. S. A., not only presents the features of his theme, but describes the use of each American tree. While 8,000,000 trees are cut every year only 1,000,000 are planted. To reproduce the forests that have been cut away it would take forty generations. Of course no one desires to turn the country into a wilderness again, but there is a danger line in forest destruction that has already been passed in many localities in America as in whole regions, now the scene of desolation in Europe.

When Gen. Brisbin turned forester the subject had made no public impression. Few journals could be induced to give him a hearing. One of the first to aid him with his pen was William Cullen Bryant. The progress that has been made is not insignificant. Nebraska once called the treeless state, is covered with young forests and will soon be as well timbered as an eastern state. For several years past from 15,000,000 to 20,000,000 trees have been set annually in that state. Its arbor day is an annual holiday. The governor of Nebraska offers a large reward to the family that will set out the greatest number of forest trees. "When I was there," the general writes, "It was $500 for the first premium, $400 for the second, and so on down to $25. Even the women and children could earn premiums, medals and diplomas and great was the competition for these rewards of the state.

Patches of timber have sprung up everywhere, and where a few years ago only the naked plain could be seen now waves a goodly forest." Trees 10 and 12 years old are 30 feet high and 8 to 10 inches in diameter. Forest trees well cared for grow with great rapidity in the west. Sage brush when irrigated will produce from twenty-five to fifty bushels of wheat per acre. The general gives many instances of the remarkably rapid growth of young forests planted in Nebraska. He has no doubt that all the plains between the Missouri river and the Rocky mountains can be covered with trees if the friends of forestry presevere.

The Island of Santa Cruz, in the West Indies, which twenty-five or thirty years ago was a garden, is now almost a desert in consequence of cutting away the forests. Owing to the same cause many of our American rivers have lost half their usefulness. The Connecticut is hardly navigable, and the Kennebec and Merrimac have shrunk one fourth. The Potomac has lost nearly one-fourth of its volume and the Hudson has declined one-sixth. The recent almost instantaneous and very destructive July flood in the Monongahela river is calculated to make the people of the Ohio valley more thoughtful on the subject of disappearing forests. The loss of millions and the sweeping away of hundreds of comfortable homes and industrial improvements as the result of a single hard rain is a heavy tax to pay for neglect to prevent the waste of trees.

New York has taken hold of the forestry question with considerable earnestness. Over 200 fire wardens have been appointed throughout the state to prevent forest fires. The New York forest commission has twenty-five foresters in its employ, located in the eleven northern counties. Trespassers have been compelled to reimburse the state on account of timber taken. Timber thieving and the spoilation of forests have been stopped. The New York forest commission was appointed to preserve the forests for the following objects:

First—For the value of the timber, both present and future.

Second—For the value of forests as sanitariums—health resorts for invalids, summer breathing places for all.

Third—For the conservation of the sources of water supply. Both science and observation agree that forests are the great reservoirs that hoard the rainfall to feed brooks and rivers. The streams of Europe have shrunk as the forests have been cut away. Our own streams have been following on in the same track.

Fourth—For the increase of rainfall. Cautious scientific men are not yet ready to assert that forests increase the rainfall, but the theory has many supporters and the belief is fast growing that forests are such an important factor in supplying moisture that it is a most dangerous policy to strip the country of its trees.

Fifth—For the climatic and sanitary influence of forests. There can be little doubt that forests are great equalizers of temperature, render the surrounding country less liable to violent winds, absorb malarial and noxious vapors, and act in many ways beneficially to human health.

A remarkable illustration of the fact that the clearing of hilly countries is likely to result in the complete failing of springs is given by Mr. Ney, who states that in Provence, France, after all the olive forests, which had been frozen, were cut down, a great number of springs failed totally. In the city of Orleans, after the surrounding heights had been thus cleared, nearly all the wells dried up, and it became necessary to go to the headwaters of the Little Loire for a water supply.

The state of New York is fortunate in still owning the most of the Adirondack region, covered with the primitive forests. It has also a forest preserve of 46,000 acres in the Catskill region.

Planing Lumber "On the Log."

S. N. Berry, of Meridian, Miss., has applied for a patent on an invention which he says makes possible "the planing of plank on the log before it reaches the saw." The Meridian *News* says:

This interesting device is a marvel of simplicity, and, as is generally the case with all useful inventions, the greatest wonder about the whole thing is why somebody did not discover it long ago. The lumber planed by this machine is now being used in the construction of several buildings in this city, and has every appearance of being as smoothly planed as lumber dressed by the regular planing mills. It is believed, as before stated, that every saw mill in the country will be compelled, in order to compete successfully in the sale of lumber, to use one of these cheap and comparatively inexpensive machines, and in this way deliver their lumber in a dressed condition to their customers, instead of in the rough as heretofore. It will be remembered, in connection with this statement, that the planed lumber is worth $5 per M more than the undressed lumber. There is no question as to the usefulness and practical working of this novel device, and when the probable increase of $5 per thousand in the value of the lumber is considered, it becomes at once apparent that the saw mills will find it to their interest to adopt them. The crude and original machine as started by Capt. Berry, is working successfully at his mills, four miles west of the city, and the lumber referred to in building here shows how well it has done its work. Improvements are being made by the parties having this matter in charge, and they feel pretty sure that they have made a most valuable discovery. As soon as the models are complete and the patents secured, the Messrs. Berry propose to manufacture these machines in this city.

A Pine Tree.

A handful of moss from the woodside,
Dappled with gold and brown,
I borrowed to gladden my chamber
In the heart of the dusky town;
And there, in the flickering shadows
Traced by my window vine,
It has nursed into life and freshness
The germ of a giant pine.

I turn from the cool-blossomed lilies,
Dewy the whole day through,
From the flaunting torches of tulips,
Flame-like in form and hue—
From the gorgeous geranium's glory,
From the trellis where roses twine
To welcome the sturdy stranger,
This poor little alien pine.

Out of this feeble seedling
What wonders the years may bring;
Its stems may defy the tempests
Its limbs in the whirlwind swing,
For age which to men comes laden
With weakness and sure decline,
Will add only strength and beauty
And growth to this tiny pine.

Hark! is it an airy fancy?
The roar of its storm-wrung limbs,
Then the sigh of its tender tassels
To the twilight's zephyr hymns:
The rain on its thick, soft greenness,
When the spring skies weep and shine;
O, many and mighty the voices
Haunting this tiny pine.

I will take it again to the woodside,
That safe with its kindred there,
Its evergreen arms may broaden
Yearly more strong and fair;
And long after weeds and brambles
From o'er this head of mine,
The wild birds will build and warble
In the boughs of my grateful pine.

A Use for Tree Tops.

The tops of pine and spruce trees are now utilized in Maine in the manufacture of paper pulp, a fact which it is argued has more than a local or mere industrial significance. The fires which do such immense injury in the coniferous forests can generally be traced to the tops and branches of trees, left by lumbermen behind them in the woods. These by the middle of the following summer become thoroughly dry and afford the very best material to start a great fire with, in case a careless hunter or tramp or berry-picker drops a lighted match or a spark from his pipe into it. In Europe there is a demand always for such minor products of the forest; and the material itself pays for cost of gathering up every part of the trees which lumbermen cannot make use of, to say nothing of the increased safety this gives to the forest, and to the priceless surface coating of decaying vegetable mould which fires consume. No one in this country has wanted the tops and branches of trees, and lumbermen have preferred to take the chance of almost inevitable fire rather than pay the cost of having the woods cleaned up behind their operations. The upper part of the main trunk as well as all the branches and chips and all unsound logs, the whole amounting generally to a third of the whole bulk of the tree, has been left in the woods to burn or rot; while in the case of hemlock it is within a comparatively recent time that any use of the tree except the bark has paid. In some districts in Maine now, however, the tops and large branches are gathered, and the wood, from which the knots and sapwood is first removed, is thoroughly steamed to extract all resinous matter and then ground into dry pulp. If it is profitable in Maine to do this, it will doubtless prove profitable in other parts; and one of the principal causes of forest fires may perhaps in time be eliminated in this way.—*Ex.*

From Worn-out Saws.

A wagon, heavily laden with a nondescript assortment of old saws in every stage of decrepitude, was slowly wending its way along Greenwich avenue the other day. The curious collection caught the eye of a reporter who, hailing the driver, inquired whither he was going with his unique load. "Jump aboard and I will show you."

The reporter clambered to the lofty seat and there obtained a closer view of what appeared to be the most valueless sort of rubbish imaginable. There were hundreds of saws in the load of every kind and description, from the long and broad two-handled instrument of the lumber camp to the delicate scroll saw of the cabinetmaker, and there was not a whole one in the wagon.

Proceeding slowly to the neighboring street, the driver turned into a yard of a large factory, where the broken and rusty relics were dumped upon the ground to be sorted into separate piles according to their worth. "You will be surprised," said one of the proprietors of the establishment, "when you learn the use to which the old saws are put after they leave our hands."

Then leading the way into the exhibition room of the place, the reporter's attention was called to a show case containing a collection of engineering and surgical instruments of delicate make and exquisite finish, including rules, sextants, quadrants, compasses and lancets, and knives of the finest manufacture and all highly polished.

"Every one of these scientific instruments," continued the proprietor, "is made from the same stock which you saw dumped upon the ground a few moments ago. We make a regular business of buying up used-up saws from carpenters, cabinetmakers and others all over the city, which we transform into these delicate tools, and they are the very best materials for our purpose. It is not generally known that saws are made of the finest and best-tempered steel, but it is a fact, and, therefore, as we get them at prices usually paid for junk, you see it is much cheaper than manufacturing our own product."
—*New York Mail and Express.*

A Big Lumber Mill.

Mr. J. E. Parker, of Ottawa, who has just returned from an extensive tour throughout Washington Territory, gives an interesting account of what is said to be the largest saw mill in the world. The mill is situated at Port Bleakly, near Seattle Wash., Territory, and is 404 feet by 101. It cost $200,000, and has to drive the machinery, twelve boilers and eleven more are being put in and two five-hundred-horse power engines. One hundred and fifty men are now employed, and when the mill is completed, three hundred men will be employed in the mill proper. The largest trees cut turn out about 15,000 feet each and the largest logs cut are 160 feet in length. The amount of lumber used in the construction of the mill was 3,000,000,000 feet. The principal of the mill is a blind man, and the manager a young lady who, Mr. Parker says, can talk lumber with any person.

The Rage for Red Oak.

The lovers of the beautiful, not only those of really æsthetic tastes, but the plebians patricians alike, says a lumber trade journal, have only begun to realize the true beauty of red oak and are in danger of satiating themselves. Red oak at the present time overshadows all other woods together in this city for the interior finish of the better class of buildings. The furniture manufacturers say that no other wood, either American or foreign, ever had such a run as oak is enjoying today; there is a greater demand for oak furniture, in every section than for that of all other woods combined, and the consequence is the red oak men are reaping a rich harvest, which bids fair to continue—well at least until popular fancy skedaddles in some other direction.—The *Wood-worker.*

THE NEWS.

ONTARIO.

—Parry Sound Lumber Co's mill has shut down for want of water.

—Vessel men complain of the time taken to load lumber at Parry Sound.

—This promises to be one of the busiest lumbering seasons ever seen in Algoma.

—The water in the Ottawa is rising rapidly owing to the recent heavy rains.

—The Canadian Lumber Cutting Company, of Belleville, employs twenty-five men.

—The Rainy Lake mill, at Rat Portage is now running in earnest, the water in the lake having subsided.

—Lumbering operations in the vicinity of Sudbury will be carried on to about the same extent as last season.

—Large quantities of oak timber are being shipped through Owen Sound for the C.P.R. elevator at Fort William.

The Canadian steam barge Kincardine, lumber laden, is sunk at French River, Georgian Bay, insured for $4,000.

—The cedar block pavement laid down in the Deseronto dry-kiln yard six years ago is as good as the day it was put down.

—The Rathbun Company, of Deseronto, have opened a lumber office in Mr. W. C. Bang's new block on Elgin street, Ottawa.

—Ottawa lumber forwarders expect a busy time till the close of navigation, as several large shipments have been contracted for.

—Between low water and sawdust the Chaudiere lumbermen are experiencing a great deal of trouble in loading barges at their docks.

—Mr. S. A. Smith is putting up a large addition to his saw mill at Port Sydney. He intends cutting about two millions next season.

—The Ontario Lumber Company, Thomson & Baker, the Muskoka Mill and Lumber Co., and several other firms have started their winter operations.

—The American tug "Gladiator" was seized at Algoma Mills by Special Customs Officer Watters, for towing a raft of logs in Canadian waters without the necessary permission.

—Mr. William Mills, of Torbolton, is about concluding the sale of the old O'Meara limit on the Ottawa and Pettewawa rivers to the C.P.R. but the figure has not transpired.

—Jas. Dollar's shingle mill in the township of Brunell, Muskoka, shut down a week ago, having cut 5,911,000 feet in 215 days. It will be started up again in November if not sooner disposed of.

—Among other little nick knacks the government dredge has yanked out of the canal at Hamilton a huge oak beam, 40 feet long and 2 feet thick, which has been there for 30 years.

—Bush fires have done great damage on many of the beautiful islands in the Parry Sound Archipelago. Both Indians and white campers are blamed for causing the destruction by carelessness.

—The Conger Lumber Co's. mill at Parry Sound was run time and a quarter in the early part of the month in order to fill a large order for the construction of new bridges on the C.P.R. main line.

—The Saginaw Lumber and Salt company have purchased 20,000,000 of pine situated on Fitz Williams Island in the Georgian Bay district. The purchase was made for spot cash. The timber is to be cut at once.

—J. R. Booth & Co. have purchased the Moore timber limits on lake Nipissing for $46,000. The limits are 88 square miles in extent and belonged to Mr. E. D. Moore of Ottawa. They are considered the best in the Nipissing country and have only been worked for square timber.

—Mr. James Findlay, ex-M.P. for North Renfrew proposed some time ago selling his timber limits on the Ottawa river by auction at the Grand Union in October but has withdrawn the sale. The limits are situated near the Ottawa river on the line of the C.P.R. a little west of Bass lake.

—It is reported that Mr. Sandford Fleming will present his report on the examination of the sawdust question as affecting the Ottawa river, about the 15th inst. The report, it is said, will go to show that the bays along the shores of the river, especially those in the vicinity of the city were being gradually filled up with sawdust, but that it will be shown that it does not lodge in the channel of the river, except perhaps a little towards the fall season when the current [illegible].

—To facilitate the passage of their drive down the Mississippi, Messrs. McLaren & Edwards built a dam which raised the water four feet. When the water was let out it raised the river two feet between Playfairville and Ferguson's Falls, damaging the hay, and the farmers are claiming damages.

—The work of rafting the timber floated down the Moira to Belleville was completed early in September. The amount rafted was 13 drams, averaging 35,000 feet each, making a total of 455,000 feet. This work employed a considerable number of men and caused the expenditure of a large sum for switches, etc.

—Edwards & Co's great saw mills at Rockland, Ottawa County, have a great run this season, and yet there are an immense number of logs to be cut before winter sets in. New and improved machinery has been introduced in the shape of great band saws about 60 feet long, and are run off on 8 feet wheels.

—Three hundred and sixty-one square miles of pine timber limits on the Ottawa and tributaries, the property of Mr. R. White, of Pembroke, and others were offered for sale at auction at the Russell House, Ottawa, on September 13th, but in no case was the reserve price reached and the whole were withdrawn.

—The Georgian Bay Lumber Company had Mr. George Caswell, of Coldwater, before G. J. Booth, Esq., J.P., charged with appropriating their logs, found floating in the Georgian Bay, but bearing the Company's mark. A *prima facie* case being made out, the defendant was committed for trial, bail being accepted for his appearance.

—Mr. Beck has put in the New Keene Mills, Penetang., the machinery and frame work for a large band saw, which is now in running order. The saw is 50 feet in length, containing 480 teeth, and running on two cast-iron fly-wheels 8 feet in diameter. This will be a great addition to the working capacity of the mill and will make the lumber fly in earnest.

—The outlook for the lumber trade in the Ottawa valley is unusually encouraging, and the operations of the coming season will be largely in excess of last year. In square timber the increase will be greatly felt, at least double last year's cut will be made. Every day large gangs are leaving for the woods and in all firms great activity is being shown.

—An American fleet of five vessels took from Parry Sound about 1,700,000 feet of lumber early in September. The *Star* says the crews complained of the length of time occupied in loading a vessel and of the absence of professional dock hands. If they would pay the wages per hour usually received by dock hands, they would secure the class of men and the amount of activity they desire. A man doesn't throw himself for $1.25 per day.

—The lumber yards at the Chaudiere are congested at present. The shipping carrying lumber from Montreal and Quebec is quite inadequate to the quantity of lumber going to the English market. From Ottawa alone nearly ninety million feet of lumber are shipped to that market. The stoppage of this outflow from the Chaudiere yards is rapidly filling them up, and work will have to be stopped if the movement of lumber be checked much longer.

—At Ottawa the Canada Atlantic railway company have at last got their Chaudiere extension into working order. On Saturday, September 8th, the first shipment of lumber was made over the new extension. The shipment consisted of thirty-two cars of lumber from Messrs. J. R. Booth's yards consigned to Messrs. Shepherd and Morse, of Burlington. The company have men laying down platforms between the four terminating switches of the line where lumber from the yards will be loaded. The idea of extending the tracks across Bridge street into Booth's lumber yards and also across on to Victoria island into Messrs. Bronson & Weston's yards has been abandoned till next spring and for the present the lumber for shipment will be loaded at the Crown acre station.

—Messrs. Gilmour & Co's big mill at Trenton, has, it is said, had one of the most successful runs known in the history of that institution. The cut will average over 500,000 feet per day, or in the neighborhood of 78,000,000 feet for the season, which will end about November 8th. The shingle mill belonging to this company has in addition turned out over 240,000 per day, which will make the total output over 35,000,000. This is fully one-half more than last year, and has been accomplished with the same number of men. Preparations are now being made for the starting of a cedar mill to cut ties, posts, and cedar shingles. The new mill will start operations about Oct. 1st, and will give employment to from twelve to fifteen men.

—The Michael's Bay Lumber Company, of 9 Victoria street, Toronto, and Michael's Bay on the North Shore, composed of representatives of several large lumbering con[illegible] have [illegible] ments, and asked for an extension. The principal members of the firm are Alexander. R. Christie, of Christie, Kerr & Co., who is the president, R. A. Lyons and C. H. Wilson. The company dealt with the now defunct Central Bank, and before the smash they made arrangements with Cashier Allen for accommodation when it should be required. With the suspension of the bank the main support of the company was removed. The advances made by the bank are secured by mortgages on the company's property and the payment of these mortgages have fallen due. The scarcity of funds compelled the firm to suspend and seek an extension. Liquidator Lye said that the company would be granted whatever extension was required, while the manager of the bank intimated his willingness to advance any amount of money the company might require to get them out of their present difficulty on the security which they have heretofore given. An effort is being made by the company to dispose of their property on which they expect to realize sufficient to pay off their entire indebtedness. The present difficulty will have no effect upon the firms of the members of the joint stock company.

—From the *Journal* we learn that the recent timber limit sale at the Russel House, Ottawa, was a slow affair, very little interest being manifested, in fact lumbermen who were present fighting shy of bidding at all. Four blocks of timber lands, owned by Mr. Richard White, of Pembroke, and containing about 241 square miles, were put up, the auctioneer, Mr. Tackaberry, beginning with the second block of 50 square miles on the Colounge river. Bidding on this started at $20,000 and slowly crept up to $34,700 and then ceased. Mr. White then withdrew the limit. The next to be put up was 101 square miles on the Black river. The auctioneer took the Crown Lands Department style in getting this off by offering it by the mile for the whole block. Bidding started at $200 and meandered slowly up to $540, and as bidding stopped at that figure, the block was withdrawn. Similarly block 3, containing 70 square miles on the Coulonge river and 20 miles on the Ottawa was put up and after lingering for a short time, was withdrawn. Then Mr. Tackaberry tried 100 square miles of white pine on the Jean de Terre but as only $11,000 was offered for it that sale also flopped. The Hiban limit on the Coulonge was then set up and after some dulsatory bidding withdrawn at $7,800. This limit had an area of 21 miles. The chief reason attributed for the want of sale was the lateness of the season, the lumbermen having their plans for their winter operations completed. It is understood that Mr. White's reserve bid on the whole four blocks was $200,000.

QUEBEC.

—The Henderson Lumber Co., of Montreal, are interested to the extent of $3,415 in the recent failure of Dame Flora Smith, cigar manufacturer, of the same place.

—Mr. G. B. Green, manager of the Upper Ottawa Improvement company has returned from the Quio where he was inspecting the company's works. The tail of the Upper Ottawa drive arrived at Des Joachims about the 15th instant. The water in the river is low but few logs were reported stuck.

—Application for incorporation is made by the Ross McLaren Lumber Company, with a capital of half a million dollars, for the purpose of manufacturing, shipping and dealing in lumber. The applicants are Hon. James Ross, of Quebec; Jas. McLaren, Buckingham; Leonard Greenham, Little Montreal; William Henry Higgins, New Westminster, and Charles David Rand, of Vancouver. The chief point of operations will be at New Westminster, and that it is proposed to ship to the Australian, Japanese and South American markets.

—There is a slight improvement noticeable in the Montreal market and values continue firm. At the mills the manufacturers have increased their prices, but so far there has been no augmentation. Dealers not being able to buy at former rates, are by no means urgent sellers, and in consequence, the tendency has been to discourage business. The contractors are beginning to make their season's inquiries, but have as yet made no purchase of importance. At the mills there is considerable activity in the fulfillment of orders already on hand, which it is said will take some time to work off, the available supply outside of that being very limited.

—The saw mills of the E. B. Eddy Manufacturing Company at Hull have suspended operations for want of logs. The Eddy Company have lost considerable time during the past season owing to their logs not having reached the Chaudiere as early as usual. This difficulty will be done away with next season as the company intend putting on an unusually large number of men into their new Magnissipi limits, and will cut sufficient logs to keep them running night and day watch during the whole of next season. The transfer of Messrs. Hurdman &

Co.'s Magnissipi limits to the Eddy Manufacturing Company was made on the 17th Sept. The price paid, as stated in the deed of transfer was $325,000. The general impression among the lumbermen is that the Eddy company have secured one of the best pieces of pine country in the Ottawa Valley. The company intend only working their new limit for logs. No square timber will be taken out.

—As will be seen from the following comparative statement of timber measured through the supervisor's office at Quebec, the quantity of white and red pine falls very much short of that of 1886 and 1887, made up to the same date in each year, viz., September 5th. The figures are for cubic feet.

	1886.	1887.	1888.
Waney White Pine	2,365,398	1,820,243	1,220,025
Square " "	2,172,838	945,082	863,997
" Red "	243,392	560,005	484,875
Oak	829,677	513,866	736,658
Elm	378,541	196,872	166,605
Basswood	218	535	717
Butternut	192	1,079	419
Tamarack	3,459	5,507	3,130
Birch and Maple	160,641	116,694	156,647

—McLaren and Ross, ot Quebec, the former being connected with the Saginaw Lumber and Salt company, have purchased 1,500,000,000 feet of pine timber in British Columbia where they will erect and equip two large mills for its manufacture into lumber. The Saginaw lumber and Salt Company has given a contract to Barrie, Ont., parties to cut 10,000,000 feet of timber from their tract on Fitzwilliam Island, in Georgian Bay, to be rafted to Saginaw. The Emery Lumber Company will this winter cut 14,000,000 feet on the waters of Georgian Bay, to be manufactured at Midland, Ont. The lumber market is active and prices up to the top notch.

—Rev. Father Paradis, whose name was prominently brought before the public some months ago in connection with a misunderstanding between him on the one side and the Gilmour lumber merchants of the Upper Gatineau, Hon. J. J. Ross and Rev. Father Augier, on the other, has arrived in Montreal from Buffalo, whence he was spirited away some months ago, on his way to Quebec, and thence to Rome. The object of the reverend gentleman's trip to Canada has not been made known, but it is asserted on excellent authority that he goes to the Eternal City upon the advice of Bishop Ryan, of Buffalo, for the express purpose of protesting against his recent expulsion from the Oblat Order. Exactly why Father Paradis has been expelled from the order has not yet leaked out, but it is stated that the sole cause of his misfortune is the fact that he persistently refused to sign a retraction of the damaging statement he had made against Hon. Mr. Ross and allow the whole discussion thereon to drop.

—Quite a commotion was created at Eastman's Springs, on the Canada Atlantic railway, a short time ago, by the disappearance of two brothers John and Robert Stewart, who for several years have been doing a lumbering business in a small way at that place. The brothers left saying they were going on a trip instructing their clerks to sell lumber as usual and forward receipts to them. Mr. Neil Stewart, father of the young men upon learning of their departure, seized the mill upon which he had a mortgage of $1,200. A Mr. Baker of North Gower also hearing of the departure of the Stewart brothers visited Eastman's Springs and again seized the mill upon a first mortgage for $1,500. Mr. John Kyle, a grocer at the Springs, was victimized to the extent of $400, having signed the firm's paper to that extent before hearing the true state of affairs. Another man named Morgan had bought some logs to be cut at the mill before the departure of the brothers and after their departure came to get his lumber. He was told that he could have no lumber unless he paid for it. Morgan grew indignant took away a pile of lumber made from his logs and a few days afterwards had to pay $18 for his own lumber on the order of the district magistrate before whom the case came up. The affairs of the firm are in a bad condition and claims are coming in thick and fast. The Stewart brothers have not since been heard of.

—A Quebec city despatch of September 13th said: "Not a stick of square white pine remains unsold in the hands of lumbermen. The whole stock in port, as well as this year's make to arrive, has passed into the hands of shippers, this being a condition of things that never happened in the port before, besides which there is only 30,000 feet of waney board pine unsold to arrive, all this year's manufacture and what is now in port, with the above small exception having been bought by the timber merchants. The latest purchases were A. Fraser's Nipissing raft to arrive, bought by Messrs. W. & J. Sharples, and A. Fraser's Operongo rafts, and Caldwell's rafts in port. These two latter were bought by Messrs. J. S. Murphy & Co., these purchases by the latter firm amounting to over three quarters of a million feet. The stock of white pine timber to winter here will be unprecedentedly small and the question has repeatedly been asked: 'How are we going to load next springs fleet?' Fortunately, with their utmost efforts, were they unwise enough to attempt it, the lumbermen could not overstock the market for two years to come, but with the few lumbermen owning the timber bearing lands in Canada they are not likely to attempt to overstock the market as they have done in recent years to their cost, because the enormous prices which timber lands brought at the last public sales have given lumberman a keen appreciation of the value of standing timber.

NEW BRUNSWICK.

—There has been considerable activity about the wharves and lumber yards at Richibucto loading the vessels in port.

—The long-talked-of steam saw mill to be erected in Richibucto is to be a sure thing. The place selected is what is known as the Yellow House Point at the north-east extremity of the town.

—T. H. Ramsay, of Newcastle, has bought the Redbank Mills, Miramichi, from J. B. Snowball, and enters into possession at once. He intends to add steam power for the manufacture of shingles and other small lumber.

—There is a great jam of logs in the St. John at the Grand Falls. It fills the river for a distance of from 1,500 to 2,000 feet and is 30 to 100 feet deep. Lumbermen estimate the quantity to be from twelve to fifteen million feet. An attempt to start it with dynamite was to have been made but on examination it was considered useless. Probably nothing but the spring freshet will move it.

—It is estimated by experienced lumbermen that there has been cut on the Penobscot river the past year fully 150,000,000 feet of logs, an amount which is said to be equal to that cut years ago during the palmiest days of lumbering. Tracts that have been cut over thirty years ago have been gone over twice since and the growth about keeps pace with the demand for lumber.

MANITOBA AND THE NORTHWEST.

—At Brandon, Mr. Christie, has been working his mill night and day on logs from Riding Mountains.

—The harvesting operations lessened the demand for lumber and enabled the mills to get ahead of orders.

—Jonnasson, Frederickson & Walkely forwarders and lumber dealers, Selkirk, Man., are organizing a joint stock company.

—Upwards of one hundred men were employed at Selkirk last week unloading lumber at the docks, and lumbermen complain of lack of men.

—The Rainy Lake Lumber Company has been purchased by the Western Lumber Company, of which Mr. McRae, of Quebec, is president.

—Christie's drive of logs from the Bird Tail have all reached Brandon. The mill is working night and day, with a staff of about fifteen men.

—Thos. White and another prominent Michigan lumberman are exploring the timber limits to the north of Calgary. Their visit has also something to do with development.

—Mr. Tait is engaged with a number of men in improving the Bird Tail river between Birtle and Riding Mountains, Manitoba. The object is to make the stream more suitable for the passing of saw logs from the mountains. It is expected that 5,000,000 feet will be taken out this winter.

—Lake Winnipeg mill men are pushing to get the lumber herald out before the closing of navigation and all the craft on the lake are employed carrying the cut to Selkirk, the head of deep water navigation on the Red River, and the nearest railway point to the mills.

—J. A. Christie's logs from the Bird Tail river are first class, some of them measuring over two feet through. It is the intention to cut them into dimension lumber. About half of them will be cut this season in the old mill at Brandon, Man., and the balance will be cut in the new mill which he will build next spring.

—The lumber trade throughout Manitoba is reported in a satisfactory condition. Orders can now be filled in a reasonable time, and customers are not subject to any serious delay. Mills look forward to upwards of a month more of activity, and are reporting very favorable as to the season's business as a whole. Prices remain about the same.

BRITISH COLUMBIA.

—A new saw mill is in course of construction for Dunsmuir & Sons, at the Union Coal Mines, Comox district, B. C.

—A stick of timber was cut the other day at the Hastings Mill which was 106 feet long and 24 inches square. There were sawed out of the log 12,000 feet of cedar lumber weighing 30 tons.

—The barque Jan Baas has sailed for Melbourne with 509,412 feet of rough lumber and 15,205 bundles of pickets from the Moodyville mill. It is said that the captain of the barque has been fined $400 for not clearing at customs.

—A portion of the C. P. R. wharf at Vancouver has sunk considerably owing to the heavy traffic being done on it at the present time, and the depredations of the terredo. A large surface of the City Wharf has also sunk several feet from similar causes.

—There is a hitch in the arrangements regarding the proposed establishment of the mammoth mill at Westminster, B. C., by Ross & McLaren, of Ontario. The trouble is over the timber lands which the projectors are endeavoring to secure from the Provincial Government.

—The first vessel of the two chartered by the Royal City Planing Mills is the barque Nanaimo which was built in the black diamond city of that name some six years ago. When loaded she will carry fully 800,000 feet of lumber and her destination will be Melbourne, Australia.

—New Westminster is naturally anxious to have the saw mill of Ross & McLaren, eastern lumbermen, who propose to carry on extensive operations in British Columbia, located there. The capacity of the proposed mill will be over half a million feet per day, or larger than the capacity of all other mills in the province.

—The enterprising and wealthy firm of A. Broder & Co., of Morrisburg, Ont., have purchased a large tract of land on Alberni canal, and will proceed at once to erect a small saw mill preparatory to the construction of a larger one, having a capacity for 100,000 feet per day. The firm named is well known in the county of Russel, Ont., for which constituency Mr. Broder was at one time a representative in the Ontario Legislature.

—The Vancouver *Herald* says:—The Moodyville mills are kept busy night and day at present loading the vessels at the wharves, of which there are five: the Jan Baas, the Edward O'Brien, the W. J. Rotch, the Balaklava and the Pactolus. The three former are now almost loaded and will proceed to sea shortly. The barque India and the ship Earl Granville are both anchored in the stream waiting for berths at the wharves.

—The Moodyville saw mill is running night and day to its full capacity. A recent report says that there were six vessels at the dock—most of which are loading—which will take away 6,200,000 feet of lumber. The Balaklava takes 1,100,000 feet to South America, The Pactolus 9,000 feet to China the India 900,000 feet to South America, the Earle of Granville 1,000,000 to Australia, the Edward O'Brien 1,400,000 to Australia, and the Jaen Baas takes 900,000 feet to Valparaiso, South America. The mill is supplied with logs from the various camps along the coast, some of which are distant about 200 miles.

—The owners and managers of the various saw mills of Vancouver who cut for the local trade, have agreed upon a new schedule of prices which has come into effect and contains a considerable advance in the price of the principal sorts of lumber. The following extracts from the list will give an idea of the prices now asked: Bridge and wharf plank and lumber from $12 to $16 per M feet, B. M., according to length. Flooring from $17.50 to $27.50, according to the size and quality. Rustic from $17.50 to $22.50, according to quality. Boards, S. S. $20 to $22.50. Laths and shingles $2. The demand for lumber is very good, all the mills being kept busy supplying it. The number of men employed among the various mills and yards in the city is continually increasing and the business generally assuming large proportions.

—Pacific Coast lumbermen in British Columbia, continue to find an active demand. At Burrard Inlet the mills are working night and day on export orders, and latest reports stated that several ships were anchored waiting their turn to load. The Westminster mills are busy with local and eastern orders. The Royal City mill at that place has an order from a car building company, of Dayton, Ohio, for square timber for car sills. The timber is required to run 60 to 70 feet in length and perfectly sound. During August seven ships cleared from the two Burrard Inlet mills for Australia, with lumber, lath and pickets. Two ships cleared from the Royal City mill at Westminster, taking the first exports of lumber ever made direct from Frazer river mills, the river having only recently been made navigable for ocean craft.

—The owners and managers of the various saw mills of Vancouver who cut for the local trade, have agreed upon a new schedule of prices which has come into effect and contains a considerable advance in the price of the principal sorts of lumber. The following extracts from the list will give an idea of the prices now asked: Bridge and wharf plank and lumber from $12 to $16 per M feet, B. M., according to length. Flooring from $17.50 to $27.50, according to size and quality. Rustic from $17.50 to $22.50, according to quality. Boards S. S. $20 to $22.50, D. D. $25 to $25.50. Laths and Shingles $2. The demand for lumber is very good.

all the mills being kept busy supplying it. The number of men employed about the various mills and yards in the city is continually increasing and the business generally assuming large proportions.

AMERICAN.

—The Frost Lumber company, of Detroit, has failed.

—A forestry convention is to be held in Cincinnati this fall. The exact date has not yet been settled.

—The New Jersey Lumber Company, Jersey City, N. J., has been incorporated under the same name.

—The daily capacity of the St. Paul & Tacoma Lumber Company's new sawmill at Tacoma is estimated at 630,000 feet.

—Extensive forest fires have been raging near Bay City, Mich., and an incalculable amount of damage has been done.

—Maine lumbermen are beginning to send men, horses and supplies into the woods in preparation for the winter campaign.

—The August shipments from Muskegon, Mich., footed up to 66,616,000 feet of lumber, 23,000,000 shingles, 1,500,000 lath, 4,194 cords of slabs and 240 tons of sawdust.

—Robinson & Lacey, the well known pine land dealers of Grand Rapids, Mich, have associated with themselves in their Canadian timber business R. A. Haire, formerly an extensive lumberman on Grand River, but for the past two years an explorer of Canada limits.

—It is very dull in the coasting trade now. About half the coasting fleet are laid up, and the present rate of freight, $3.50 per M, hardly pays running expenses, to say nothing of leaving any profit to the owners.

OUR TIMBER EXPORTS TO BRITAIN.

Since our last issue the following cargoes of Canadian wood have been reported entered at the various United Kingdom ports :—

AT ABERYSTWITH.—Huldin from Bathurst, 11,177 deals.

BARROW.—Jens Willsen. Halifax, 8,021 deals and ends, 1,200, palings. Oscar II., St. John, 18,916 deals. Sheffield, Parsboro, 25,109 deals. Oscar, Halifax, 11,660 deals and ends.

BEAUMARIS.—Haabet, Halifax. 8,428 deals, 637 spruce boards, 59 birch logs.

BELFAST.—Drammenseren, Three Rivers, 30,453 deals. Oscar, Quebec, 26,378 pcs sawn fir. Aren, Quebec, 16,732 pcs sawn fir. Atlas, Miramichi, 19,829 deals and ends. Norman, Miramichi, 27,275 deals and ends, 16,800 palings.

BRISTOL.—Draupner, Sackville, N.B., 15,133 deals, 157 scantling 1,100 ends, 333 bundles palings. Skien. Halifax, 20,915 deals, ends and battens. James L. Harway, Montreal, 23,261 deals and ends. Ontario, Montreal, 6,244 boards, 1,072 pine deals, 415 spruce deals. Texas (s), Montreal, 6,218 spruce deals.

CARDIFF.—Ingleside, St. John, 27,415 deals. Parmatta, Quebec, 249 pcs hewn oak, 1,223 hewn fir, 78 elm, 3,464 deals, 2,400 oak staves. Senator Weber. Quebec, 347 pcs oak. 497 hewn fir, 5,327 deals, 1,034 pcs sawn fir.

CARNARVON.—Dover, Economy Point, 7.897 deals, 1,542 spruce boards, 939 deal ends.

CHESTER.—Corns, Richibucto, 8,028 deals, 1,837 boards, 1,125 deal ends.

CORK.—Pacific, Quebec, 18,654 deals, 1,147 deals and ends, 6,000 palings. George Peake, Quebec, 15,978 deals, 1,097 deals and ends. Reform. Pentecost, 14,033 deals, 1,541 deals and ends. Douglas, St. John, 16,536 deals, 2,436 deal ends. Endrick, St. John, 12,257 deals, battens and ends. Syringa, St. John. 17,535 deals and battens. 2,189 ends. Maggie M., St. John, 12,764 deals.

DOUGLAS (ISLE OF MAN).—Peterel, Halifax, 3,878 spruce deals.

FLEETWOOD.—Queen, Miramichi, 49,424 deals, 17,655 sawn fir. Alexandra, West Bay, N.S., 15,943 deals. Anna, West Bay, 16,625 deals. Halden, Miramichi, 28,641 deals, Stella, Halifax, 18,321 deals. St. Joseph, Quebec, 919 pcs hewn fir, 69 pcs hewn oak, 30 pcs hewn ash, 9,903 deals. Panama (s), Quebec, 2,278 deals, 137 logs hewn oak, 71 pcs elm, 1,200 pcs hewn fir, 16,780 deals.

GLASGOW.—Grecian, Montreal. 11,396 deals. Circe, Montreal, 653 deals, 962 pcs oak lumber. Corean, Quebec, 117 pcs timber, 7,261 deals. Vigo. Weymouth, N.S., 283 pcs birch, 9,426 spruce deals, 800 spruce deal ends, 328 deals, 55 deal ends. Colina, Montreal, 4,323 deals, 239 oak planks, 1,202 deals. Louise, Halifax 13,167 deals, 1,137 ends. Carthaginian, Montreal and Quebec, 175 logs birch, 24 logs maple, 2,490 deck planks. 3,873 deals, 599 deal ends. Norwegian, Quebec, 7,370 deals, 2,658 bundles spoolwood. Concordia, Quebec. 289 logs ash, 307 pcs oak lumber, 12,491 deals.

GLOUCESTER.—King Carl, Bathurst, 19,875 deals. Maria, Bathurst, 36,440 deals. Ebba, Campbelton, 23,021 deals. Uranos, Halifax. 550 lds sawn fir.

GREENOCK.—Prince Eugene, Quebec, 2,652 pine deals, 955 pine pine deal ends, 1,914 pcs spruce, 437 ash, 91 elm 167 red pine, 522 waney white pine, 298 waney boards. Terzo, Quebec, 135 pcs waney pine, 1,411 spruce deals, 498 pcs waney white pine, 23 square do., 153 oak, 11 hickory, 222 red pine. Skibladney, Quebec, 183 spruce deals, 29,538 bundles spoolwood, 243 birch planks, 2,350 spruce deals. Europa. Bathurst. 16,346 deals, 1,466 deal ends. Enterprise, Quebec, 200 pcs elm, 102 pcs ash: 1,323 pcs white pine, 4,643 deals, 159 pcs oak, 56 pcs red pine.

HARTLEPOOL, WEST.—Antoinette, Quebec, 80 pcs oak, 56 pcs elm, 22 pcs walnut, 559 pcs hewn fir, 3,184 deals. Flora, Quebec, 46 pcs hewn oak, 33 pcs ash, 120 pcs birch, 260 pcs hewn fir, 21,450 deal ends.

HULL.—Bishop Brun, Quebec, 125 pcs elm, 663 pine, 3,450 deals.

INVERNESS.—Elizabeth, Quebec, 130 pcs hewn oak, 2 pcs hickory: [illegible] pcs elm, 80 pcs hewn pine, 3,553 deals,

LANCASTER.—Minerva, West Bay, 11,959 deals, 1,208 birch planks.

LIVERPOOL.—Lake Superior, Montreal, 8,989 deals. 4,382 boards. Circassian, Montreal, 9,836 deals, 98 pcs timber; from Quebec, 4,515 pine deals. Oregon, Montreal, 15,860 deals. Niceto. St. John, 4,257 birch planks, 843 birch ends, 1,564 scantlings, 47,334 deals, 12,942 ends. President Harbitz, Bay Verte. 21,100 deals. Glenola, Halifax, 512 spruce ends, 14,247 spruce deals, 150 birch ends, 1,308 birch deals, 302 pcs juniper, Petitcodiac, Hillsborough, N.B., 669,586 superficial feet deals, 827 feet scantling, 6,586 feet ends. Excelsior, St. John, 949 pcs timber. 17,134 deals and battens, 696 scantlings, 6,131 deal ends, 1,044 boards. Magnificent, Quebec. 36 pcs oak, 291 birch, 111 elm, 85 ash, 945 white pine, 4,993 spruce deals, 1,177 spruce ends. Buenaventura, St. John, 29,255 deals. 1,624 scantling, 7,542 deal ends, 3,049 boards, 1,744 birch planks. Boromo, Richibucto, 27,428 fir deals and ends. King Oscar II., West Bay, 22,475 deals and battens, 215 scantlings, 1,496 deal ends. Nathanail, Bay Verte, 513 battens, 17,082 deals and battens, 1,827 deal ends. City of Liverpool, Quebec, 281 pcs oak, 140 elm, 34 red pine, 1,039 white pine, 120 pine deals, 2 089 pine boards, 81 pcs ash, 1,132 pine deal ends. Lake Nepigon, Montreal, 9,045 deals, 7,242 pine and spruce boards, 130 stds deals. Europa. Halifax, 16,822 deals and battens. 691 deal ends, 1,692 boards and scantlings. Polynesian, Montreal, 5,643 pine deals; Quebec, 1,296 pine deals, 13,980 birch scantlings. Anglo America, Quebec, 300 pcs red pine, 3,903 spruce deals, 549 pcs white pine, 222 logs birch, 170 pcs oak, 48 elm, 76 ash, 118 square white pine, 284 waney white pine, 2,034 pine ends, 4,850 staves. Oxenholme, Montreal, 12,904 staves, 14,315 deals, 6,487 ends, 424 pcs lumber. Lake Huron, Montreal, 8,596 deals, 9,233 boards, 2,711 spruce boards. Vancouver, Montreal, 19,014 bds, 3,270 red deals, 10,854 deals and ends. Sarmatian, Montreal, 1,782 spruce deals.

LONDON.—Nicolet, Quebec, 10,866 deals, 467 pieces pine, 167 fms. elm, 788 staves. 26 walnut, 154 oak. Bothal, Montreal, 13,443 deal ends, 40,000 deals. Neslone, Montreal, 20 pkgs. boards. Hermanos, Pentecost, 13,078 deals, 12,508 planks, 2,083 ends. Murciano, Montreal, 8,405 pieces lumber; Quebec, 6,393 deals, 380 pcs. birch, 281 ash, 600 bundles box shooks. Fremona, Montreal, 1,075 pieces lumber, 23 birch 6,907 walnut, 10,698 deals, 75 ash. Chateau Leoville, (s) Montreal, 37,017 fms deals, 2,396 ends, Grey Colin, Montreal, 61,617 fms deals, 7,081 ends. Hovding (s), Quebec, 44,608 deals, 3,768 ends, 13,091 staves. Damara (s), St. John. 14,557 deals, 153 scantlings, 3,153 ends.

Lack of space forbids an extended report being continued, but up to September 15th the following additional timber imports from Canada were entered at the various ports of the United Kingdom: Pine and spruce deals and ends 207,704, sawn and hewn fir 52,654, birch and spruce planks 9,687, boards 7,455, and oak, ash, walnut, pine, cherry, &c., logs and hewn or square timber 27,263 pcs.

OUR ADVERTISERS.

No better indication of the rapidly increasing popularity of the CANADA LUMBERMAN as an advertising medium can be found than the large number of new announcements which are from month to month finding a place in its columns. The list of new names appearing in the current issue is unusually large, and we take pleasure in appending a brief notice concerning each :

The well-known firm of Patterson & Hall, of Toronto and Midland, have done what every lumberman in the country should do—inserted their business card in THE LUMBERMAN.

The Geo. Bishop Engraving Co., of Montreal, lithographers, engravers and printers, is one of the largest firms of the kind in the Dominion. Their work speaks their worth, and a perusal of their advertisement will doubtless prove of interest.

Recognizing the fact that lumbermen are large consumers of the necessaries of life, the enterprising firm of J. W. Lang & Co., wholesale grocers and importers, of Toronto, make use of our columns to advertise their business.

The attention of shippers to South America is called to the notice of Mr. D. M. Rennie, of Beaunos Ayres, who is prepared to accept agencies for the Argentine Republic and Uruguay, from the manufacturers and shippers of Canada.

Reynolds & Kellond have been so long in Toronto and Montreal, as solicitors of patents and experts in patent cases that a simple announcement of their business is all that is necessary to command attention. We would direct attention to their card.

The Department of Public Works call for tenders for the replacing of the present roadway to the Suspension Bridge across the Ottawa river, at the city of Ottawa, with an iron truss bridge. Tenders are to be received up to noon on the 5th inst.

Mr J. J. Turner, the extensively patronized manufacturer of tents and awnings and lumbermen's supplies, Peterborough, Ont., has again inserted his card in these columns. Mr. Turner's manufacture is highly spoken of wherever used, and as a result his business is rapidly assuming large proportions.

Our Amherst N. S. Correspondent writes that A. Robb & Sons sent our of this siding one day lately, two Hercules engines with Monarch boilers and smoke stack complete both going to Kings Co N. B. and also one of their Shingle Machines to Newfoundland this makes four Shingle Machines this firm have shipped within a month or two.

By reference to the space occupied by him, it will be observed that Mr. James Leslie, one of the oldest members of the trade in Montreal, is again pushing his [illegible] in English Oak Tanned Leather B[illegible] position to supply all users of belting with complete or partial outfits promptly and at prices which will compare favorably with those of any other [illegible]

It is always pleasing to notice evidences of improvem[illegible] and prosperity among the manufacturer[illegible] Hamilton Manufacturing Co., of Peterborough, gratify that feeling very frequently. They are now forced, by the pressure of increasing business, to enlarge their pre[illegible] e rection of an addition to their workshop. The new building will be 160x34 feet and two stories high.

We have received a very handsomely gotten up circular from Lewis Bros. & Co., Montreal, wholesal[illegible] ware and lumbermen's supplies. These gentle[illegible] the importance and extent of the great lu[illegible] contracted with THE LUMBERMAN for [illegible] We would recommend our readers to keep a careful lookout for the changes in the space controlled by this firm as they handle many articles of interest to the lumber trade.

Mr. Geo. Brush, the veteran proprietor of the [illegible] dry, King and Queen Streets, Montreal, makes a modest [illegible] play on another page. If we have been rightly informed this is about the oldest foundry and machine shop in the city of Montreal, and the many years of liberal patronage bestowed upon it never seems to wane. As usual a specialty is made of saw mill machinery, engines and boilers, etc., which for quality and price would be difficult to surpass.

The Royal Electric Light Co., with headquarters in Montreal, have contracted for a respectable space to advertise their rapidly increasing business as manufacturers of dynamo machines, lamps, motors, etc., and as contractors and builders of electric light plants. Mr. Chas. W. Hagar, the manager of the company, is a thoroughly qualified electric[illegible] and in every way competent to give intending users of electric light apparatus the best of satisfaction.

The J. C. McLaren Belting Co., of Montreal, one of the oldest belting houses in the Dominion, again present their claims for patronage to the lumber and allied trades. They have now something entirely new to offer, an illustration and particulars of which appear in their advertisement elsewhere. Since the sudden and lamentable decease of the head of this firm some months ago, extensive improvements have been made in their mode of manufacture, and the onward progress of the firm has been creditable to the new and enterprising management.

W. A. Carr & Co., rubber stamp manufacturers, of Peterborough, although a comparatively new firm, have already opened out a very creditable connection among the business public of Eastern Ontario. The facilities they have at their command for doing the very best work are equal to that possessed by much older houses. As young men of business push and integrety we would recommend them with confidence and any of our readers requiring anything in the line of rubber stamps would do well to send this firm their orders. Their card appears in another column.

In another column will be found the announcement of an important sale by public auction of pine timber limits, situated in the Keepawa territory, Upper Ottawa agency, in the province of Quebec. They are virgin limits, and the owners, Messrs. John Ross and Co., have had them explored. They are well timbered, and the pine is of the very best quality. Water is plenty, all the rivers and creeks being suitable for driving. The facilities for taking timber and logs made on limits in the Keepawa territory to Ottawa makes these limits much more valuable now than they would have been a few years ago. Doubtless the competition at the sale on the 3rd inst. will be keen.

There are some special lines of manufacturing in Montreal that have not only carried the fame of that city throughout North America, but over the entire civilized world. The specialities of Tees & Co. are the manufacture of railroad, bank and other desks, revolving book cases, wood carpet, paraquet and inlaid floors. In desks they make over 200 different varieties, most of which are covered by patents owned by this firm. They range through all styles and shapes of roll and cylinder, office, library and parlor desks. They are manufactured in all kinds of wood, chiefly in black walnut, ash, oak and cherry, also to order from satin, teek, maple, mahogany, and any of the fine imported woods. They were among the most prominent exhibitors at the Colonial and Indian Exhibition at London, England, not only securing first awards, but received orders from all parts of Great Britain, France and Germany, also from Ceylon, Canary Islands and other parts of the Eastern Hemisphere. In all departments of their trade they take the lead in Canada not only in character of work but in the reasonable prices at which their wares are offered.

TRADE REVIEW.

Toronto, Ont.

TORONTO, Sept. 29th, 1888.

CAR OR CARGO LOTS.

1¼ and thicker clear picks, American inspection	$34 00@35 00
1¼ and thicker, three uppers, American inspection	40 00
1¼ and thicker, pickings, American inspection	30 00
1X10 & 12 dressing and better	20 00 22 00
1X10 & 12 mill run	15 00 16 00
1X10 & 12 dressing	16 00 18 00
1X10 & 12 common	12 00 13 00
1X10 & 12 spruce culls	10 00 11 00
1X10 & 12 mill culls	9 00
1 inch clear and picks	24 00 26 00
1 inch dressing and better	18 00 20 00
1 inch siding mill run	13 00 15 00
1 inch siding common	12 00 13 00
1 inch siding ship culls	10 00 11 00
1 inch siding mill culls	8 00 9 00
Cull scantling	8 00 9 00
1¼ and thicker cutting up plank	22 00 25 00
1 inch strips 4in to 8in mill run	14 00 15 00
1 inch strips, common	11 00 12 00
1¼ inch flooring	14 00
1½ inch flooring	14 00 15 00
XXX shingles, sawn	2 40 2 50
XX shingles, sawn	1 40 1 50
Lath, Sawn	1 80

YARD QUOTATIONS.

Mill cull boards & scantling	$10 00	Dressing stocks	16 00@20 00
Shipping cull boards, promiscuous widths	12 00	Picks Am. inspection	30 00
" stocks	13 00	Three uppers, Am. inspect.	40 00
		B. M.	
Scantling & joist, up to 16 ft	13 00	1½-in. flooring, dres'd	25 00 30 00
" " 18 ft	14 00	1½ " " rough	14 00 15 00
" " 20 ft	15 00	1¼ " " dres'd	23 00 25 00
" " 22 ft	16 00	" " undres'd	14 00
" " 24 ft	17 00	" " dres'd	16 00 20 00
" " 26 ft	18 00	" " undres'd	12 00 14 00
" " 28 ft	19 00	Beaded sheeting, dressed	18 00 20 00
" " 30 ft	20 00	Clapboarding, dres'd	12 50
" " 32 ft	21 00	XXX sawn shingles	
" " 34 ft		per M	2 75 2 90
" "	22 50@22 50	Sawn Lath	2 25
" " 36 ft	24 00	Red oak	20 00 25 00
" " 38 ft	27 00	White "	25 00 30 00
" 40 to 44 ft	30 00	Basswood, No. 1 & 2	18 00 20 00
Cutting up planks 1¼ and thicker dry	25 00 26 00	Cherry, No. 1 & 2	50 00 60 00
" board	18 00 20 00	White ash, 1 & 2	25 00 30 00
		Black ash, 1 & 2	20 00 25 00

Ottawa, Ont.

OTTAWA, Sept. 28th, 1888.

Dimensions, Inches.	*Per M.*
Mill culls 10 x 1	
" 12 1	
" 12 1½	
" 12 2	
" selected 16 ft. long, above dimensions	8.50 to 9.00
Cull strips, 1 in. thick, 5 to 7 wide	7.00 to 8.00
Mill cut outs 12 x 1	
" 11 1½	4.00 to 5.00
" 12 2	
Scantling 2 4	
" 3 4	12.00
" culls 2 4	
" " 3 4	7.00
Laths	1.25
Stock shorts, 12 x 1	10.00
1 inch siding outs, 1¼, 1½, 2	15.00
" outs from shorts, 1¼, 1½, 2	6.50 to 7.00
Outs from stocks 12 x 1	
" " 12 1¼	10.00 to 12.00
" " 12 1½	
Shingles, X	1.25
" XX	2.00
" XXX	3.00
" cedar, No. 1	2.00 to 2.
" cedar, culls	1.80
Difference in planed lumber, in waste and planing	5.00
Ditto, on average good stock	20.00 to 25.00

Hamilton, Ont.

HAMILTON, Sept. 29th, 1888.

Mill cull boards and scantlings	$ 9 00@10 00	Dressing stocks	$16 00 18 00
Shipping cull boards, promiscuous widths	10 00 12 00	1¼ flooring, rough	16 00 18 00
Shipping cull stocks	14 00	1½ flooring, rough	16 00 18 00
Scantling and joist up to 16 feet	13 00	1¼ flooring, dressed	25 00
do up to 18 feet	13 50	1½ flooring, dressed	32 00
do up to 20 feet	14 00	1 flooring, dressed	21 50 23 00
do up to 22 feet	15 00	Beaded sheeting 1	25 00 30 00
do up to 24 feet	16 00	Picks Am inspection	32 00 34 00
do up to 26 feet	17 00	Three uppers Am. In.	40 00
do up to 28 feet	18 00	XXX sawn shingles	2 60 2 70
do up to 30 feet	20 00	Sawn Lath	2 25
Cutting up plank 1¼ and thicker, dry	20 00 25 00	Red Oak	20 00 25 00
Cutting up boards	20 00	White Oak	25 00 30 00
		Basswood No. 1. & 2.	16 00 20 00
		Cherry No. 1 & 2	60 00 70 00
		White Ash No. 1 & 2.	25 00 30 00
		Black Ash, No. 1 & 2.	20 00 25 00

St. John, N. B.

St. JOHN, Sept. 29th, 1888.

Deals, Boards, Scantling, etc.

Spruce deals	$12 00	Spruce boards	12 00
Pine "	15 00	Pine "	12 00@40 00
Deal ends	6 00	Oak "	40 00
Scantling	10 00	Ash "	15 00@25 00
		Hemlock "	7 50

Shingles.

Spruce, extra	$3 50	No. 1	1 25
" clear	3 00	Pine	1 25
" No. 1 extra	2 25		

Clapboards.

Pine, extra	35 00	Spruce, extra	24 00
" clears	45 00	" clears	23 00
" 2d clears	35 00	" No. 1	15 00
		" No. 2	10 00

Flooring, Dressed.

6 in., No. 1	12 00	4 in., No. 1	12 00
" No. 2	10 00	" No. 2	10 00

Miscellaneous.

Staves	3 00@ 4 50	Laths	1 80
Heading, 17 in. per pr.	04	Pickets	6 50@15 00
" 18 in. "	04½ 05½	Railway ties	15
" 22 in. "	04½ 06		

Goderich, Ont.

GODERICH, Sept. 28th, 1888.

PRICES IN CAR LOTS.

1 inch Mill Culls	$8 00@ 8 50
1x6-8-10 & 12, common	12 00
1x6-8-10 & 12, dressing	16 00
1x14, and wider, common	12 00
1x14, " " dressing	16 00
1¼ dressing	16 00
1½ "	16 00
1¼ Norway pine flooring	14 00
1½ " " "	14 00
1 inch clear and picks 4 to 9 inch	25 00
1 inch " " 4-in. and up	26 00
1 inch " " 9-in. and up	27 00
1¼ and 1½ clear and picks	35 00
Lath 1½x4 feet	1 80
2 inch pine joist	11 50 12 00
2 inch Norway joist	11 00

Montreal, Que.

MONTREAL, Sept. 29th, 1888.

Pine, 1st qual'y ₱ M	$35 00 40 00	Basswood, run of log culls out per M	$16 00 20 00
Pine, 2nd " "	22 00 25 00	Oak, per M	40 00 50 00
Pine, shipping culls ₱ M	14 00 16 00	Walnut, per M	60 00 95 00
Pine, 4th quality deals ₱ M	10 00 12 00	Cherry, per M	75 00 90 00
Pine, mill culls, ₱ M	8 00 10 00	Butternut, per M	30 00 40 00
Spruce, per M	10 00 13 00	Butternut, per M	30 00 40 00
Hemlock, per M	9 00 10 00	Birch, per M	18 00 25 00
Ash, run of log culls out per M	16 00 18 00	Hard Maple, per M	20 00 25 00
		Lath, per M	1 50 1 70
		Shingles, 1st, per M	300 3 25
		Shingles, 2nd, per M	1 50 2 0

Saginaw, Mich.

SAGINAW, Sept. 28th, 1888.

CARGO LOTS.

Uppers	36 00@38 00	Norway	8 50@ 9 25
Common	16 00 19 00	Box	10 50 11 00
Shipping Culls	8 50 10 00	Straight measure	12 00 18 00
Mill Culls	6 00		

YARD QUOTATIONS—CAR LOTS DRY.

Drop Siding.

Clear, ⅞ in	42 00	C, ⅞ in	30 00
A	38 00	D	19 00
B	36 00		

Flooring and Siding—Dressed.

Flooring, clear, d & m	40 00	Siding, clear, ½ in.	22 00
No. 1	33 00	A	23 00
No. 2	30 00	B	17 00
No. 3	20 00	C	14 00
No. 4	13 00	D	12 00

Finishing Lumber—Rough.

Three uppers, 1 in. & 1¼ & 1½	42 00@45 00	Fine common, 1 in. & 1¼ & 2 in.	32 00@32 00
Selects, 1 in. & 1¼ & 2 in.	36 00 37 00		36 00
	44 00 46 00	C, 7, 8 & 9 in.	26 00
	38 00	Base, 2 to 9 in. No. 1	40 00
		No. 2	30 00
		No. 3	20 00
		Coffin boards 16 in. and over	18 00

Joist, Scantling and Timber.

12 to 18 feet	10 00	22 feet	12 00
20 feet	11 00	24 feet	13 00

Plank and timber, 12 inches wide, $1 extra.

Wide Select and Common—Rough.

C (No. 1 com.) 13in. and up	28 00	D (common) 14 in. and up	16 00

Lath, Shingles and Pickets.

Lath, No. 1	1 50	Country brands XXX	3 25@ 3 35
No. 1	1 00	Clear butts	2 25 2 35
Shingles, river brands		P'kts, 2 to 2½ in rough	12 00 13 00
XXX	3 40@ 3 50	Dressed	20 00
Clear butts	2 40 2 50	1¼ in. square, dressed	14 00 19 00

Philadelphia, Pa.

PHILADELPHIA, Sept. 29th 1888.

White Pine.

Mich. uppers, 1 to 2 in., dry	$48 00@50 00	1¼ to 2 in. plank, barn quality	22 50@25 00
2½, 3 & 4 in	55 00 60 00	Common plank	20 00 22 00
Selects, 1¼ to 2 in.	42 50 45 00	⅞ box boards, wide	14 00 16 50
2½ 3 & 4 in	41 00 43 00	⅝ siding, selected	27 50 30 00
12 in. flooring quality	30 00 32 50	Culls, 12 in.	15 50 17 00
barn	19 00 23 00	Wide	15 00 16 00
Edge barn, all widths	18 00 20 00	Narrow	13 50
		No. 1 moulding	36 00 38 50

Cargo Lots.

Yellow pine edge bds	14 00@16 00	Scantling and plank	20 00 22 00
Heart face boards	19 00 21 00		

Hemlock Boards and Scantling

Edge boards	10 50@11 50	Scantling, 2x3 & 2x4, 12 in. stock	11 50 12 00
		16 & 18 ft	12 00@13 00
Fencing, 6 in., 16 ft	11 50 12 00	3x4, to 12, 12 to 20 ft.	11 00 11 50

Shingles and Posts.

Cypress shingles, 24 in. heart, d & b	13 00@18 00	Cedar shingles, 30 in. hand dressed	35 00 40 00
24 in. sap, d & b.	10 00 12 00	Chestnut posts, 9 ft.	32 00
		7 ft.	28 00

HARDWOOD.

Walnut.

Nos. 1 & 2, 1 in., good dry, Indiana	$87 50@ 95 00	Reject or common, 1 in., 1¼ and up	60 00@65 00
1¼ & up	92 50 100 00	Culls, 1 in.	35 00 37 50
Nos. 1 & 2, ⅝ in.	72 50 77 50	1¼ in. & up	35 00 40 00

Poplar.

Nos. 1 & 2, ⅝ in. good wide, Indiana	25 00@27 50	Nos. 1 & 2, 1¼ in. & up, good wide, Ind.	32 50 37 00
1 in.	28 00 32 50	Columns, 5x5 & up clear	35 00 37 50

Oak.

Nos. 1 & 2, 1 in., good western, straight	32 50@35 00	Nos. 1 & 2, 1¼ in. & up, good western, straight	35 00 37 50
quartered	49 00 50 00	quartered	52 50 55 00

Ash.

Nos. 1 & 2, 1 in., good western	35 00@40 00	Nos. 1 & 2, 1¼ in. & up, good western	32 50 42 50

Yellow Pine—Yard and Wholesale.

Sc'tlg, 2x4 to 12x14	22 00@23 00	Flooring, 1 in., Va.	17 00 19 00
Plank, 1¼ to 2 in.	23 00 27 50	1 & 1¼ in., Ga. &	
Fl'g, 1 & 1¼ in. No. 1	27 50 30 00	Fla. cargo run	22 00 24 00

Cherry.

Nos. 1 & 2, 1 in., good	62 50 70 00	Nos. 1 & 2, 1½ in. & up, good	65 00 75 00

New York City.

NEW YORK, Sept. 28th, 1888.

Black Walnut.

⅝ in., all clear	$78 00@ 82 00	Culls, 1 inch	$35 00@37 00
1 and 1¼ inches	92 00 97 00	Culls, thick	37 00
1½ and thicker	98 00 105 00	Counter tops, 18 in.	
Rejects	52 00 55 00	and over	110 00 150 00

Poplar, or White Wood.

⅝ in. 10 inches and over	23 00@24 00	1¼ to 2 inch	29 00@30 00
¾ in. coffin boards	27 00 28 00	2½ and thicker	31 00 32 00
1 inch, 10 inch and over	28 00 30 00	Common 1 to 2 inch	21 00 22 50
1 inch, 8 in. and over	26 00 28 50	Saps, 1 inch & thicker	22 00 25 00
		Culls, all thickness	16 00 17 00

Dressed Poplar.

½ inch panel	24 50@25 00	⅓ in. clg. 4 to 6 in.	21 00@21 50
⅝ inch panel	27 00 28 00	½ in. clg. 4 to 6 in.	24 00 24 50
¾ inch panel	29 00 30 00	⅝ in. clg. 4 to 6 in.	27 00 28 00
4, 5, 6 inch casing	30 00 31 00	¾ in. clg. 4 to 6 in.	24 00 31 00
7, 8, 9, 10 inch casing	32 00 33 00	⅞ in. clg. 4 to 6 in.	30 00 31 00

Ash.

1 inch, white	36 00@ 38 00	Strips, clear	26 00@ 25 00
1¼ to 2 inch	37 00 38 00	Black ash, good	26 00 30 00
2½ to 4 inch	40 00 41 00	Black ash, culls	10 00 12 00

Oak.

1 inch plain sawed,	36 00@ 39 00	inches and over	46 00@ 48 00
1¼ to 2 inch	37 00 40 00	Thicker	48 00 50 00
Thicker	38 00 41 00	Strips under 6 in.	32 00 40 00
Quarter-sawed, white, all clear, 6-			

Cherry

⅝ in., white & clear	65 00@ 70 00	1½ and thicker	88 00@ 95 00
1 inch	76 00 80 00	Counter tops, 18 in.	
1 inch strips	40 00 42 00	and over	100 00 115 00
1¼ to 2 inch	80 00 85 00	Culls, all thickness	18 00 20 00

Miscellaneous.

Chestnut, clear	33 00@ 35 00	Hickory, old growth	50 00 60 00
Chestnut common	20 00 23 00	Hickory, 2nd growth	70 00 80 00
Basswood white	30 00 32 00	Elm	20 00 22 00
Basswood common	20 00 23 00	Sycamore	24 00 27 00
Maple, clear	25 00 30 00	Sycamore quartered	35 00 40 00
Birch, clear	32 00 36 00	Gum	38 00 41 00
Birch, 1s and 2s	26 00 30 00	Butternut	45 00 50 00
Cottonwood	20 00 22 00		

Boston, Mass.

BOSTON, Sept. 29th, 1888.

Western Pine—by car load.

Uppers, 1 in	$48 00@50 00	Fine com., 3 & 4 in.	46 00@ 50 00
1¼, 1½ & 2 in	47 00 50 00	No 2, 1 in. Fine com.	29 00 30 00
3 & 4 in	58 00 60 00	1¼, 1½ & 2 in	31 00 33 00
Selects, 1 in	42 00 45 00	No. 1 strips, 4 to 6 in	41 00 43 00
1¼, 1½ & 2in	44 00 46 00	No. 2	37 00 38 00
3 & 4 in	48 00 52 00	No. 3	25 00 27 00
Moulding boards, 7 to 11 inch clear	37 00 41 00	Cut ups, 1 to 2 in	26 00 30 00
60 per cent clear	35 00 37 00	Coffin boards	22 00 25 00
Fine common 1 inch	37 00 42 00	Common all widths	20 00 28 00
1¼, 1½ & 2 inch	40 00 42 00	Shipping culls	17 00 18 00

Eastern Pine—Cargo or Car Load.

Nos. 1, 2 & 3	40 00@43 00	Clapboards, 4 ft., sap	
4	28 00 30 00	clear	40 00 42 00
5	23 00 26 00	Sap, 2nd clear	30 00 32 00
Ship'g bds & coarse	16 00	Heart extra	18 00
Refuse	12 00	Heart clear	30 00
West'n pine clapbds 4 ft. sap extra	43 00 45 00		

Spruce—by Cargo.

Scantling and plank, random cargoes	12 00@13 00	Coarse, rough	9 00 12 00
Yard orders, ordinary sizes	13 50 14 50	Hemlock bds., rough	10 00 11 00
Yard orders, extra sizes	15 00 16 00	" dressed	12 00
Clear floor boards	19 00	Clapbds., extra, 4 ft.	28 00 30 00
No. 2	16	Clear, 4 ft.	26 00 28 00
		Second clear	20 00 22 00
		No. 1	12 00 15 00

Lath.

Spruce	1 90@ 2 00

Shingles.

Spruce	1 25@1 50	Cedar, sawed, extra	5 30@5 50
Pine, 18 in. extra	4 30 4 50	Clear	3 00 3 00
Pine, No. 1	3 10 3 40	Extra, No. 1	1 75 2 25
		Cypress, No. 1, 18 in.	5 00 5 00

Oswego, N. Y.

OSWEGO, Sept. 29th. 1888.

Pine.

1¼, 1½, 2 and thicker uppers	$40 00@43 00
" " " pickings	30 00 33 00
" " " No. 1 cutting up	22 00 26 00
" " " cuttings up pickings and uppers as run	30 00 35 00
1 inch selected sidings	25 00 30 00
1¼ " " "	30 00 35 00
1 & 1½ box or No. 2 culls	11 00 12 00
1 & 1¼ sidings No. 1 dressing and better	17 00 25 00
1x10 & 12x12 to 16 feet dressing and better	17 00 25 00
" " " shipping culls	14 00 17 00
" " " No. 2 "	11 00 12 00
1 & 1¼ in. strips 4 to 7 wide selected	20 00 30 00
" " " dressings	16 00 17 00
" " " box	9 00 12 00

Brown Ash.

1 1¼ 1½ 2 & 3 in. 1st & 2nd quality	17 00 21 00
" " " culls	9 00 11 00

Basswood.

1 & 1¼ 1st & 2nd quality	20 00 21 00
" culls	9 00 12 00

Shingles.

XXX 18 inch pine standard thickness 5 to 2¼	$3 75
XX " " " " "	2 50
X " " " " "	75
XXX " cedar " " "	3 00
XX " " " " "	2 00
XXX 16 " pine " " "	3 00
XX " " " " "	1 00

Lath.

No. 1 1½, 1½	1 80	2 10
" 2 "	1 10	1 50

Buffalo and Tonawanda, N. Y.

BUFFALO, Sept. 27th, 1888.

Norway Pine—Rough.

No. 1, 1 & 1¼ in.	20 00@22 00	Stocks No. 1,1 & 1¼ in	22 00
No. 2, 1 & 1¼ in.	15 00 15 50	No. 2, 1 & 1¼ in.	17 00
No. 3, 1 & 1¼ in.	11 50 12 00	No. 3, 1 & 1¼ in.	12 00
		Scantling 2x4 to 2x12 12 to 16 ft	13 00
		Timber, 4x6 to 12x12 16 00	25 00

White Pine—Rough.

Uppers, 1 in.	$44 00@45 00	Shelving, No. 1, 13 in.	
1¼, 1½ and 2 in.	44 00 46 00	and up	29 00
2½, 3 and 4 in.	54 00 56 00	No. 2, 13 in. & up	22 00 24 00
Selects, 1 in.	36 00 38 00	Fine common, 1 in.	30 00
1¼, 1½ and 2 in.	37 00 40 00	1¼, 1½ and 2 in.	30 00 33 00
2½, 3 and 4 in.	44 00 46 00	Common, 1 in.	16 00 19 00
Cuts, No. 1, 1 in.	27 00 30 00	1¼ and 1½ in.	17 00 20 00
1¼, 1½ and 2 in.	32 00 33 00	2 in.	20 00 22 00
2½, 3 and 4 in.	37 00 40 00	Coffin boards	16 00 19 00
No. 2, 1 in.	17 00 19 00	Box, 1 in.	13 50
1¼, 1½ and 2 in.	21 00 22 00	1¼ in. & thicker	13 50
Moulding, 1 in.	30 00 33 00	A stocks, 1x10	27 00
1¼, 1½ and 2 in.	30 00 33 00	1x12	28 00
Siding strips, 1 in.	38 00	B stocks, 1x6 to 16	17 50
		C stocks, 1x6 to 16	13 50

Dressed Lumber.

	No. 1.	No. 2.	No. 3
Base and Casing under 6 inches	$33 00	$23 00	$16 00
Base and Casing, 6 inches	34 00	25 00	17 00
Base and Casing, 6, 7 and 8 inches	35 00	27 00	20 00
Flooring, 1 and 1¼ inches, 2½ to 5 in. wide	32 00	20 00	14 00
Ceiling, ⅞ in., 2½ to 5 inches wide	33 00	23 00	16 00
Ceiling, ⅝ in., 2½ to 5 inches wide	28 00	22 00	14 00
Ceiling, ½ in., 2½ to 5 inches wide	24 00	18 00	13 00
Philadelphia Fencing	36 00	25 00	17 00
Bevel Siding, 6 inches	23 00	21 00	11 00
Bevel Siding, 5 inches	23 50	19 00	14 00
Bevel Siding, 6 inches	23 00	19 00	14 00
Novelty Siding, 6 inches and over	34 00	25 00	17 00

Shingles and Lath.

Shingles, 18 in. XXX	4 10	Lath, pine No. 1	2 10 2 10
XX	3 10	No. 2	1 60
X	1 25	Norway	1 80
Shingles, 16 in. XXX	3 00	Hemlock	1 60
XX	2 10		
X	90		

Burlington, Vt.

BURLINGTON, Sept. 28th, 1888.

Canada Pine Sidings—1x8 in. and up, 12 to 16 ft. d 2 or 4 s.

Select & shelving	$46 00	Finish	$38 00
Pickings	37 00	Dressing	28 00
Pickings & better	40 00@42 00	Common	20 00@21 00

Canada Pine Stacks—1x10 in, 12 to 16 ft., d 2 or 4 s.

Selects (clear)	55 00	Pickings & better	40 00
1st shelving	42 00	As run, common out	28 00@30 00
2nd	39 00	No. 1 barn boards	25 00
3rd	30 00	Common	21 00
Pickings	38 00		

Canada Pine Stock—1x12 in. 12 to 16 ft. d 2 or 4 .

Selects (clear)	57 00	Pickings & better	44 00
1st shelving	47 00	As run, common out	33 00
2nd	41 00	No 1 barn boards	26 00
3rd	32 00	Common	21 00@22 00
Pickings	38 00		

Canada Pine Stock—14 in. 12 to 16 ft. d 2 or 4 s.

Pickings & better	45 00	3d shelving	33 00
As run, common out	33 00	Common	22 00

Canada Pine S. B'ds–1x8 in. & up, 11 ft. and under, d 2 s or r.

Pickings & better	33 00@35 00	Dressing & common, d 2 s or	
As run, common out	30 00	d 2 s & m	20 00@21 00
		Common	18 00@19 00

Canada Pine Sheathing, d. m. & b.–1," 4 to 7", 5" & up.cb ⅞".

1st quality, 12 to 16 ft	46 00	1st & 2nd quality, 9 to 11 ft.	33 00
2d	37 00	7 & 8 ft.	34 00
3d	27 00	3rd quality, 11 feet & under	22 00
4th (selected Common)	22 00	4th	18 00

Canada (Quebec) Spruce—1 & 1½ in., 4 to 7 in. d 2 s & m.

Clear, 10 to 16 feet	32 00	No 2, 10 to 16 ft.	15 00@16 00
No 1	22 00		

Above prices delivered on a rate of $30 per car load.

Detroit, Mich.

DETROIT, Sept. 28th, 1888.

Uppers, Selects, Stocks, etc.

Uppers, 4-4	$43 00	Shop, 5-4, 6-4 & 8-4	$25 50
5x4, 6x4 & 8x4	43 00	Fine common, 4x4	31 00
3 & 4 in	50 00	5x4, 6x4 & 8x4	33 00
Selects, 4x4	38 00	Stocks, 1x12 & 1x10, No. 1	19 00
5x4, 6x4 & 8x4	38 00	1x12, & 1x10, No. 2	16 00
Shop, 4x4	22 00	1x12, & 1x10, No. 3	13 00

Flooring, Siding, Ceiling, etc.

Flooring, select common	22 00	Roofing, D & M	16 00
No. 1 common	18 00	Siding, clear	21 50
No. 1 fencing	16 50	A	20 50
Ceiling, select common	25 00	B	18 50
No. 1 common	22 00	C	13 50
No. 1 fencing	20 00		

Bill Stuff and Culls.

Bill stuff, ordinary sizes:		26 to 28 ft	14 00
12 to 16 ft	12 00	30 to 34 ft	16 00
18 to 20 ft	12 50	Ship culls	12 00
22 to 24 ft	13 00	Mill culls	10 00

Shingles and Lath.

Shingles, clear. 18 in. Ex	3 75	6 in. stocks clear, Ex	4 00
10 in. clear. 18 in.	3 00	5 in. stocks clear, Ex	4 80
6 in. clear. 18 in.	2 75	Lath	2 10

Add for surfacing one or two sides, $1.

RAILWAY MATTERS.

The Red River railway is now open for passenger traffic.

The cost of the C. P. R. to Westminster was: Railway bonus, $75,000; Right of way, $35,000; Land granted, $20,000; or a total cost to the city of $130,000 or $16,200 per mile.

An idea of the fast speed made by the London and North Western railway between London and Edinburgh will be maintained when it is borne in mind that at the same rate of speed the distance between Quebec and Vancouver would be covered in two days and a-half.

The Union Pacific embraces 6,354 miles of road in ten States and Territories, and by another year will reach 7,000 miles. The total funded debt at the end of 1887 was $147,590,011, which is a decrease of $8,257,416 since June 30, 1884. The aggregate earnings of 4,764 miles in 1887 reached $28,557,776. The net earnings per mile of the whole system were $2,355,72.

A project is on foot to build a line of railway from the coal fields on the Souris northward through Carlisle and Cannington, thence to Moosomin, crossing the C. P. R. continuing northwestward, crossing the line of the G. N. W. Central and the M. & N. W. railway, terminating in the Riding Mountains, where there are large quantities of timber which would make traffic for the road, which with the coal traffic would form alone a sufficient amount of business to make the line a paying investment. Mr. James Humphreys, of Cannington, a wealthy English gentleman, has left for England for the purpose of procuring financial backing there before forming a company.

A company has been formed by a number of the leading citizens of Victoria, B. C., with the object of building a railway from that city to a point at or near Shoal Harbor at the north end of the Saanich peninsula and connecting this point with the mainland at or near the mouth of the Fraser river by a ferry, thence carrying a branch to Westminster city and extending a line from the mouth of the Fraser to connect with the American system of railways at or near Mud Bay. It is expected by the promotors that a trip from Victoria to the mouth of the Fraser river by the proposed line will be made inside of three hours, reaching Westminster 15 minutes later. At the Fraser river it is proposed to extend a mole to deep water, where trains will connect with the ferry. It is understood that both the Dominion House of Commons and the Local Legislature will be applied to for power to enable the Company to carry out the work. The distance by rail from Victoria to Shoal Harbor will be 18 miles, the ferry line 25 miles, and 12 or 18 miles from the mole io Westminster.

EXCHANGE ECHOES.

Chicago Timberman.

It pays better to ship the goods manufactured than the raw material.

Canadian Trade Review.

A manufacturer who wants to succeed in business must make money not only in selling his goods but in buying his material.

New York Lumber Trade Journal.

We are sorry to see by a perusal of some of our contemporaries that the Association has a leaky member. Who he is we do not know, although we are likely to at no distant day, and if we ever do know, we shall print his name in large type at the head of our columns.

Winnipeg Commercial.

Canada has more miles of railway per capita than any country in the world, and in shipping she stands second among the countries of the world as to the number of tons per capita. Great Britain only excels Canada in the matter of shipping. In proportion to population, Canada may be said to lead the world in commercial enterprise.

American Exchange.

Contrary to the opinion expressed in some directions the great majority of lumber manufacturers are not in favor of free lumber. Occasionally there is an exception to the rule, and naturally enough this exception is much talked about in free trade journals. It will generally be found if a manufacturer argues for a removal of the tariff on Canadian Lumber he is interested in Canadian stumpage.

Southern Lumberman.

To the business man the advertising pages of a journal are as valuable and interesting as the reading ones, and the man who receives a trade journal and throws it in the waste-basket without at least glancing over it carefully, even if he does not read it attentively, is extremely unwise, not to put it stronger. Some of the best houses in the country subscribe for such journals for the advertising alone, in order to keep up to the state of the market and the changes of trade.

Chicago Timberman.

If those people who have gone into ecstacies over the fact that the big Joggins raft, which contained but 3,000,000 feet of logs could see some of the "Whalers" that are coming into Bay City at this time they would open their eyes still wider. A big Lake Superior raft, containing 6,000,000 feet arrived last Thursday night, and it is announced that the Reed Towing and Wrecking Company will bring in their patent boom one containing 8,000,000 feet about the middle of September. This is the kind of boom stick used at Muskegon.

Lumber Trade Journal.

Several Eastern lumbermen have contracted the "Cuba fever," which means that they have grown strong in the faith that investments in Cuban timber lands will result in large and speedy returns, the forests of the island being rich in mahogany and other valuable woods, easily accessible, and convenient to all the leading lumber marts of the world as regards cheap freights. The timber lands are [illegible] and are estimated at about 20,000 square miles [illegible] entire area being practically a [illegible] several years ago is reported to have [illegible] acres of forest lands which have enhanced [illegible] tion to $5,000,000. He has begun [illegible] an extensive scale; having at the present [illegible] 300 yoke of cattle engaged in logging. [illegible] island at the present time is estimated at about 13,000,000 acres and valued at $40,000,000, or only a trifle over $3 per acre.

ITEMS OF INTEREST.

The proverbial two blades of grass where one grew before could hardly be more profitable than two trees where there is now but one.

It is said that a fir is standing in the Kanich valley, Nevada, which measures fifty-eight feet in diameter seven feet from the ground.

In Germany a substitute for lignum vitæ in certain mechanical uses has been found by impregnating soft wood with oil and subjecting it to pressure to increase its density. Thus prepared, the artificial is said to have all the properties of good lignum vitæ.

An exchange tells that a lock of a girl's red hair was found deeply imbedded in a large tree by some men who were cutting timber, at Fredericksburg, O., the other day. It nestled inside 51 growths of the tree, showing that there was nothing youthful about the relic. This part of the story may do, but when it is said that the workmen immediately fell to work cutting down trees in the neighborhood, expecting to find a white horse imbedded in one of them, it is asking too much of the readers' credulity.

PERSONAL.

Mr. James Dollar, of Bracebridge, intends disposing of his mill and limits and going with his brother, J. M. Dollar, to California.

Mr. John Brennan, manager Ontario Lumber Company at French River has resigned, and is going to California.

It is reported that Mr. Angus McLeod, local manager for the Victoria Harbor Lumber Company at Bracebridge, has sent in his resignation.

Mr. G. B. Pattee, of the firm of Perley & Pattee, lumbermen, Ottawa has "struck it rich" in Arizona, being the owner of one of the richest silver mines in the territory. The ore taken from the mine pans out at $562 per ton.

We had the pleasure of a visit from Mr John W. Coy, vice-president and general manager of the St. Catherines Saw Works. By some misadvertance in last issue a mistake was made in his name, which the typo made "John A. Cox."

FIRE RECORD.

Bush fires have devastated East Tawas and other parts of Michigan.

A recent fire in a lumber yard at Victoria Harbor nearly caused a disastrous conflagration. As it was but little damage was done.

Cadenhead's shingle mill at Midland was burned on Friday morning, August 31st. The fire was supposed to be of incendiary origin.

In the upper Tenton county, Montana, disastrous fires have raged. Ranches were burned off for an area of sixty miles and the fire could not be kept under control.

On Wednesday morning, Sept. 11th, the steam sawmill, machinery and buildings adjoining situated at Hazely's Bay, near Pembroke, was burned to the ground. The mill was in operation about five years, The loss is about $10,000 partly insured.

The largest fire which ever occurred at Thessalon, Ont., took place about the middle of September, resulting in the entire destruction of N. Dyment's large steam sawmill. Fortunately a large stock of lumber and slabs occupying an adjacent lot were saved through the heroic efforts of the citizens. The total loss has not come to hand, but it will be heavy. It is not known whether Mr. Dyment will rebuild or not, but it is probable that he will.

A most disastrous fire has taken place at St. Jerome, a thriving little town in Terrebonne county, situated about thirty miles from Montreal. It broke out at one o'clock in the morning and before it was got under control the woollen mills of Beauchemon & Co., a sawmill and furniture factory belonging Ald. Villeneuve of Montreal, and Chapleau & Geldert's saw mill were entirely destroyed, together with contents. The loss is placed at $60,000. No fatalities are reported.

SAW-MILL REFUSE.

The safe disposal of saw-mill refuse is literally a burning question, and one which in many places is really a serious one, and involves the expenditure of large sums of money. After the sawdust has been burned under the boilers in steam mills, and all that can be cut up into laths thus disposed of, there still remains a large amount of material which in one way or another must be got rid of. In earlier times the common way was by open fires maintained at a presumably safe distance from the mill, and to which the refuse had to be conveyed, often at considerable expense.

In more recent times furnaces have been specially designed, into which, by the action of machinery, the refuse is constantly discharged as fast as produced in the mill. For a large mill the furnace must be very large, and is very costly. In one case in Ontario the burner is over thirty feet in diameter, and has a total height of over 120 feet. The lower part has suitable openings for air, and for entrance for repairs when necessary. It is really an iron casing, made of wrought iron plates, and lined with brick. This is about sixty feet high, and then tapers until it is about fourteen feet in diameter, and thus is continued another fifty feet, and is crowned with a spark arrester.

The refuse is carried up about fifty feet, and is there discharged by a suitably-shaped mouthpiece, so as to scatter the refuse over the bottom of the burner. The burner cost several thousands of dollars, and has been in use for several years with great success. The spark arresting frame is made of wrought iron piping with the ends open, so that the air circulates through it, and keeps it cool. This is covered with heavy wire netting, the meshes being about one-fourth inch square.

This kind of burner is only well adapted for large mills, as it must be of considerable height to insure safety, and the height necessitates a large diameter. The two things necessary in a successful burner are: First, the prevention of the escape of burning pieces or sparks of size sufficient to cause a fire, and secondly, some means by which the heat generated may be dissipated without injury to to the furnace itself, so that it might last for a reasonable time.

These ends can be attained by building a brick furnace covered in with an arch. The wall and arch should be double, with considerable space between, or have a number of flues in them. These flues should be open at the bottom, and be carried up higher than the crown of the arch, in the form of short chimneys. By this means the currents of air will carry off the heat. The flue from the furnace itself should be carried horizontally for some convenient distance, and if near water, it would be advantageous to carry it out over the water, so that any burning pieces carried by the draught might drop into the water, and thus be prevented from escaping by the chimneys.

The chimney should not be at the end of the flue, but at least four or five feet nearer the furnace. The entrance to the chimney should be as square and abrupt as possible. The object of this, while giving free vent to the escape of the smoke or heated air, anything more solid, such as pieces of burning wood, cannot turn the abrupt corner leading into the chimney but pass into the space beyond. Locomotives are now frequently constructed on this principle, having a smoke box extension beyond the smoke pipe, and into this sparks and grit from the furnace collect, instead of being driven out through the chimney, and scattering over the train, as used to be the case.

The chimney from the burner should be arranged to give ample draught, but by making the flue of same length, and by one or two bends in it, or bridge walls, the velocity of the current may be checked, and so prevent the chimney becoming too hot, and in this way an ordinary smoke-pipe may be used. Should it be necessary to put a spark arrester up, it will be found of great advantage to make the frame of it of pipe with ends all open, so that the air may freely pass through, and so prevent the iron from becoming too hot.

The bottom of the furnace may be made with several low parallel fire brick walls to take the place of grate-bars, and doors should be provided for getting in to repair or clean, either by having heavy iron frames built in, or a better way is to form openings into the brick wall with an arch top, and built up in such a manner that the openings can be made at any time without injury to the wall.

It seems a pity that so much material, which it has taken years to produce, should be wasted, as is often done in saw-mills, and yet what else to do with refuse than burn it, involves questions not easily solved.

CASUALTIES.

A boiler in a saw mill at Springfield, Ill., exploded Aug. 30th, killing three persons. William Gookum, the third victim, died the following Saturday.

A young man named Joseph Elliott met his death near Thessalon, Ont., a fortnight ago, while engaged on the drives.

A young man named Vannasse who was employed in Mr. Booth's mill at the Chaudiere, was at work near the circular saw when he accidently put his hand too near the saw and had two of his fingers cut off.

At Ste. Anne De Laperade, Que., Mr. Louis Barbeau, a farmer had just comme nced work in a saw mill, when he was struck by a piece of wood from the saw with such violence as to kill him.

A lad of 14 named Latowmier, engaged in Gilmour's mill, Trenton, was caught by the chain used for carrying the saw dust to the furnace and almost completely torn to pieces.

CORRESPONDENCE.

PRESCOTT, Sept 10th, 1888.

Editor Canada Lumberman.

DEAR SIR,—Is there a mill in the continent of America whose capacity is double that of the Gilmour mill at Trenton. An early reply will oblige.

Yours truly,
A. S. WHITING MFG. CO.

Will some of our readers undertake to answer this query and give particulars?—Ed. LUMBERMAN.

—Taking effect September 5th, the lumber freight rate from Chicago to East St. Louis, Ill., has been advanced from 8 to 10 cents, and, in harmony with this move, rates from Chicago to various Illinois points, the rates of which are governed by the East St. Louis rate, have been advanced from 1 to 2 cents. Rates to these latter points have also been similarly adjusted with reference to points affected by the Chicago rate.

—Forest fires are reported in old cuttings in Northern Michigan and Wisconsin but we can learn of no damage as yet in standing pine. Apprehensions have been felt for the safety of a large jam of logs consisting of 100,000,000 feet or more in the upper limits of the Menominee boom, which are high and dry, with fire in the surrounding marshes, but as yet no damage is reported. Great complaint is made at the carelessness of railroad surveying parties traversing the Northern country, and whose camp fires are left to work havoc.

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MANUFACTURERS OF
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AUCTION SALE
—OF—
VALUABLE PINE TIMBER LIMITS.

The undersigned has received instructions from MESSRS. J. BELL FORSYTH & CO., of Quebec, to Sell by Public Auction, at the RUSSELL HOUSE, OTTAWA,

On Wednesday, Oct. 3rd., 1888,

Three Hundred Miles of Valuable Pine Timber Limits, situated on the Upper Ottawa River. These limits were selected by J. Bell Forsyth & Co. about fifteen years ago, and have never yet been worked. Terms and conditions made known on day of sale.

Plan of the limits can be seen and further information obtained on application to the owners, or

I. B. TACKABERRY,
Auctioneer.
29 Sparks St., Ottawa.

Valuable Pine Timber Limits
FOR SALE BY AUCTION.

The following valuable Pine Timber Limits situated in the Keepawa Territory, Province of Quebec, will be sold by Public Auction at the Russell House in the City of Ottawa, at 2.30 p.m., Wednesday the third day of October, 1888.

Berth No. 176,	50 sq. mls.	Berth No. 185,	30 sq. mls.
" 177,	50 "	" 186,	"
" 178,	50 "	" 187,	30 "
" 179,	50 "	" 188,	"
" 180,	50 "	" 189,	"
" 181,	50 "	" 190,	"
" 182,	30 "	" 191,	"
" 183,	"	" 192,	"
" 184,	30 "	" 193,	"

Total area 720 square miles more or less As per licenses of 1887-88.

These Limits have never been worked on, are well timbered, and the pine is of the very best quality.

Terms and conditions made known on day of sale.

Plan of the Limits can be seen and further information obtained on application to

JOHN ROSS & Co., Quebec.
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29 Sparks Street, Ottawa.

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next month.

IMPORTANT TO LUMBERMEN.

IN RE ESTATE OF
Brown & Mahood, of Utterson, Ont.

Tenders are invited for the Assets of this Estate, consisting in part of about

20 Million Feet of Standing Pine; Logs Floating in Mary's and Long's Lakes, valued at about $10,000; Shingle Mill at Port Sydney in Operation; Lumbering Utensils in Large Variety; Freehold Land and Village Property; Stock in General Store at Utterson.

Tenders will be received up to the 15TH of OCTOBER NEXT for the whole interest of the undersigned in the estate, or any part thereof.

Full particulars as to the location of the timber, etc., etc., can be had on application to

ROBERT H. GRAY,
Trustee.
24 and 26 Wellington St. West, Toronto.

Notice to Iron Bridge Builders.

Sealed Tenders, addressed to the undersigned and endorsed "Tender for Chaudiere Bridge," will be received at this office until Friday, the 5th day of October next, for replacing the present roadway of the Suspension Bridge across the Ottawa, at the City of Ottawa, with an Iron Truss Bridge, in accordance with a specification incorporated in and forming part of a form of tender, a copy of which, together with a plan of the present structure, will be supplied to Iron Bridge Builders only, on application to the Chief Engineer.

Tenders must be accompanied by plans, specification and strain sheets of the structure proposed to be constructed, and also a description in detail of the mode or manner in which it is to be erected and put in place, as no interference with the present bridge or the traffic across the same will be permitted, except as stated in the specification; and they—the tenders—will not be considered unless made on the forms supplied, and signed with the actual signatures of the tenderers.

An accepted bank cheque, payable to the order of the Minister of Public Works, equal to *five per cent of amount of tender* must accompany each tender. This cheque will be forfeited if the party decline the contract, or fail to complete the work contracted for, and will be returned in case of non-acceptance of tender.

The Department does not bind itself to accept the lowest or any tender.

By order.
A. GOBEIL,
Secretary.
Department of Public Works, Ottawa, 10th Sept., 1888.

Sealed Tenders, addressed to the undersigned and endorsed "Tender for Port Arthur Work," will be received at this office until Friday, 19th October next, for the construction of a further length of Breakwater at Port Arthur, Ontario, in accordance with plans and a specification to be seen at the Department of Public Works, Ottawa, and on application to William Murdoch, Esq., Resident Engineer, Port Arthur.

Tenders will not be considered unless made on the form supplied and signed with the actual signatures of tenderers.

An accepted bank cheque, payable to the order of the Minister of Public Works, equal to *five per cent. of amount of tender*, must accompany each tender. This check will be forfeited if the party decline the contract, or fail to complete the work contracted for, and will be returned in case of non acceptance of tender.

The Department does not bind itself to accept the lowest or any tender.

By order,
A. GOBEIL,
Secretary.
Department of Public Works,
Ottawa, 17th Sept., 1888.

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251 GEORGE AND 154 KING STREETS.
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Canoe, Yacht and Boat Sails made to order.
Perfect Fits guaranteed.
Every description of Lumbermen's Supplies and Waterproof Clothing.

Sealed Tenders, addressed to the undersigned and endorsed "Tender for Penetanguishene Work," will be received at this office until Friday, 19th October next, for the construction of work at Penetanguishene, Ontario, in accordance with a plan and specification to be seen at the Department of Public Works, Ottawa, and on application to H. H. Thompson, Esq., Mayor of Penetanguishene.

Tenders will not be considered unless made on the form supplied and signed with the actual signatures of tenderers.

An accepted bank cheque, payable to the order of the Minister of Public Works, equal to *five per cent of amount of tender*, must accompany each tender. This cheque will be forfeited if the party decline the contract, or fail to complete the work contracted for, and will be returned in case of non-acceptance of tender.

The Department does not bind itself to accept the lowest or any tender.

By order,
A. GOBEIL,
Secretary.
Department of Public Works,
Ottawa, 13th Sept., 1888.

When writing to advertisers please state that you saw their advertisement in this journal.

MACHINERY FOR SALE

H. W. PETRIE'S list of Sawmills and general wood-working machinery for sale.
ONE new 2 or 3 block sawmill, with 6-inch saw.
ONE sawmill, with timber limit in Parry Sound.
ONE 2-block mill. Butterfield build.
ONE 2-block mill, small portable size.
ONE automatic sawing machine, Bavley make.
ONE 66-inch inserted and 64-inch solid saws.
TWO stave cutters with parts-61.
ONE gang lath mill, new.
ONE Waterous self-feed grist mill and bolter.
ONE Goldie & McCulloch Hall self-acting shingle machine.
ONE self-acting shingle machine, Green Bros. make.
ONE Waterous self-acting shingle mill and jointer.
ONE Eureka self-acting shingle machine and jointer, I. Frenchette, maker, St. Hyacinthe, P. Q.
TWO Doherty hand swing machines.
ONE upright swing, with 40-inch saw.
EIGHT wheel jointers, various makers.
THREE drag saw machines.
ONE heavy 24-inch planer and matcher, Rogers' make.
ONE new eclipse planer, matcher and moulder, Galt make.
ONE 24-inch planer and matcher. Picton make.
TWENTY-inch planer and matcher.
EIGHTEEN-inch planer and matcher.
LITTLE Giant pony planer and matcher.
NEW Economist 24-inch planer and matcher.
ONE 27-inch revolving bed double surfacer, Galt make.
ONE 24-inch surfacer, McKechnie & Bertram.
ONE 24-inch poney planer, Frank & Co. build.
ONE 20-inch poney planer, Frank & Co. build.
TWENTY-four-inch surfacer, Kennedy's make.
TWENTY-four-inch surfacer, hardwood bed.
TWENTY-two-inch surfacer, wood bed.
EIGHTEEN-inch surfacer, all iron and steel.
SIXTEEN-inch buzz planer, Galt make.
THREE-side moulder, all brass heads, Rogers' make.
THREE-side moulder No. 2, Cant, Gourlay make.
TWO one-side moulders, McKechnie & Bertram make.
ONE one-side moulder, wood frame.
NEW 3-side moulder, Cant Bros, make, Galt.
TENONING machine, double cope, Goldie & McCulloch.
ONE J. A. Fay tenoner, small size.
TWO Ross tenoners.
ONE double cope tenoner, McKechnie & Bertram.
BLIND slat tenoner, Cowan build.
POWER mortiser, Goldie & McCulloch make.
TWO power mortisers for heavy work.
LARGE stock of foot mortisers, new at $15 each.
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ONE 34-inch band saw, Hamilton Tool Co.
TWO new band saws, Galt make.
NEW 34-inch pedestal and 24-inch bracket band saws.
ONE upright Goldie & McCullock shaper.
NEW iron Top shaper, Cowan make.
SHAPER. heavy iron column, Cant Bros. make, Galt.
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ONE Blanchard spoke lathe, Fay make.
ONE broom handle lathe, wood frame.
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ONE iron bowl machine, American make.
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SEND for lists 13 and 14, and mention wants. Address H. W. PETRIE, Brantford, and No. 9 York street, Toronto, opposite Union Station.

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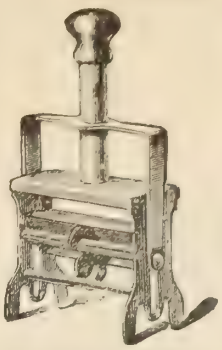

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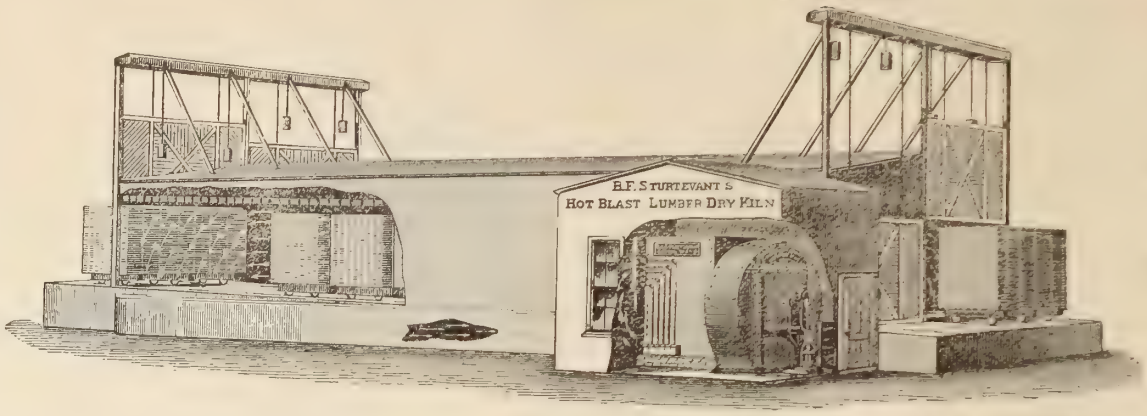

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10 KING ST. EAST
TORONTO
SEND FOR PRICES

Sealed Tenders addressed to the undersigned, and endorsed "Tender for Post Office, Goderich, Ont.," will be received at this office until Monday, 15th October, 1888, for the several works required in the erection of Post Office, &c., at Goderich, Ont.

Specifications and drawings can be seen at the Department of Public Works, Ottawa, and at the office of the Town Clerk, Goderich, Ont., on and after Wednesday, 5th September, and tenders will not be considered unless made on the form supplied and signed with actual signatures of tenderers.

An accepted bank cheque, payable to the order of the Minister of Public Works, equal to *five per cent of amount of tender* must accompany each tender. This cheque will be forfeited if the party decline the contract, or fail to complete the work contracted for, and will be returned in case of non-acceptance of tender.

The Department does not bind itself to accept the lowest or any tender.

By order,

A. GOBEIL,
Secretary.

Department of Public Works, Ottawa, 31st August, 1888.

FOR SALE.

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Address S. W.,
Office of CANADA LUMBERMAN,
Peterborough.

Sealed Tenders, addressed to the undersigned, and endorsed "Tender for Post Office at Brampton Ont.," will be received at this office until Tuesday, 9th October, for the several works required in the erection of Post Office at Brampton, Ont.

Specifications can be seen at the Department of Public Works, Ottawa, and at the offices of Messrs. Beynon and Manning, Brampton, on and after Tuesday, 18th September, and tenders will not be considered unless made on the form supplied and signed with actual signatures of tenderers.

An accepted bank cheque, payable to the order of the Minister of Public Works, equal to *five per cent. of the amount of tender*, must accompany each tender. This cheque will be forfeited if the party decline the contract, or fail to complete the work contracted for, and will be returned in case of non-acceptance of tender.

The Department does not bind itself to accept the lowest or any tender.

By order,

A. GOBEIL,
Secretary.

Department of Public Works, Ottawa, 15th September, 1888.

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PROVINCE OF QUEBEC.

Department of Crown Lands.

WOODS AND FORESTS.

Quebec, 9th August, 1888.

Notice is hereby given that, conformably to the clauses of the Act 36 Victoria, chapter 9, the following timber limits will be offered for sale at public auction in the sales' room of the Department of Crown Lands, in this City, on Wednesday, the 17th October next, at 10.30 A.M., subject to the conditions mentioned below, namely:

Upper Ottawa Agency.

Limit No. 7,	1st range Block A	16¾	Sq. miles.
" 8,	"	16	"
" 9,	"	29½	"
" 11,	"	40	"
" 12,	"	37¾	"
" 10,	2nd range	50	"
" 11,	"	50	"
" 12,	"	50	"
" 2,	3rd range	50	"
" 3,	"	50	"
" 4,	"	50	"
" 5,	"	50	"
" 6,	"	50	"
" 7,	"	50	"
" 8,	"	50	"
" 9,	"	50	"
" 10,	3rd range Block A	50	"
" 11,	"	50	"
" 12,	"	50	"
" 502,	River Coulonge	3	"
" Rear,	River Gatineau	58	"
"	Calumet Island	3⅔	"
Total.....		904⅔	"

Lower Ottawa Agency.

Limit L River Rouge	25	Sq. miles.
Limit Township Beresford	6⅓	"
Limit Township Chertsey	9½	"
Total.....	40 5/6	

Chaudiere Agency.

Limit Township Langevin No. 2	38	Sq. miles.
" " " No. 3	29	"
Total.....	67	

Montmagny Agency.

Limit Township of Bellechasse 9⅔ Sq. miles.

Saint Maurice Agency.

Limit Batiscan No. 7 East 24 Sq. miles.

Rimouski Agency.

Limit Rear River Humqui	8	Sq. miles.
" Nemtaye No 2	48½	"
" Rear Awautjish	38	"
" River Causapscul No 1 north	6	"
" Township Saint Denis	15	"
Total... ..	105½	

Lake St. John Agency.

Limit River Petite Peribonka No. 120.	25	Sq. miles.
" River Petite Peribonka No. 121.	50	"
" River Petite Peribonka No. 122.	50	"
" River Petite Peribonka No. 123.	50	"
" River Petite Peribonka No. 124.	50	"
" River Peribonka No. 125	40	"
" " No. 126	42	"
" " No. 127	50	"
" River Mistassini No. 128	2	"
" River aux Iroquois No. 129	15	"
" River Ha! Ha! No. 130	10	"
" River Shipshaw No. 61	9	"
" Ouiatchouan East No. 131	12	"
" " No. 132	13	"
" " Ouest No. 133	13	"
" " No. 134	8⅓	"
" Rear " No. 135	16	"
" " No. 136	20	"
" Lac des Commissaires South East No. 137	30	"
" Rear Lac des Commissaires South East No. 138	20	"
" Lac des Commissaires South West No. 139	24	"
" Rear Commissaires South West No. 140	20	"
" Metabetchouan No. 141	37	"
" Metabetchouan No. 142	25	"
" Lake Kiskisuik No. 143	18	"
" Metabetchouan No. 144	40	"
" Lake Kamamintigougne No. 145	36	Sq. miles.
" N. E. branch of river Ste. Marguerite No. 146	79	"
" N. E. of river Ste. Marguerite No. 147.	89	"
" Township Ducreux No. 148	53½	"
" Township Dequen No. 149	12½	"
" Township Dequen No. 150	23	"
" Township Dequen No. 151	23	"
" River Pikauba No. 152	18½	"
" Real River Peribonka East No. 153	34	"
" Township Boileau No. 154	32½	"
" Township Boileau No. 155	13	"
" Township L'Allemant No. 156	16	"
" Township Ferland No. 157	4½	"
" Township Ferland No. 158	13	"
Total.....	1,146⅓	

Granville Agency.

Limit No. 1, 1st range East Lake Temiscouata	36	Sq. miles.
" Township of Parke No. 1	24	"
" Township Raudot	6⅔	"
" Township Demers A	6⅔	"
" Township Demers B	18	"
" Township Armand	19	"
" No. 45 River St. Francis	14	"
" No. 46 River St. Francis	16½	"
" No. 47 Black River	38	"
Total.....	178 5/6	

Bonaventure Agency.

Limit Tom Ferguson's Brook	16	Sq. miles.
" River Escuminac	9	"
" Glen Brook	2	"
" Marchall Brook	3¼	"
" River Andre	4⅓	"
" Township of Carleton	1	"
" Township of Hope South	5	"
" River Nouvelle No. 2	50	"
" " No. 3	24	"
" " West Branch	30	"
" Rear River Nouvelle West	10	"
" " " East	16	"
" River Maun East	25	"
" " West	25	"
Total.....	220 7/12	

Saguenay Agency.

Limit Rear Cailliere	18	Sq. miles.
" Township Sagard	31⅓	"
" North East of the N.E. Branch of River St. Marguerite	15	"
" Tadousac East	5	"
" River Manitou No. 1 East	30	"
" River Manitou No. 2 East	30	"
" River Manitou No. 3 East	30	"
" River Manitou No. 1 West	30	"
" River Manitou No. 2 West	30	"
" River Manitou No. 3 West	30	"
" Township Saguenay East	32	"
" River Grande Trinite No. 1 East	50	"
" River Grande Trinite No. 2 East	50	"
" River Grande Trinite No. 1 West	50	"
" River Grande Trinite No. 2 West	50	"
" Petite Trinite No. 1 East	14	"
" Petite Trinite No. 2 East	14	"
" Petite Trinite No. 1 West	14	"
" Petite Trinite No. 2 West	14	"
" River Calumet No. 1 East	25	"
" River Calumet No. 1 West	25	"
" Township Lafleche	18	"
" No. 86 Petite Bergeronne West	7	"
" No. 1 East Petite Bergeronne	4	"
Total.....	614⅓	

Gaspe Agency.

" Gaspe Bay South	11	Sq. miles.
" Gaspe Bay North	12¼	"
" Township Blanchet	9	"
" River York North	3	"
" River York South	6	"
" Sydenham South	22	"
" Township Rameau	21⅔	"
" Township Malbaie South	4	"
" River St. John n° 1 South	12	"
" River St. John n° 2 South	10	"
" River St. John North	14	"
" River Dartmouth South	24	"
" River Dartmouth North	19½	"
" Rear River Dartmouth North	32	"
Total.....	200 5/12	

CONDITIONS OF SALE.

The above timber limits at their estimated area, more or less, to be offered at an upset price to be made known on the day of sale.

The timber limits to be adjudged to the party bidding the highest amount of bonus.

The bonus and first year's ground rent per square mile, to be paid in each case immediately after the sale.

These timber locations to be subject to the provisions of all timber regulations now in force and which may be enacted hereafter.

Plans of these timber locations will be open for inspection, in the Department of Crown Lands, in this city, and at the offices of the local Agents, up to the day of sale.

E. F. TACHE,
Assistant commissioner
of Crown Lands.

N.B.—According to law, no newspaper other than those named by Order in Council, are authorized to publish this notice.

WANTED AND FOR SALE.

Announcements in this department will be inserted at the uniform rate of ten cents per line, each insertion, payable in advance. For three or more consecutive insertions of the same advertisement a discount of 25 per cent. will be allowed. Eight words should be counted as one line.

TIMBER LIMITS FOR SALE,

TIMBER LIMITS FOR SALE IN ONTARIO, Quebec and Manitoba. W. J. FENTON & Co., 50 Adelaide Street, East, Toronto.

PINE TIMBER LIMITS FOR SALE.

Two choice Timber Limits in Northwest Territory, Canada, 100 square miles each; great bargains, Also, limits in Georgian Bay, Algoma and Muskoka districts for sale. JOHN SCULLY, Toronto, dealer in Pine Lands and Lumbermen's plant and supplies, Light iron and steel rails in stock.

FOR SALE.

At a very reasonable sum one half interest in the Strathclair Saw and Grist Mills, situated on the Little Saskatchewan River, six miles from Manitoba & Northwestern Railroad in the district of Riding Mountain Timber Limits, comprising 22 square miles, river running through the center only 14 miles from the mills. All owned by Whimster & Kayll, Mr. Kayll wishing to retire. A first class opening, good references can be obtained.

Apply to H. E. KAYLL,
Strathclair, P. O.,
Manitoba.

Deck Lumber Wanted—Seasoned.

30 M 4 x 3½ inch NORWAY PINE.
2½ M 4 x 3½ inch WHITE PINE.
35 M 4 x 2½ inch WHITE PINE,
in 30 to 40 ft. lengths, free from sap, shakes and black knots.

POLSON IRON WORKS CO.,
TORONTO, ONT.

J. K. POST & Co.,
LUMBER MERCHANTS
And Shipping Agents.
OSWEGO, N. Y.

TIMBER BERTHS

Estimated and plans carefully prepared. Experienced men, References given.

Address,

J. B. BENSON,
164 ROBERT STREET, TORONTO.

B.4. ANY

AXES made of Norway Iron and best English Steel.

$14.00 per dozen.

B.4. ANY

AXES made of all Steel.

$15.00 per dozen.

B.4. ANY

AXES made specially to stand Hemlock, *Single Bitt.*

$16.00 per dozen.

The best axes made in the world. Warranted good or new axes given to replace. Sample axes sent on application.

GEO. STETHEM,
ONLY SOLE AGENT FOR CANADA.
Hardware Merchant, PETERBORO'.

Eckardt, Kyle & Co.

IMPORTERS AND WHOLESALE GROCERS.

We beg to call the attention of Buyers to our complete stock of

TEAS, SUGARS, SYRUPS
TOBACCOS, ETC.

INSPECTION INVITED.

No. 3, FRONT STREET EAST,
TORONTO.

ESTABLISHED 1871

J. W. LANG & CO.
Wholesale Grocers & Importers,
33. Front St. East, Toronto.

We shall be pleased to have you write to us for samples and prices of

TEAS, TOBACCOS, SUGARS, SYRUPS, RICE, Etc.

We can and will cut prices fine to large buyers.

We have a GOOD, SOUND, FINE FLAVOURED TEA at 12½ cents.

Write for sample chest. Address,

J. W. LANG & CO.,
TORONTO.

BARGAINS
— IN —
MACHINERY

ONE Iron Key Seating Machine.
ONE Wood Shaper (two spindles).
ONE Bolt Cutter.
ONE Iron Turning Lathe, 14-inch Swing by six feet.
ONE Reliance Saw Rig to cut 25-ft.
ONE Heavy Circular Saw Rig latest improvements, with "Prescott's Direct Acting Steam Feed" to cut 30-ft.
ONE Heavy Circular Saw Rig to cut 20-ft. with Rope Feed.
ONE Gang Lath Mill.
ONE Bolter.
ONE Shingle Jointer.
ONE 60-inch Solid Tooth Circular Saw, Iron Pulleys up to 8-ft. diameter.
ONE 56-in. second hand Leffel Turbine.
ONE 52-in. second hand Leffel Turbine.
TWO 48-in. New Leffel Turbines.
TWO 30½-in. second hand Leffel Turbines.
TWO 26½-in. second hand Leffel Turbines.
ONE 23-in. second hand Leffel Turbine.
ONE 15¼-in. second hand Leffel Turbine.
ONE 10-in. second hand Leffel Turbine.
ONE 30½-in. second hand Vulcan Turbine.
ONE 17½-in. second hand Vulcan Turbine.

For particulars address,

PAXTON, TATE & CO.,
PORT PERRY, ONT.

Our readers will confer a favor by mentioning this Journal when writing Advertisers.

REPRESENTATIVE TORONTO LUMBER FIRMS

TENNANT & CO.

Wholesale Dealers in

LUMBER, LATH & SHINGLES

Dressing and Better Pine.

Also Hemlock in all sizes a Specialty.

OFFICE:
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THOS. H. WILLMOTT. A. K. McINTOSH.

WILLMOTT & McINTOSH,

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44 and 46 Front Street East,

TORONTO, - - ONTARIO.

Lumber Shipped to all Parts by Rail or Vessel.

Agents for the Celebrated LUFKIN BOARD AND LOG RULE.

Prompt Delivery in all Cases. CORRESPONDENCE SOLICITED.

DONOGH & OLIVER,

Wholesale Dealers in

LUMBER

OFFICE:
Nos. 16 and 17 Imperial Bank Buildings,
WELLINGTON STREET EAST.
TORONTO, ONT.

Christie, Kerr & Co.,

Manufacturers and Wholesale Dealers in

PINE & HARDWOOD LUMBER

Office: 9 Victoria Street,

TORONTO.

Lumber Shipped to all parts.

McCRANEY, McCOOL & WILSON,

Manufacturers and Wholesale dealers in all kinds of

PINE and HARDWOOD LUMBER

LATH AND SHINGLES.

Ship Plank, Decking and Long Bill Stuff, a Specialty.

Mills at Burlington, Bronte and Huntsville.

Head Office: 16 UNION BLOCK, corner Toronto and Adelaide Sts., Toronto
Branch Office: 208 Wellington Street, Ottawa.

TORONTO and OTTAWA.

SCOTT, SCOTT & CO.

Manufacturers of and Wholesale Dealers in

LATH — **LUMBER** — SHINGLES

MILLS AT MEDONTE, SIMCOE CO.

Office: Union Loan Buildings, 28 & 30 Toronto St.

TORONTO.

The Gutta Percha and Rubber Manufacturing Company of Toronto.

Offices: 43 YONGE STREET, TORONTO. *Factories: PARKDALE, ONT.*

Sole Manufacturers of "Monarch," TRADE MARK. *"Red Strip," and "Lion" Brands of*

RUBBER BELTING

Particular attention given to special Belts for Lumber Mills.

Our celebrated "Maltese Cross" Rubber; "Baker Fabric" and Ajax Cotton; "Giant" and Light Linen, and Fire Hose constantly in stock.

LUMBERMEN'S HEAVY RUBBER CLOTHING, OUR OWN MANUFACTURE.

Address all Communications to THE GUTTA PERCHA & RUBBER MFG. CO. OF TORONTO, 43 Yonge St.

TO MILL OWNERS, MANUFACTURERS

AND ALL WHO ARE USING

LEATHER * BELTING

IF YOU WANT BELTING

Which will Run Straight on the Pulleys,
Which is Thoroughly Well Stretched,
Which will not Tear at the Lace Holes,
Which will give Complete Satisfaction,

— SEND TO —

F. E. DIXON & CO.

MANUFACTURERS OF

PATENT LAP-JOINT STAR RIVET

*LEATHER*BELTING*

70 King Street East, Toronto.

Sole Agents in Canada for the

CELEBRATED PHŒNIX OIL

The Only Perfect Belt Dressing.

All our Belting is sold at the Canadian price list. Please compare before purchasing. Send for Discounts and our Pamphlet on Belting.

NOTICE TO SHIPPERS TO SOUTH AMERICA.

D. M. RENNIE.

FORMERLY OF TORONTO, NOW IN BUENOS AYRES, SOUTH AMERICA.

Is prepared to accept Agencies for the Argentine Republic and Uruguay from the Manufacturers and Shippers of Canada. Particulars as to Customs Tariff, Shipment of Samples, etc., may be obtained at the office of NICOL KINGSMILL, ESQ., Toronto, Consul for the Argentine Republic.

REFERENCES BY PERMISSION.—Simeon Jones, Dominion Commissioner to the Argentine Republic, St. John, N.B.; Nicol Kingsmill Consul to the Argentine Republic, Toronto; W. B. Hamilton (of W. B. Hamilton, Son & Co.); Hon. Frank Smith (of Frank Smith & Co.); W. R. Brock & Co.; Wyld, Grasett & Darling; Smith & Keighley; Eby, Blain & Co., Toronto; Hon. James Turner (of James Turner & Co.), Lieut.-Col. J. M. Gibson, M.P.P., Hamilton; Wm. Darling & Co., Montreal.

NAPANEE CEMENT COMPANY

(LIMITED.)

— MANUFACTURERS OF —

Hydraulic Cement

PARTICULARLY adapted for Dams, Smoke Stacks, Foundations, Culverts, Cisterns, Cellars, etc.

ENDORSED BY LEADING RAILWAYS AND CONTRACTORS

ROACH * LIME,

For Building, Plastering, Gas Purifying, Paper Manufacturing, &c.

Galt*Machine*Knife*Works.

MACHINE KNIVES

OF EVERY DESCRIPTION FOR

Planing, Moulding & Stave Cutting.

SEND FOR PRICE LIST.

PETER HAY, - - - GALT, ONT.

"THE LEADER"

CROSS-CUT SAW,

Manufactured only by

R. H. SMITH Co. LTD.,

ST. CATHARINES, ONTARIO.

A Gauge is furnished with each Saw to regulate the Clearing Teeth.

Full directions for Setting and Filing are etched on every Saw.

The above Saws are made from the best Double Refined Silver Steel, warranted four gauges thinner on back than front, and the only Saws on the market that are a perfect taper from the front of the teeth to the back.

They are tempered by the Simonds Patent Process, insuring a perfect uniform temper throughout the plate, and stand without a rival as the best, fastest and easiest-cutting Saw known. *For Sale by the Trade generally.*

ONTARIO OIL CO.,

7 Church Street, Toronto, Ont.

* * A. * GOODBY, * Manager. * *

[SUCCESSORS TO BOWDEN & CO.,]

SOLE CONSIGNEES OF SOUTHWICK'S CELEBRATED LUBRICATING OILS & GREASE.

We beg to advise our customers and the trade generally that having succeeded BOWDEN & CO. in this business, we shall by close attention thereto, endeavour to merit a still larger patronage than has been accorded to them in the past.

Our goods, the customers being the judges, are not equalled in the market and will continue to maintain the high position they now occupy, our aim being to still conduct the business on strictly legitimate principles.

With thanks for past favors and the request for their continuance, we are,

Yours very truly,

ONTARIO OIL CO.

ARTHUR GOODBY, Manager.

DOMINION SAW WORKS!

JAS. ROBERTSON & CO.

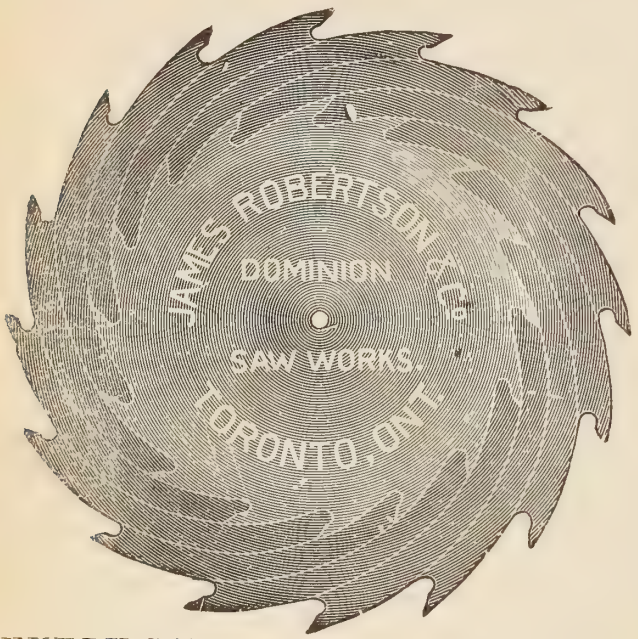
253 to 267 King Street West,

Toronto, - - Ontario.

JAMES ROBERTSON

Dalhousie and William Streets,

Montreal, - - Que.



EVERY SAW FULLY WARRANTED.
Prices on Application.

MANUFACTURERS OF SAWS

Circular, Shingle, Gang, Cross Cut, Concave, Mulay, Drag, Grooving.

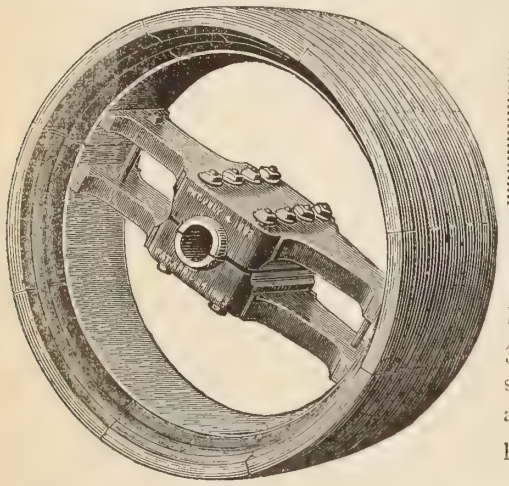
Thurber's Royal

ANTI-FRICTION BABBIT METAL.

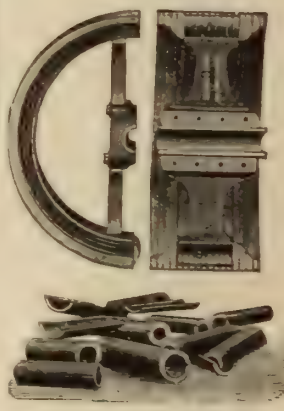
Importers and Dealers in

Band Saws, Emery Wheels Saw Sets,
Saw Swages, Rubber Belting, Iron Pipe,
Saw Gummers, Leather Belting, Files, &c.

DODGE PATENT WOOD SEPARABLE OR SPLIT PULLEYS.



BEST BELT SURFACE, LIGHTEST, STRONGEST, BEST BALANCED AND MOST CONVENIENT PULLEY IN THE WORLD.



With our Patent Bushing System

Every pulley will fit 22 different sizes of shafting, and guaranteed to give from 30 to 60 per cent. more power from same belt and like tension than any iron or steel pulley. Every pulley a split pulley, 70 per cent. lighter than cast iron and 50 per cent. lighter than wrought iron or steel. Strong enough for any power required. Made in any size from nine inches to sixteen feet diameter.

As a material for pulleys wood is better than iron from the fact that it holds a belt much better. Most good mechanics are aware of this fact, but it may not be generally known how great is the difference, and for the benefit of our readers we give the result of two tests made and published by two of the most eminent mechanical authorities :—

Portion of Circumference embraced by Belt.	Rel. value of leather belt	
	On Wooden Pulleys.	On Iron Pulleys.
.20	1.80	1.42
.30	2.43	1.69
.40	3.26	2.02
.50	4.38	2.41
.60	5.88	2.87
.70	7.90	3.43

Morin.—Appleton's Encylopedia of Mechanical Arts.

Portion of Circumference embraced by Belt.	Rel. value of leather belt	
	On Wooden Pulleys.	On Iron Pulleys.
.20	1.90	1.40
.30	2.40	1.70
.40	3.30	2.00
.50	4.40	2.40
.60	5.90	2.90
.70	7.90	3.40

Haswell.—Engineers' and Mechanics' Pocket Book.

A Dodge Patent Wood Pulley is better than iron from the fact that it can be made very much lighter and thus save weight on the line shaft and bearings, thereby saving in expense from a saving in friction.

The advantages of the separable pulley are very apparent. By its use the necessity of taking down shafting already up for the purpose of putting on additional pulleys when needed, or to be changed, is avoided, thus saving time, trouble and expense, while their first cost is much less than any other pulley made not having these advantages.

The Compression Fastening whether used with keys in iron center or compression alone, keeps the pulley always in balance as the compression on the shaft and key is always towards the center.

The most perfect balanced iron pulley fastened with set screws or key, is invariably out of balance by being thrown from the centre, this fact is obvious to all mechanics.

The advantages of our mode of fastening over any other are : It is the only absolutely true fastening for a pulley. A pulley once properly balanced cannot be thrown out of balance in securing with this fastening. A pulley fastened with key or set screw in the ordinary way, cannot be screwed without lifting the pulley from the shaft at that point where the key or set screw is placed, thus throwing the pulley out of balance.

Manufacturers should carefully avoid any pulley with a set screw fastening for shaft ; also a key unless the pulley is compressed on it. The Dodge Patent Bushing system is a great convenience to manufacturers and also to agents who carry pulleys in stock, as with the aid of the patent bushings every pulley will fit 22 different sizes of shafts.

Haswell the acknowledged authority and most quoted by American mechanics, summarizes thus : The ratio is friction to pressure of leather belts, when worn over wooden pulleys is 47, over turned cast iron pulleys, 24, thus showing the average advantage of a wood pulley over iron to be 50 per cent.

We also manufacture GROOVED HARD WOOD PULLEYS FOR TRANSMITTING POWER BY MANILLA ROPES (tallow laid) by the Dodge Patent System of applying the ropes and taking care of the slack.

Illustrated catalogues of belt pulleys and the rope transmission system will be furnished on application to

The Dodge Wood Split Pulley Co., 89 Adelaide St. W., Toronto.

THE CANADA LUMBERMAN.

VOLUME VIII. NUMBER 11. PETERBOROUGH, ONT., NOVEMBER, 1888. TERMS, $1.00 PER YEAR. SINGLE COPIES, 10 CENTS.

THE CANADA LUMBERMAN

PUBLISHED MONTHLY BY

ARTHUR G. MORTIMER,

OFFICE: SIMCOE STREET, PETERBOROUGH, ONTARIO.

TERMS OF SUBSCRIPTION:

One Copy one Year, in Advance, - - - - - $1.00
One Copy six months, in Advance, - - - - - 50

Advertising Rates Furnished on Application.

THE CANADA LUMBERMAN is published in the interest of the lumber trade and of allied industries throughout the Dominion being the only representative in Canada of this foremost branch of the commerce of this country. It aims at giving full and timely information on all subjects touching these interests, discussing these topics editorially and inviting free discussion of them by others.

Especial pains are taken to secure the latest and most trustworthy market quotations from various points throughout the world so as to afford to the trade in Canada information upon which it can rely in its operations.

Special correspondents in localities of importance present accurate report not only of prices and the condition of the market but, also of other matters specially interesting to our readers. But correspondence is not only welcome but is invited from all who have any information to communicate or subjects to discuss relating to the trade or in any way effecting it. Even when we may not be able to agree with the writers we will give them a fair opportunity for free discussion as the best means of eliciting the truth. Any items of interest are particularly requested for even if not of great importance individually they contribute to a fund of information from which general results are obtained.

Advertisers will receive careful attention and liberal treatment. We need not point out that for many the CANADA LUMBERMAN with its special class of readers is not only an exceptionally good medium for securing publicity but is indispensable for those who would bring themselves before the notice of that class. Special attention is directed to "WANTED" and "FOR SALE" advertisements which will be inserted in a conspicious position at the uniform price of ten cents per line for each insertion. Announcements of this character will be subject to a discount of 25 per cent. if ordered for three successive issues or longer.

Subscribers will find the small amount they pay for the CANADA LUMBERMAN quite insignificant as compared with its value to them. There is not an individual in the trade or specially interested in it, who should not be on our list thus obtaining the present benefit and aiding and encouraging us to render it even more complete.

THE ocean rates to Europe have been considerably raised this season. Not only has this been the case, but vessels have been scarce at Quebec. Shipments being thus restricted, and there being little convenience for storing either at Quebec or Montreal, the yards at the Canadian capital have become crowded, they being also of limited capacity. This has necessarily caused considerable inconvenience to the firms that have made a feature of this branch of the trade.

ACCORDING to a London paper there seems a probability of Russia dealing largely with Canada in the lumber trade. Certain merchants of Batoum have, it is said, asked one of the largest firms in Ottawa for quotations for the shipment to the Black Sea of several million feet of pine annually. It certainly seems surprising that such a demand should be made on Canada from a country like Russia which has possessed such forest wealth, but if the report be true Canadian lumbermen will receive the news with much favor.

A DEMOCRATIC government official, an American paper says, is reported to have gone to Ontario to investigate the effect which the passage of the Mills bill would have upon lumber and timber prices in Canada, and to have come out strongly against the bill. He lately labored in the house to explain the situation. He was convinced that the expected passage of the bill had boomed timber limits immensely, and quoted a newspaper statement that R. Hurdman & Co., Ottawa, had given an option to the E. B. Eddy Manufacturing Company of their Magnissippi limits at $325,000, which would be a profit of $75,000 for holding them three years. A refusal was given for six weeks to allow for the passage of the bill. If it did not pass, then the limits, inferentially, would not be desired. Other opinion had been offered at largely advanced prices, in anticipation of a great benefit, leading to the conclusion that the free lumber clause would not cheapen lumber to the consumer, as the advocates of the measure supposed.

A CASE affecting large interests and involving most of the law as to building dams and running logs on rivers, is now pending in the provincial courts of New Brunswick. Log owners claim that the annoying log jams that occur on the St. Croix river at Milltown are occasioned by the defective passageway in the cotton mill dam. The cotton mill owners on the other hand claim that the lumbermen should keep the log roll clear, and they have obtained a temporary injunction against a lumber firm, restraining them from allowing logs to remain on their lands. The decision of the court will begin upon the motion to dissolve the injunction, and will be of interest to lumbermen generally.

WE learn that the McArthur Bros. Co., of Toronto and Quebec in Canada, and East Saginaw, Mich., will handle 3,000,000 cubic feet of square timber for the European markets this season. The work of handling square timber is confined to comparatively few operators whose work is spread over the entire country. Timber of this kind is by no means plentiful and is usually found in small groups. As a result operators are placed at a great inconvenience and have to extend their operations in every direction. While the timber business of Canada is mainly carried on in the province of Quebec there is nevertheless a considerable business springing up in Ontario. Messrs. Flatt & Bradley, of Hamilton, and Mr. J.M. Irwin, of Peterborough, are among those whose interests are closely identified with the square timber business.

THE perennial boundary dispute between the Government of the Dominion and the provincial government of Ontario crops up this time in relation to what is known as "the White Fish Lake Indian Reserve," in the District of Algoma, the advocates of the provincial view claiming that the Dominion Government has located an Indian Reserve around choice timber tracts and then sold the timber at private sale to its favorites. The provincial Government has brought an action against the Dominion licensees, and the case is now pending in the Chancery Court at Toronto. An interesting feature of this case has been the examination of a band of Indians as to the terms of their original treaty with the government, and in giving their evidence they are said to have evinced remarkable intelligence.

IF the Ottawa district is to be taken as a criterion there is every prospect of a large cut the coming winter. In the space of 30 days it is estimated that 2,000 men were sent into the woods from the capital alone. From various quarters there come reports of extended operations. Though the results may be satisfactory it would be well to observe a conservative policy. Every year the limits increase in value, as many recent transfers have showed in the most practical manner, namely, the handing over of hard cash or its equivalent. This rise in values is steady, not at all of the nature of a "boom," and is almost certain to continue. Under such circumstances it would seem more judicious not to force property, always enhancing, into the market with too great eagerness either in the shape of standing timber or the manufactured article. Those who are able and willing to hold back somewhat will probably find that they have been the gainers by not going ahead too eagerly. Prices are likely to be satisfactory enough to repay operators, but not to warrant an exaggerated scale in the face of a continually increasing value.

AMERICANS seem to take it as a foregone conclusion that should the tariff on Canadian lumber be removed through the passage of the Mills bill, that the Canadian export duty of a like amount would be immediately taken off. Would it not be just as well for the advocates of free lumber to learn a little more concerning the views of the Canadian government on this question before making up their minds fully on the subject? We do not apprehend any serious opposition to such a step being taken, but as it is always wise to look before one leaps. A canvass of Canadian sentiment, would not be out of place. There is always two sides to a question, and in this case we find those who strongly endorse a free exchange of the products of the forest, from a pecuniary point of view, of course; while there are also those—and the number is large—who look not only to the present put also to the future and realize the oft-repeated fact that free lumber into the United States means nothing less than the utter annihilation of our forest wealth for all time to come. The question is a serious one and demands thoughtful consideration.

INDICATIONS point to a somewhat diminished cut the coming winter, especially throughout the Western States. Every effort is being made by the larger operators to push their work forward as expeditiously as possible so as to avoid the inconveniences caused by heavy snow falls and other drawbacks. That the stock of standing timber is fast diminishing is patent to every one who takes any interest in the subject, and it is therefore not surprising that the output of lumber throughout many States in the Union will diminish from year to year. In the face of such an outlook operators in the Northern States are looking to the Southern States and Canada as the only available source of supply. During the past year or two a large amount of American capital has found investment in Canadian stumpage and new mills are being pushed forward rapidly. While we have as yet abundance of timber left for our own uses, nothing is more evident but that in a few years if the present extensive operations be continued, our forests will be remembered only as things of the past. But how to avert this inevitable result is a question that but few if any can answer.

ONE who is considered as an authority on the subject makes the statement that the Southern States contains an area of 239,837,611 acres of land, of which 50.3 per cent. is covered with valuable timber. Of this there is of pine alone 250,000,000,000 feet of merchantable timber. Every lumberman knows that a million feet makes a big pile. Just imagine 250,000 piles of lumber with a million feet in each pile! Well this is the amount of pine timber, we are told, yet standing in the South. And this is only one item of the timber resources of that much-wooded country. The amount of hard woods will greatly exceed in quantity and value that of pine. Eight years ago there were 6,481 saw and planing mills and woodworking establishments in the South, employing 42,873 hands, and turning out products to the value of $48,319,963. According to the last count, there are now 11,242 establishments, employing 89,040 hands, and turning out products to the value of $91,980,960. One thing is certain and that is that the Southern States are booming, and it is not surprising that while many Western lumbermen are looking towards Canada for their future supplies, a much larger percentage have turned their faces Southward with good chances for increased fortune.

THE fight between the Toronto wholesale dealers and the Grand Trunk railway, relative to the rules regulating the handling of lumber freight, is waxing warmer. A month or two ago THE LUMBERMAN took occasion to express itself on freight rates and the injustice which is being done the trade in the way of over-charges. What the lumbermen want is either a rate based on so much per thousand feet, or an honest and impartial system of weighing. Their contention that they have no right to pay for more than they receive is worthy the consideration of even such a monopoly as the G.T.R. The practice of charging for 30,000 lbs. on every car whether it contains that amount or not is an injustice which should not be tolerated. The suggestion previously made in these columns that weigh scales be erected by the railway companies at all important shipping points has apparently been well received. If this was done the increased weight—caused by snow and rain—always added to a car of lumber in transit would not be charged up as lumber but would have to be met by the railway companies themselves. At the present time when cars are at a premium and locomotive power scarce, the movement of lumber is very slow, and as a result the difference in weight at the point of destination compared with the point of shipment means an important item, if such additional weight has to be paid by the consignee. The demands made by the lumbermen are only just, and considering the importance to the railways of the great industry they

represent, a refusal to meet their wishes in this particular, can only be taken as an evidence of unblushing selfishness, and a lordly intimation that the Grand Trunk Railway Co. rule the roost. and go elsewhere if you can.

COMMENCING with the present number we begin the publication of a series of practical articles from the pen of Mr. Anson A. Gard, a gentleman well known as a member of one of New York's largest lumber firms. Mr. Gard has passed through all the different stages of a lumberman, from wielding the axe in the forests of Ohio, up through the sawing of the lumber to its disposal, and therefore can claim a practical rather than a theoretical knowledge. The information contained in the article in the present issue of THE LUMBERMAN on "Walnut Logs and How to Prepare Them," will well repay the time taken up in its perusal, while the tables will serve as a permanent help to all loggers. The second article, which will appear in our next issue will be on the subject of Hardwood lumber and its manufacture.

MR. FLEMING has finished his examination of the Ottawa river in connection with the sawdust difficulty, but it is understood that the report will not be made public for some time to come. The investigation, it is said, will go to show that the sawdust is not injuring the river to the extent that has been stated. The intention is to lay the matter before the Government at its next session with a view to counteracting the effect of statements made before the Senate committee last session. The lumbermen say that should the Government undertake to deprive them of their exemptions under which they carry on their business at the Chaudiere, all the inducements they now possess for remaining in Ottawa will be removed. The lumbermen are evidently serious in their threat of withdrawing from Ottawa if the government should restrain them from throwing the sawdust into the river. The proposal to the government to compel mill owners to erect burners and burn all their sawdust has raised not only the mill owners but the whole city in arms against the suggestion, as they find that insurance rates will be raised from 50 to 100 per cent, according to locality, in all parts of the city, if the erection of burners is insisted upon.

MR. EDWARD JACK, a writer on subjects relating to the timber and lumber business, in a letter to an American exchange, charges that for years the Quebec government has been constantly and systematically defrauded in the matter of stumpage dues by the under-estimation of the quantity of timber cut on the various leases held by individuals under the government. The government of the province, this writer says, is about granting the sum of $24,000 this year, in order to give effect to the modifications which they have made in the tariff of ground rents and timber dues, and which are going to produce a considerable increase in the revenues from woods and forests. In the course of a speech delivered in the Quebec legislature last session the crown lands commissioner stated that the investigations ordered by the government showed that the old system of accepting the declarations of the lumber merchants and their employees had led to the perpetration of fraud to the prejudice of the provincial revenue; that enormous quantities of timber cut on crown lands had paid no dues to the government, and that in certain sections of the province the pillaging of the crown forests has been systematically carried on without hindrance in any way from the officers of the department employed for the purpose. The new regulations have been framed to prevent these frauds in future.

THE LUMBERMAN is again called upon to report another heavy failure among the Toronto wholesale lumber trade. The firm who in this case have been compelled to succomb to the pressure of hard times is that of Manhard & Co. who are well known to the trade of both Canada and the United States, although they have only been located in Toronto but a few months, having moved to that city from the town of Brockville. At a recent meeting of the creditors of the insolvent firm a statement of their affairs was submitted, showing their liabilities to be $53,000 and the assets purely nominal. A few unsecured creditors, whose accounts were incurred since the retirement of Mr. Doodridge, of Brockville, from Manhard & Co., and who have not Mr. Doodridge's name on their paper, made a request that he (Doodridge) should assign and join hands with the insolvent firm. This it is understood Mr. Doodridge refused to do. It was stated at the meeting that the nominal assets consisted of furniture and book debts, all of which amounted to less than $10,000. It was further reported that $26,000 of the liabilities were preferred and secured creditors. Everything went to show that the unsecured creditors' prospects were gloomy in the extreme. The meeting adjourned without arriving at any definite decision.

THERE are five saw mills between the summit of the Rocky Mountains and Revelstoke, B. C., a distance of 150 miles. The mill men complain that they are unable to run their mills to advantage, owing to the excessive freight rates charged on the C. P. R. The rate is $135 per car to points east of Regina, which is about the same rate as is given the coast mills, though the haul in the latter case is much longer. West of Regina the country is not largely settled, and there is not much demand for lumber. In time as the western part of the territories gets settled up, the mountain mill men will have a good market for their lumber closer to their mill, but in the meantime the timber is undergoing great destruction every year from forest fires. The railway company has lately made a reduction in rates from the mountain mills to Calgary, but this will not greatly improve the position of the mill men.

TWO interesting test cases will be argued before Judge Burbridge of the Exchequer court shortly concerning the importation of lumber into Canada. For some years past Messrs. McGome & Co., Toronto, and Messrs. Hazelton & Co., who have had contracts for constructing cars for the Canadian Pacific and Grand Trunk railways, have been importing into Canada quantities of manufactured oak lumber to be used in the construction of railway cars. This material it appears, has been invoiced as rough lumber and has been allowed to enter the Canadian Customs free of duty. The Customs department now contend that the lumber in question should have been entered as manufactured lumber on which a duty of 20 per cent. is chargeable, and they have accordingly entered actions against both of the above firms for an amount covering the duty chargeable on all the lumber entered by the firms in the past. The importations are spread over a period of several years, and the amounts involved are upwards of half a million dollars. The defendants claim that they can put in a strong defence. This case will be watched with the greatest interest, especially by importers.

FROM almost every lumber district in Canada we learn of unusually large numbers of men being sent to the woods. Such information furnishes a foresight into the probable cut for next year, which is evidently intended to be very large. It is evident that with each succeeding year the lumber cut is being largely augmented. Whether or not this wholesale slaughter of our forests is brought about by a clamorous spirit for hasty wealth or a fear of another increase in stumpage is a question of which those most directly interested are better capable of answering. This apprehension on the part of the lumbermen is certainly well founded, as when the last increase was put into force an effort was made to induce the Provincial Government to engage that a further increase would not be made for a specified number of years. This request, though a very reasonable one, was refused, and as a result lumbermen holding limits are inclined to make the most of their opportunities by cutting the timber as rapidly as possible. Although a lumber scribe but seldom drops into poetry a four-line stanza may briefly depict the situation.

O, woodman, cut that tree.
Leave not a single bough,
It will put five dollars in my inside pocket
Then why not cut it now.

HOW to keep a lumber camp free from noxious insects, says the *Timberman*, is a matter of vital importance to the welfare of the men and their value in the hard labor required from them. If the men's rest is broken in upon, their work is rendered just so much the poorer. It is therefore a question of dollars and cents to the owner of a camp, that is to be kept free from fleas, bugs and lice. When these pests take possession of a bunk camp, it is almost impossible to get rid of them, and a word or two relative to the building of the sleeping arrangements for the men will not be out of place. It will pay to provide cedar boards with which to build the bunks. No vermin can stand cedar. In the bottom of each bunk, cedar boughs should be spread and oil of cedar plentifully sprinkled upon the bed clothes. This is far superior to all insect powder, and if occasionally renewed and applied will keep the bunk camp clean. Remember, that the sounder the rest obtained by the men the better they can labor, and these little non-essentials when attended to, will keep your men in a fit condition to give you a full return for the wages you pay them. This they cannot do, however willing, if their rest is broken. Now see that your foreman attends to this, and you will find the hints here given will be money in your pockets.

THE threatened retaliation would considerably interfere with the business of some in the trade who would have to seek fresh means of reaching their market. At present however there seems to be no great haste at Washington to take any decisive step, so there is no certainty whether the threat will be carried out or not. A subsidiary branch of the discussion that has arisen between the two countries is as to reciprocal equal use of their respective canals. It is [illegible] that the free use by Canadians of the canals in the United States, notably in the State of New York, has not been permitted, and this having been pointed out as a contravention of the Treaty of Washington there is a possibility of the equal use being accorded if some amicable settlement should be arrived at. The forwarding of lumber by canal without transhipment would be very convenient for some Canadian lumbermen and would increase their profits. This, however, is another uncertainty. Most uncertain however is the [illegible] question. It would be hard to guess who may be President, and even then the tariff policy that may be adopted by either party in case of success is by no means certain. That and several other questions of moment are postponed, that is their settlement, not their [illegible] the Presidential election, with all its excitement, is over. That day is not far distant now.

MR. HOTCHKISS, the United States consul at Ottawa, as was mentioned in our last issue, has supplied a very elaborate report to the State Department at Washington of the Canadian lumber industry. His chief object appears to be to consider what would be the effect of the remission of the $2 per thousand duty on Canadian lumber imported into the United States. He comes very decidedly to the conclusion that the change would not have the effect desired by the advocates of cheapening lumber to the consumer. So far, he argues, the import of Canadian lumber has had no influence in lowering the price at other points, the quantity being too small in proportion to the total supply. He calculates, apparently with considerable care, that the increased import would not be sufficient to change this position. To his mind the importance of the influence of imports of lumber into the United States and the quantity of pine available has been over estimated. According to his view the figures show that if all the lumber sent into the United States from Canada was placed in the Chicago market it would supply but one-quarter of the requirements of that market alone and but one-half of the quantity handled by either Tonawanda or Buffalo. This quantity, even allowing for any probable increase, would be, he holds, too insignificant to fix the price. This, he says, is made by the United States manufacturer, and in so doing he is not influenced by the Canadian supply in any degree. If the duty of $2 were removed it would not affect the price in the United States, because it has never been a factor and would still be the same, no lower price would prevail in the United States than before and no different net results would be experienced by the manufacturers. The Canadians, he thinks, on the other hand would lay down their lumber in the United States cheaper by $2 less per thousand and would obtain for it the same as the United States manufacturer, so the result would be a clear gain to them of the $2 a thousand thus remitted. He does not think that the Canadian lumbermen would long retain this advantage. He explains at length the system of dealing in limits in Canada and dwells especially on the power the Provincial Governments have of augmenting the rentals and dues, notwithstancing the recent increases. The conclusion he draws is that not a May pay day would elapse before a further increase in the dues by order-in-council would be arranged to be sufficient to absorb the $2 per thousand into the Provincial treasuries. Thus, according to Mr. Hotchkiss, it is neither the United States consumers nor the Canadian lumbermen who would get the benefit of the $2 remission but the Provincial Governments. As to another important question he asserts that free lumber implies free logs. He thinks however that only a few mill owners on Lakes Huron and Michigan who have exhausted their supply of logs would avail themselves of this by rafting across the lakes, believing that in most cases the mills would be transferred to a location near the timber in preference. Not only, in his opinion, would this be more economical, but it would give them a better chance of supplying the English market, which draws and would probably continue to draw, chiefly from Canada, and he gives figures showing the importance of this trade. Consul Hotchkiss seems to be very positive in his views as to the effect of the remission of the duty, but it is certain that he would not find everyone agree with his opinions. We notice that Mr. Blaine, in delivering addresses in regard to the Presidential election in several lumbering centres in Maine, when dwelling on the tariff question assumed positively that the free importation of Canadian lumber would reduce the price by the amount of the duty, which would thus not benefit the Canadian lumbermen but the United States consumers, while the United States lumbermen would also have to accept the lower price. This was not only the view of Mr. Blaine but it seemed also to be the opinion of the interested audiences whom he was addressing. There was also a manifestation of the same difference of opinion on this point in the debates in Congress on the Mills Tariff Bill.

THE NEWS.

ONTARIO.

—The Ottawa river has been exceedingly low but is now rising slowly.

—Timoth Nester & Co., will put in 50,000,000 feet of logs on the Thessalon river, this winter.

—It is feared that owing to the low water in the Severn River many of the mills will have to shut down.

—The Georgian Bay Lumber Co., of Waubaushene, have already sent nearly one thousand men to the woods.

—Owing to the plentiful supply of men for the shanties this fall wages have taken a drop during the past month.

—W. R. Thistle & Co., Pembroke, have put in a large steam pump in connection with their large saw mill there.

—Band saws 60 feet in length have taken the places of circulars in Edwards & Co.'s large saw mills at Rockland.

—Mr. Wm. Orr, of Shelburne, is calling for tenders for a new saw mill to be erected on the site of the mill recently destroyed by fire.

—It is said that throughout the Georgian Bay district the ensuing season is destined to witness exceptional activity in the lumber shanties.

—Some of the mills at Ottawa have been shut down for several days at a time lately for want of logs. An unfavorable wind has been keeping the drives back.

—There are rumors of further large purchases of pine in the Spanish river region of the Georgian bay country, by Americans who have already invested there.

—In the case of George Caswell, accused of appropriating saw logs owned by the Georgian Bay Lumber Co., of Waubaushene, the grand jury at the late assizes found no bill.

—The Superior Lumber Co., of Ashland, Wis., has sold 1,000,000 feet of green lumber to a Port Arthur firm for immediate shipment to be used in the construction of a large elevator.

—The 1,500,000 feet of green elevator lumber to go to Port Arthur, Ont., from the Superior Lumber Company's mills, Ashland, Wis., will be conveyed on scows taking 400,000 feet at a trip.

—Klock Bros., of Klock's Mills, upper Ottawa, Ont., have bought 88 square miles of timber limits on the Veuve river, Ont., from J. G. Ross, Quebec, for $20,000, and will operate there this season.

—Two hundred and thirty-five car loads of lumber was shipped over the Canada Atlantic railway from Ottawa during a period of one week in October. Its destination was New York and Burlington.

—J. E. Bunswell, of Grand Haven, Mich., is interested in lumbering on the Spanish river. His firm has a yard on the Canada side at Sault Ste. Marie, Mich., and has just purchased additional water front.

—It is reported that a crew was lately taken from Alpena, Mich., to the Georgian Bay regions of Canada, to work in the woods, whereas in past years Canadians have been employed by lumbermen on the American side of the line.

—The saw mill owners at Norman, Keewatin and Rat Portage are reported as doing a large shipping business this season. They are all from 60 to 100 cars behind their orders, and in some cases they complain of being unable to get sufficient cars to fill their orders.

—The Rainy Lake Lumber Company, which has been in the hands of the Bank of Montreal for some years, has been purchased by a company know as the Western Lumber Company with headquarters at Rat Portage. The president of this company is Mr. John A. McRae, formerly of Ross & McRae, large railway contractors of Quebec.

—Mr. Frank R. Weston, of French River, writes THE LUMBERMAN that he is about through with the work of superintending the manufacture and shipment of the five millions of lumber purchased from the Ontario Lumber Co. by Messrs. Shaw, of Forest, and Fraser, of Amherstburg. It has turned out a well manufactured and satisfactory lot. The mills at French River expect to shut down about Nov. 10th. The Ontario Lumber Co. will have cut about $8,000,000 and McLean Bros. about 3,000,000 feet.

—One of the government surveyors who recently returned from the Ludbury district reports that lumber operations are being actively pushed in the northwestern section of that country. Francis Bros. have begun operations on their limits on the White Fish Indian reserve, and the Emery Lumber Company is getting a large quantity of timber on its Spanish river limits. It is understood that the Ontario government will shortly place a number of valuable timber limits, in the Ludbury district, on the market.

—That valuable milling property belonging to the estate of Hamilton Bros. at Hawkesbury, has been purchased by a wealthy syndicate, composed of Hiram Robinson, W. R. Thistle, H. K. Eagan and Robert Blackburn. They have purchased the entire plant, as well as a supply of about 150,000 ft. of logs. The new firm has already 250 men in the woods.

—E. D. Davidson & Son have shut down their lumber mills on Lahave River, throwing 300 or 400 men out of work. Cook & Co. have also shut down, throwing out of work another large number of men, and other lumbermen are preparing to do likewise. This action is on account of the enforcement of the law preventing saw dust from being dropped from the mills into the river.

—Lumber operations during the coming winter on the Ottawa promise to be the most extensive for several years. Reports from the Mattawan state that already 7,000 shantymen have passed through that place on their way to the Upper Ottawa districts. The men are compelled to walk several miles this year owing to the destruction by fire of the steamer which previously carried them.

—The land road from Mattawa to Lake Temiscamingue through Ontario is now open for traffic. Nine shanty teams went through from Mattawa to Opemican on Lake Temiscamingue in eighteen hours. The opening of this road will be a great boon to lumbermen and settlers on Lake Temiscamingue, who can forward horses and cattle with much greater dispatch, and at far less cost than by the old route.

—Mr. Gormully, of Gormully & Sinclair, has commenced an action in the Exchequer Court on behalf of a Michigan contractor, for some $3,000 against the Government. Mr. Hazleton sent a lot of timber under the description of dimension timber into the Dominion. Under this heading it would be admitted free. The Customs Department, however, insisted that it was manufactured and imposed duties accordingly.

—Port Arthur *Sentinel*:—The demand for lumber in this vicinity this season is something enormous, the new elevators requiring 8,250,000 feet alone, for which Messrs. Graham, Horne & Co., have the contract. These gentlemen have also contracted for the delivery of over 2,000,000 feet of lumber to be used in new buildings here and at Fort William, and it is safe to say that other local dealers and builders will use about half as much more.

—Rejoicing over the advance in price of square timber during the present season, resulting in the clearing out of all rafts held at Quebec, the Perth *Expositor* has the following: Mr. Wm. Caldwell of Lanark was one of the lucky ones, selling three years' timber at Quebec and this year's raft on the way down, at prices varying from 25 to 32 cents per foot. The total was 560,000 feet, and it will realize about $170,000, or an average of about 30 cents.

—The Department of Customs has been notified by Capt. Holmes, of the revenue cutter Cruiser, that lumbering operations are being conducted this fall on Fitzwilliam Island, Georgian Bay, by the Saginaw Salt and Lumber Company. It is estimated that 20,000,000 feet will be got out for export next spring, and Capt. Holmes advises that a landing waiter be sent to the Island early in the spring to estimate the cut, so that the proper duty may be charged.

—Lumbering operations at Algoma Mills are likely to be brisk the coming winter. John Rowan has five lumber camps in full blast, and still another is being established. John McLeod, of Pembroke, has arrived there with a gang of men for H. P. Shaw, whose camps are on the north shore of Lake Huron, in the Blind river district. His logs will be towed down Lake Huron to Algoma Mills, where they will be cut into lumber for the C.P.R.

—The immense water power of Sturgeon Falls, which has remained so long almost idle, is about to be utilized on a large scale. Mr. Baxter is about to erect a mill for grinding coarse grains for feed. Mr. Slinger is importing machinery for the erection of a door and sash factory, and a paper company is negotiating for the purchase of a site for the erection of a pulp factory, which will employ 100 men constantly. Should the latter industry be founded there, the poplar and spruce trees, which are so plentiful in the forests, will become a source of great profit.

—The Ottawa *Journal* says that the wages for shantymen are beginning to drop a notch lower than the figures readily given to the men some time ago. Then log cutters got $22 a month and board, and some even as high as a dollar a day. Now men are hired in lowertown to cut logs at $19 and $20 a month, and none but good men will ever get this high. The big rush to the woods is practically over for the season, although many of the firms will continue sending up men to augment the force now engaged in the woods, but the bulk of the men who will go up are now in the bush, and as the demand has lessened the wages have dropped.

NEW BRUNSWICK

—The shipments of deals to Europe from New Brunswick during the first seven months of the year amounted to 114,000,000 feet, against 82,000,000 last year.

—A complete lumber camp outfit smuggled into Canada from the United States has been seized at St. Stephen by the Customs authorities.

—Importers of spruce will have noticed the different character of the wood shipped from St. John, N.B., and from the Nova Scotian ports. The prevailing timber tree of New Brunswick is the white spruce, the deals shipped from Nova Scotia being cut from the black spruce, which may explain the difference. For purposes where strength and durability are required the black spruce is preferred. The color refers to the bark. Large sized trees near the mouth of the St. John river are said to be getting scarce, and supplies are being drawn from the upper tributaries.

—The recent very heavy rain falls re[illegible] month in the grea[illegible] freshet seen on [illegible] 1853. Not only was railway tra[illegible] Fredericton interfered with, but the damage done by [illegible] has extended to other parts of the province—railway and other bridges being swept away, logs set adrift, crops destroyed and other attendant injury sustained. Fairley's Mill, and the bridge connected with it, were in danger of being carried away. They were saved by stones being carted to them and placed on their floors as ballast. The water rose over the mooring posts at Millerton wharf and a good deal of lumber that was lying rafted in that vicinity broke [illegible] and much of it went adrift. Hundreds of thousands of feet must have thus gone adrift. It was feared that Somers' and Bryanton's drives would go adrift, but when the Northwest sheer boom was partially broken away, the logs that went down stream were caught and saved by a temporary boom stretched across the Northwest at Sinclair's. The wharf connected with the Redbank mill was badly damaged and the mill boom just above it carried away. Between twenty and thirty thousand feet of logs ran out of Barnaby river and nearly all of them went to sea with those from the Southwest.

NOVA SCOTIA.

—Hugh Robertson, who built the Joggins raft, says there will be an end of business here if the export duty is levied and timber owners hold to the high prices. It cost a great deal more to get the raft torn apart than he supposed. He is going to British Columbia to build a timber raft for San Francisco and one for Chili.

—Last month it was reported that there would be no more Joggins rafts, but the latest information goes to show that such is not the case. Mr. Robertson, who, as previously reported, is leaving for the Pacific coast to take charge of a log raft there, has closed a contract with parties on the spot to supply timber at the Joggins for a raft six hundred feet long and containing twenty thousand sticks. This raft, it is expected, will be launched next July.

—A correspondent from Bridgewater writing to a contemporary says: The present season has been very favorable for the lumbermen of this part of our province. There has been a larger manufacture in our water mills than ever known before, as seasonable rains brought down the stock, and kept the rivers at a good sawing head all summer. Vessels have been scarce, and freight rates very much higher than for the last few years, therefore shippers have not been able to move lumber freely. Stocks are larger than usual. There is now piled at Bridgewater about 8,000,000 feet, at Port Medway, 4,000,000 and at Liverpool 2,000,000, which may have to remain over winter or serve for winter shipment when the demand from the West Indies reaches here. The logs in the rivers will likely remain there till next spring. This will enable the mills to start, as the timber has to come from the heads of the streams, and is late in reaching the mills. The subject now most engrossing the saw mill men is the sawdust question. By a late edict of our paternal government, they are required "to keep all sawdust from the streams in Nova Scotia." To enforce this will curtail the business very much, as most of the mills are direct action (the saw gate connected with the wheel), and there will be waste in any attempt to stop the sawdust; and as most of the timber lands are nearly exhausted there is not stock enough to warrant the large expense of removing the sawdust by machinery. We think there will be a general stoppage of business until the matter is adjusted, as we cannot see the justice of the large Canadian and New Brunswick mills throwing all their refuse into the rivers. At Ottawa where the greatest quantity is manufactured, they are allowed to grind up the edgings, etc., and dump that also into the river. Until the edict is removed there will not likely be much preparation for next year's work, as it will not do to cut timber and allow it to spoil in the log.

TRADE REVIEW.

Toronto, Ont.

TORONTO, Oct. 29th, 1888.

CAR OR CARGO LOTS.

1¼ and thicker clear picks, American inspection	$34 00@35 00
1¼ and thicker, three uppers, American inspection	40 00
1¼ and thicker, pickings, American inspection	30 00
1x10 & 12 dressing and better	20 00 22 00
1x10 & 12 mill run	15 00 16 00
1x10 & 12 dressing	16 00 18 00
1x10 & 12 common	12 00 13 00
1x10 & 12 spruce culls	10 00 11 00
1x10 & 12 mill culls	9 00
1 inch clear and picks	24 00 26 00
1 inch dressing and better	18 00 20 00
1 inch siding mill run	13 00 15 00
1 inch siding common	12 00 13 00
1 inch siding ship culls	10 00 11 00
1 inch siding mill culls	8 00 9 00
Cull scantling	8 00 9 00
1¼ and thicker cutting up plank	22 00 25 00
1 inch strips 4in to 8in mill run	14 00 15 00
1 inch strips, common	11 00 12 00
1¼ inch flooring	14 00
1½ inch flooring	14 00 15 00
XXX shingles, sawn	2 40 2 50
XX shingles, sawn	1 40 1 50
Lath, Sawn	1 80

YARD QUOTATIONS.

Mill cull boards & scantling	$10 00	Dressing stocks	16 00@20 00
Shipping cull boards, promiscuous widths	12 00	Picks Am. inspection	30 00
stocks	13 00	Three uppers, Am. inspect. B. M.	40 00
Scantling & joist, up to 16 ft	13 00	1½-in. flooring, dres'd	25 00 30 00
" " 18 ft	14 00	1½ " " rough	14 00 15 00
" " 20 ft	15 00	1¼ " " dres'd	23 00 25 00
" " 22 ft	16 00	" " undres'd	14 00
" " 24 ft	17 00	" " dres'd	16 00 20 00
" " 26 ft	18 00	" " undres'd	12 00 14 00
" " 28 ft	19 00	Beaded sheeting, dressed	18 00 20 00
" " 30 ft	20 00	Clapboarding, dres'd	12 50
" " 32 ft	21 00	XXX sawn shingles per M	2 75 2 90
" " 34 ft	22 50@22 50	Sawn Lath	2 25
" " 36 ft	24 00	Red oak	20 00 25 00
" " 38 ft	27 00	White "	25 00 30 00
" 40 to 44 ft	30 00	Basswood, No. 1 & 2	18 00 20 00
Cutting up planks 1¼ and thicker dry	25 00 26 00	Cherry, No. 1 & 2	50 00 60 00
" board	18 00 20 00	White ash, 1 & 2	25 00 30 00
		Black ash, 1 & 2	20 00 25 00

Ottawa, Ont.

OTTAWA, Oct. 27th, 1888.

Dimensions, Inches.	*Per M.*
Mill culls 10 x 1	
" 12 1	
" 12 1½	
" 12 2	
" selected 16 ft. long, above dimensions	8.50 to 9.00
Cull strips, 1 in. thick, 5 to 7 wide	7.00 to 8.00
Mill cut outs 12 x 1	
" 11 1½	4.00 to 5.00
" 12 2	
Scantling 2 4	
" 3 4	12.00
" culls 2 4	
" 3 4	7.00
Laths	1.25
Stock shorts, 12 x 1	10.00
1 inch siding outs, 1¼, 1½, 2	15.00
" outs from shorts, 1¼, 1½, 2	6.50 to 7.00
Outs from stocks 12 x 1	
" " 12 1¼	10.00 to 12.00
" " 12 1½	
Shingles, X	1.25
" XX	2.00
" XXX	3.00
" cedar, No. 1	2.00 to 2.
" cedar, culls	1.25
Difference in planed lumber, in waste and planing	5.00
Ditto, on average good stock	20.00 to 25.00

Hamilton, Ont.

HAMILTON, Oct. 29th, 1888.

Mill cull boards and scantlings	$ 9 00@10 00	Dressing stocks	$16 00 18 00
Shipping cull boards promiscuous widths	10 00 12 00	1¼ flooring, rough	16 00 18 00
Shipping cull stocks	14 00	1½ flooring, rough	16 00 18 00
Scantling and joist up to 16 feet	13 00	1¼ flooring, dressed	25 00
do up to 18 feet	13 50	1½ flooring, dressed	32 00
do up to 20 feet	14 00	1 flooring, dressed	21 50 23 00
do up to 22 feet	15 00	Beaded sheeting 1	25 00 30 00
do up to 24 feet	16 00	Picks, Am inspection	32 00 34 00
do up to 26 feet	17 00	Three uppers Am. In.	40 00
do up to 28 feet	18 00	XXX sawn shingles	2 60 2 70
do up to 30 feet	20 00	Sawn Lath	2 25
Cutting up plank 1¼ and thicker dry	20 00 25 00	Red Oak	20 00 25 00
Cutting up boards	20 00	White Oak	25 00 30 00
		Basswood No. 1. & 2.	16 00 20 00
		Cherry No. 1 & 2	60 00 70 00
		White Ash No. 1 & 2.	25 00 30 00
		Black Ash No. 1 & 2.	20 00 25 00

St. John, N. B.

St. JOHN, Oct. 29th, 1888.

Deals, Boards, Scantling, etc.

Spruce deals	$12 00	Spruce boards	12 00
Pine "	15 00	Pine "	12 00@40 00
Deal ends	6 00	Oak "	40 00
Scantling	10 00	Ash "	15 00@25 00
		Hemlock "	7 50

Shingles.

Spruce, extra	$3 50	No. 1	1 25
" clear	3 00	Pine	1 25
" No. 1 extra	2 25		

Clapboards.

Pine, extra	35 00	Spruce, extra	24 00
" clears	45 00	" clears	23 00
" 2d clears	35 00	" No. 1	15 00
		" No. 2	10 00

Flooring, Dressed.

6 in. No. 1	12 00	4 in., No. 1	12 00
" No. 2	10 00	" No. 2	10 00

Miscellaneous.

Staves	3 00@ 4 50	Laths	1 80
Heading, 17 in. per pr.	04	Pickets	6 50@15 00
" 18 in.	04½ 05½	Railway ties	15
" 22 in.	04½ 06		

Goderich, Ont.

GODERICH, Oct. 27th, 1888.

PRICES IN CAR LOTS.

1 inch Mill Culls	$8 00@ 8 50
1x6-8-10 & 12, common	12 00
1x6-8-10 & 12, dressing	16 00
1x14, and wider, common	12 00
1x14, " " dressing	16 00
1¼ dressing	16 00
1½ "	16 00
1¼ Norway pine flooring	14 00
1½ " " "	14 00
1 inch clear and picks 4 to 9 inch	25 00
1 inch " " 4-in. and up	26 00
1 inch " " 9-in. and up	27 00
1¼ and 1½ clear and picks	35 00
Lath 1 ½x4 feet	1 80
2 inch pine joist	11 50 12 00
2 inch Norway joist	11 00

Montreal, Que.

MONTREAL, Oct. 29th, 1888.

Pine, 1st qual'y M	$35 00 40 00	Basswood, run of log culls out per M	$16 00 20 00
Pine, 2nd " "	22 00 25 00	Oak, per M	40 00 50 00
Pine, shipping culls M	14 00 16 00	Walnut, per M	60 00 95 00
Pine, 4th quality deals M	10 00 12 00	Cherry, per M	75 00 90 00
Pine, mill culls, M	8 00 10 00	Butternut, per M	30 00 40 00
Spruce, per M	10 00 13 00	Butternut, per M	30 00 40 00
Hemlock, per M	9 00 10 00	Birch, per M	18 00 25 00
Ash, run of log culls out per M	16 00 18 00	Hard Maple, per M	20 00 25 00
		Lath, per M	1 50 1 70
		Shingles, 1st, per M	300 3 25
		Shingles, 2nd, per M	1 50 2 0

Saginaw, Mich.

SAGINAW, Oct. 29th, 1888.

CARGO LOTS.

Uppers	36 00@38 00	Norway	8 50@ 9 50
Common	16 00 21 00	Box	8 50 11 00
Shipping Culls	8 50 10 00	Straight measure	11 00 18 00
Mill Culls	6 00	Hemlock	7 50 8 00

YARD QUOTATIONS—CAR LOTS DRY.

Drop Siding.

Clear, ⅞ in	42 00	C, ⅞ in	30 00
A	38 00	D	19 00
B	36 00		

Flooring and Siding—Dressed.

Flooring, clear, d & m	40 00	Siding, clear, ½ in.	22 00
No. 1	33 00	A	23 00
No. 2	30 00	B	17 00
No. 3	20 00	C	14 00
No. 4	13 00	D	12 00

Finishing Lumber—Rough.

Three uppers, 1 in.	42 00@45 00	Fine common, 1 in.	32 00@32 00
1¼ & 1½	44 00 46 00	1¼ & 2 in.	33 00
Selects, 1 in.	36 00 37 00	C, 7, 8 & 9 in.	25 00
1¼ & 2 in.	38 00	Base, 2 to 9 in. No. 1	40 00
		No. 2	30 00
		No. 3	20 00
		Coffin boards 16 in. and over	18

Joist, Scantling and Timber.

12 to 18 feet	10 00	22 feet	12 00
20 feet	11 00	24 feet	13 00

Plank and timber, 12 inches wide, $1 extra.

Wide Select and Common—Rough.

C (No. 1 com.) 13in. and up 28 00 D (common) 14 in. and up . 16 00

Lath, Shingles and Pickets.

Lath, No. 1	1 50	Country brands XXX	3 25@ 3 35
No. 1	1 00	Clear butts	2 25 2 35
Shingles, river brands		P'kts, 2 to 2½ in rough	12 00 13 00
XXX	3 40@ 3 50	Dressed	20 00
Clear butts	2 40 2 50	1¼ in. square, dressed	14 00 19 00

Philadelphia, Pa.

PHILADELPHIA, Oct. 26th, 1888.

White Pine.

Mich. uppers, 1 to 2 in., dry	$48 00@50 00	1¼ to 2 in. plank, barn quality	22 50@25 00
2½, 3 & 4 in	55 00 60 00	Common plank	20 00 22 00
Selects, 1¼ to 2 in.	42 50 45 00	⅞ box boards, wide	14 00 16 50
2½ 3 & 4 in	41 00 43 00	⅝ siding, selected	27 50 30 00
12 in. flooring quality	30 00 32 50	Culls, 12 in.	15 50 17 00
barn	19 00 23 00	Wide	15 00 16 00
Edge barn, all widths	18 00 20 00	Narrow	13 50
		No. 1 moulding	36 00 38 50

Cargo Lots.

Yellow pine edge bds	14 00@16 00	Scantling and plank	20 00 22 00
Heart face boards	19 00 21 00		

Hemlock Boards and Scantling.

Edge boards	10 50@11 50	Scantling, 2x3 & 2x4,	
12 in. stock	11 50 12 00	16 & 18 ft	12 00@13 00
Fencing, 6 in., 16 ft.	11 50 12 00	3x4, to 12, 12 to 20 ft.	11 00 11 50

Shingles and Posts.

Cypress shingles, 24 in. heart, d & b	13 00@18 00	Cedar shingles, 30 in. hand dressed	35 00 40 00
24 in. sap, d & b.	10 00 12 00	Chestnut posts, 9 ft.	32 00
		7 ft.	28 00

HARDWOOD.

Walnut.

Nos. 1 & 2, 1 in., good dry, Indiana	$87 50@ 95 00	Reject or common, 1 in., 1¼ and up	72 50@77 50
1¼ & up	92 50 100 00	Culls, 1 in.	35 00 37 50
Nos. 1 & 2, ⅝ in.	72 50 77 50	1¼ in. & up	35 00 40 00

Poplar.

Nos. 1 & 2, 5/4 in. good wide, Indiana	25 00@27 50	Nos. 1 & 2, 1¼ in. & up, good wide, Ind.	32 50 36 00
1 in.	28 00 32 50	Columns, 5x5 & up clear	35 00 35 50

Oak.

Nos. 1 & 2, 1 in., good western, straight	32 50@35 00	Nos. 1 & 2, 1¼ in. & up, good western, straight	35 00 37 50
quartered	49 00 50 00	quartered	52 50 55 00

Ash.

Nos. 1 & 2, 1 in., good western	35 00@40 00	Nos. 1 & 2, 1¼ in. & up, good western	32 50 42 50

Yellow Pine—Yard and Wholesale.

Sc'tlg, 2x4 to 12x14	22 00@23 00	Flooring, 1 in. Va.	17 00 19 00
Plank, 1¼ to 2 in.	23 00 27 50	1 & 1¼ in. Ga. & Fl'g, 1 & 1¼ in. No. 1	27 50 30 00
Fla. cargo run			22 00 24 00

Cherry.

Nos. 1 & 2, 1 in., good	62 50 70 00	Nos. 1 & 2, 1½ in. & up, good	65 50 70 00

New York City.

NEW YORK, Oct. 29th, 1888.

Black Walnut.

5/4 in., all clear	$78 00@ 82 00	Culls, 1 inch	$35 00@ 37 00
1 and 1¼ inches	92 00 97 00	Culls, thick	37 00 39 00
1½ and thicker	98 00 105 00	Counter tops, 18 in.	
Rejects	52 00 55 00	and over	110 00 150

Poplar, or White Wood.

5/4 in. 10 inches and over	23 00@24 00	1¼ to 2 inch	24 00@25 00
¾ in. coffin boards	27 00 28 00	2½ and thicker	31 32
1 inch, 10 inch and over	28 00 30 00	Common 1 to 2 inch	21 22
1 inch, 8 in. and over	26 00 28 50	Saps, 1 inch & thicker	22 25
		Culls, all thickness	15 18

Dressed Poplar.

½ inch panel	24 50@25 00	⅜ in. clg. 4 to 6 in	21 00@21 50
5/8 inch panel	27 00 28 00	½ in. clg. 4 to 6 in	24 00 24 50
¾ inch panel	29 00 30 00	⅝ in. clg. 4 to 6 in	27 00 27 50
4, 5, 6 inch casing	30 00 31 00	¾ in. clg. 4 to 6 in	25 00 30 00
7, 8, 9, 10 inch casing	32 00 33 00	⅞ in. clg. 4 to 6 in.	30 00 31 00

Ash.

1 inch, white	36 00@ 38 00	Strips, clear	24 00@25 00
1¼ to 2 inch	37 00 38 00	Black ash, good	24 00 30 00
2½ to 4 inch	40 00 41 00	Black ash, culls	10 00 12 00

Oak.

1 inch plain sawed,	36 00@ 39 00	inches and over	45 00@48 00
1¼ to 2 inch	37 00 40 00	Thicker	48 00 50 00
Thicker	38 00 41 00	Strips under 6 in.	35 00 40 00
Quarter-sawed, white, all clear, 6-			

Cherry

5/4 in., white & clear	65 00@ 70 00	1½ and thicker	88 00@ 95 00
1 inch	76 00 80 00	Counter tops, 18 in.	
1 inch strips	40 00 42 00	and over	100 00 115 00
1¼ to 2 inch	80 00 85 00	Culls, all thickness	18 00 20 00

Miscellaneous.

Chestnut, clear	33 00@ 35 00	Hickery, old growth	50 00 55 00
Chestnut common	20 00 23 00	Hickery, 2nd growth	70 00 80 00
Basswood white	30 00 32 00	Elm	20 00 22 00
Basswood common	20 00 23 00	Sycamore	24 00 27 00
Maple, clear	25 00 30 00	Sycamore, quartered	35 00 40 00
Birch, clear	32 00 36 00	Gum	35 00 40 00
Birch, 1s and 2s	26 00 30 00	Butternut	45 00 50 00
Cottonwood	20 00 22 00		

Boston, Mass.

BOSTON, Oct. 29th, 1888.

Western Pine—by car load.

Uppers, 1 in	$48 00@50 00	Fine com., 3 & 4 in	46 00@50 00
1¼, 1½ & 2 in	47 00 52 00	No 2, 1 in. Fine com.	29 00 30 00
3 & 4 in	55 00 60 00	1¼, 1½ & 2 in	31 00 33 00
Selects, 1 in	42 00 45 00	No. 1 strips, 4 to 6 in	41 00 43 00
1¼, 1½ & 2in	44 00 46 00	No. 2	37 00 38 00
3 & 4 in	48 00 52 00	No. 3	25 00 27 00
Moulding boards, 7 to 11 inch clear	37 00 41 00	Cut ups, 1 to 2 in	26 00 30 00
60 per cent clear	35 00 37 00	Coffin boards	22 00 26 00
Fine common 1 inch	37 00 42 00	Common all widths	20 00 25 00
1¼, 1½ & 2 inch	40 00 42 00	Shipping culls	17 00 19 00

Eastern Pine—Cargo or Car Load.

Nos. 1, 2 & 3	40 00@43 00	Clapboards, 4 ft., sap	
4	28 00 30 00	clear	42
5	23 00 26 00	Sap, 2nd clear	32 35
Ship'g bds & coarse	16 00	Heart extra	35
Refuse	12 00	Heart clear	25
West'rn pine clapbds 4 ft. sap extra	43 00 45 00		

Spruce—by Cargo.

Scantling and plank, random cargoes	12 00@13 00	Coarse, rough	10 00 12 00
Yard orders, ordinary sizes	13 50 14 50	Hemlock, rough	10 00 11 00
Yard orders, extra sizes	15 00 16 00	" dressed	12 00
Clear floor boards	19 00	Clapbds., extra, 4 ft.	28 00 30 00
No. 2	16 00	Clear, 4 ft.	26 00 28 00
		Second clear	20 00 22 00
		No. 1	12 00 15 00

Lath.

Spruce	1 90@2 00

Shingles.

Spruce	1 40@1 50	Cedar, sawed, extra	3 00 3 50
Pine, 18 in. extra	4 50 4 75	Clear	3 00 3 25
Pine, No. 1	3 50 3 70	Extra, No. 1	2 85 3 00
		Cypress, No. 1, 18 in.	5 00 5 25

Oswego, N. Y.

OSWEGO, Oct. 29th, 1888.

Pine.

1¼, 1½, 2 and thicker uppers	$40 00@43 00
" " " pickings	30 00 33 00
" " " No. 1 cutting up	22 00 26 00
" " " cuttings up pickings and uppers as run	30 00 35 00
1 inch selected sidings	25 00 30 00
1¼ " " "	30 00 35 00
1 & 1½ box or No. 2 culls	11 00 12 00
1 & 1¼ sidings No. 1 dressing and better	17 00 25 00
1x10 & 12x12 to 16 feet dressing and better	17 00 25 00
" " " shipping culls	14 00 17 00
" " " No. 2 "	11 00 12 00
1 & 1¼ in. strips 4 to 7 wide selected	20 00 30 00
" " " dressings	16 00 17 00
" " " box	9 00 12 00

Brown Ash.

1 1¼ 1½ 2 & 3 in. 1st & 2nd quality	17 00 21 00
" " " culls	9 00 11 00

Basswood.

1 & 1¼ 1st & 2nd quality	20 00 21 00
" culls	9 00 12 00

Shingles.

XXX 18 inch pine standard thickness 5 to 2¼	$3 75
XX " " " " "	2 50
X " " " " "	75
XXX " cedar " " "	3 00
XX " " " " "	2 00
XXX 16 " pine " " "	3 00
XX " " " " "	1 00

Lath.

No. 1 1⅜, 1½	1 80 2 10
" 2 "	1 10 1 80

RAMBLER'S PEREGRINATIONS.

I TOOK a run up to Gravenhurst some days ago, and had the pleasure of visiting some of the large saw mills which form a circle around Muskoka Bay. Lumbermen are thick in this part of the country during the summer, but it is evident that the climate in winter is not to ther liking as they nearly all seem to forsake their old haunts in the fall of the year and take up their abode in a more favored clime. This fact seemed to be particularly noticeable at the time of my visit, but perhaps it was a knowledge of my coming and not the aforesaid reason which accounted for their absence. However, I made myself familar with the place during my brief sojourn, and can remember with pleasure the free and easy cordiality which I met with while visiting the dozen or more mills in the place.

Gravenhurst is a smart town of some 2,000 inhabitants, situated in the Muskoka district. It is certainly an oasis in a rocky, but picturesque, country, in which, so far as I could judge while passing through by rail, it would be difficult to find sufficient soil on which to build a house. Still, while this is the case, there is abundance of woodland, large and apparently healthy trees growing out of crevices in the rock in thousands. A gentleman travelling beside me, in answer to my query as to how such trees get their nutriment, gave it as his opinion that the air made up for the deficiency in soil, which as the best answer to a difficult problem I give for what it is worth and for the want of a better solution.

The Gravenhurst mills—12 in all—are still busy cutting, but will soon shut down for the winter. The output this season is fully up to, if not above, the average. Mickle, Dyment & Co. operate three saw and one shingle mill, the combined output being about 15,000,000 of lumber, 15,000,000 shingles, and 5,000,000 lath. They will have four camps in operation this winter, and in the neighborhood of 160 men in the woods. The average number of men employed in and around these mills is 130. All the lumber manufactured by this firm is handled by Messrs. Christie, Kerr & Co. of Toronto.

I did not think while viewing the fine mill belonging to Mr. Isaac Cockburn such a short time ago, that in these rambling notes I would be called upon to chronicle its destruction by fire; but such, unhappily, is made necessary. I am not aware how this fire originated, but while there it occurred to me that there might be danger of fire connecting with the mill from the burner when the wind was blowing in the right direction. The refuse from this mill was carried in the ordinary way to the high rocks some fifty yards distant, where it was burned. It certainly did not appear to me as the safest plan to adopt, but, of course, my calculations may have been wide of the mark. During the progress of the fire on the 26th ult. two of the four boilers exploded, part of one being thrown a distance of two hundred yards. Fortunately the huge piles of lumber adjacent were left uninjured, but by the destruction of the mill Mr. Cockburn will lose about $20,000. He had, however, a fair insurance on the property which is certainly a matter of considerable satisfaction. This will not only be a severe drawback to the owner but also to the town, as about 60 men will be thrown out of work. Mr. Cockburn's cut this year, had the mill run a little longer, would have been 6,000,000 feet of lumber, 3,000,000 shingles and 3,000,000 lath. He has already got three camps established, and intends taking out an average cut. I learned that Mr. C. had serious thoughts of remodeling his mill the coming winter by introducing a rotary gang and other new machinery. Now that he finds himself minus even the old mill, I hope to hear of his carrying out his original intention of adding the latest improved machinery.

I failed to find either member of the firm of Thomson & Baker, but ran across the genial son of the latter gentleman, Mr. Thos. Baker, who has a good head for lumber, and I am glad to learn is making the most of his opportunities. In conversation with this gentleman I learned that Thomson & Baker own three single-circular mills at Gravenhurst and still another at Huntsville, a village some distance north. In their mills here they cut on an average of from five to six million feet of lumber, and from two to three million at Huntsville. Mr. Baker informed me that the lumber business here, as in many other places, was not by any means as profitable as in past years. Prices, however, appear firm and the demand fairly good.

I ran across Mr. Theodore W. Taylor, of the firm of G. W. Taylor & Co., but did not have an opportunity of interviewing him. This firm's operations are being carried on to about the same extent as in past years. They are cutting quite extensively for the Ontario Lumber Co. "Theo.," although getting on towards middle age, is one of the boys in Gravenhurst, and I would liked to have had an opportunity of getting better accquainted with him.

The McBurney & Laycock Lumber Co. are doing a profitable business here also, and lay claim to having one of the best equipped one-circular mills in the country. Their cut this year will be about 5,000,000 feet of lumber and 3,000,000 lath. Their average cut per day is 38,000 feet. Mr. C. Ayre is manager of this business and evidently understands his business thoroughly. Donogh & Oliver, of Toronto, will handle the entire output of this mill this year.

I was unable to pick up much information concerning the other mills here, further than that they were all running and doing a profitable trade.

Nearly all the logs intended to be converted into lumber at the Gravenhurst mills are brought by water a distance of about fifty miles, the assorting ground being at the mouth of Bracebridge river, eleven miles distant. All the mills are operated by steam, and the equipment is first class. The refuse is all disposed of by burners covered with sheet iron, each of which stands some 150 feet high. There is a complete net work of sidings connecting with the Grand Trunk Railway which renders the shipment of lumber easy. Speaking of the Grand Trunk railway reminds me that the one great great grievance among the mill men of Gravenhurst is the scarcity of cars for shipping lumber. Perhaps the reader will say that this is an old complaint, and so it is, but being such it is none the less serious. This difficulty has hampered the trade too long, and it is quite time that a united effort should be made to try to remedy the evil. Millions of feet of lumber are lying in the piling grounds awaiting the convenience of the railway company to move it. The retailer blows up the wholesaler for not filling his orders in a reasonable time; the wholesaler looks to the manufacturer; and the manufacturer do as he will, has no other course open but await the pleasure of the G.T.R. company. Surely if an honest effort were made to cater to the wants of such an important industry the railway companies could provide sufficient cars to meet the demand. I hope soon to see this difficulty removed, but a firm and decisive stand must be taken by the lumbermen before such a turn in the wheel of fortune can be realized.

I could say much more concerning the lumber interests of Gravenhurst but I have already occupied enough space for one issue. On my way south I dropped into the Longford Lumber Co's wooden-ware factory at Orillia, and was much interested in an inspection of their new and well-equipped factory. This factory only commenced operations last July, but already an extensive business is being carried on, about 45 hands being employed in the manufacture of tubs, pails and other woodenware. The factory has a capacity for turning out 2,500 pails and tubs per day, and the machinery, which is principally of American manufacture, has been selected from among the best in the market. By a novel and unique arrangement the whole premises including the private office, some distance away, are heated by the surplus hot air from the dry kiln. As THE LUMBERMAN has already published a full description of this factory I will not extend my remarks further. Mr. Geo. Thompson is the manager of this business, Mr. C. Wright, assistant office manager and shipper, while the mechanical department is under the supervision of Mr. D. A. Lundy.

Leaving Orillia I struck the little town of Waubaushene which is situated on the Midland division of the G. T. R., at ten p.m. and was fortunate enough to enjoy the hospitality of one of its leading citizens and his good lady, until nearly the wee sma' hours of the morning There was a large company of friends present enjoying one of those social gatherings which goes far to make life in a small country village endurable, if not pleasurable.

Waubaushene is the home of the Georgian Bay Consolidated Lumber Co., of which Mr. A. M. Dodge the well-known millionaire is president. In fact, I understood, that every foot of land and every building in the village is owned by this company. My visit here also was rather inopportune as Mr. Dodge had but a few days previous forsaken his magnificent summer house here and returned with his family to his winter quarters in New York. It was my pleasure, however, to meet the courteous Secretary-treasurer of the company, Mr. Jas. Scott, who kindly gave himself up for an hour to discuss lumber lore, and from this gentleman I gleaned some useful information, which for want of space will have to be discussed in a future letter. The Georgian Bay Lumber Co.'s mill here is undoubtedly one of the finest in Canada, if not in America. The outfit consists in the main of two stock gangs, a slabbing gang, twin circulars and a large circular saw. The most modern equipments, have been introduced, and in point of cleanliness it is certainly conspicious. But little material goes to waste here, for after the sorters for shingles and lath have done their work the burner receives but poor fuel. In a separate building adjoining the mill proper, is located the box factory, in which some 35 hands are employed. The machinery here is also of the best, and the factory has a capacity for turning out 5,000 standard size boxes per day. From 25 to 30 different sizes are manufactured, which all find a market in the United States. Stepping from the box factory, my escort, (who by the way, is an associate of my younger days), took me into still another building, in which are located the machine shop, engine and boiler rooms. The motive power consists of a pair of independent cut-off engines and seven steel boilers, 5 feet 6 inches in diameter, the latter being fed entirely by sawdust carried from different parts of the mill. In addition to this mill, of which I have given a casual glance, the same company own and operate two mills at Eyng Inlet, one at Collingwood and one at Port Severn, the average annual production of all these mills being from fifty to sixty million feet. Of this from 20 to 23 million feet is usually shipped by water and the balance by rail, the better grades finding a market in New York and elsewhere. At the time of my visit about one thousand men had been sent to the woods. and the intention is to make a large surplus cut this year, which course, I understand, has been made necessary in consequence of the company's limits having been badly damaged by fire during the past summer. I had almost forgotten to mention that a thorough system of fire protection has just been introduced at the Waubaushene mills, the outfit consisting of a large Northey pump and 800 feet of linen and rubber hose.

My very brief stay at Midland did not allow of my making a personal visit to the various mill in that town, but I picked up a little information here and there which will give the reader some idea of the extent of the trade carried on.

The Emery Lumber Co. in their two mills will cut from 11 to 12 million feet this year. They will get out of the woods fully as much if not more than in past years They will have about 40,000 pieces left over for spring sawing next year. This is an American firm, and some two or three years ago they turned out about 15,000,000 feet of logs from their limits on the French River. They also constructed a monster boat with a capacity of 3,000,000 feet of logs, the object being to convey their stock cut on the Canadian limits to the extensive saw mills at Bay City. After these 15,000,000 logs were ready for shipment the Canadian Government placed a duty of $2 a standard on all logs exported to the United States. The company could not ship the logs, which after lying a short time on the shores of the lake were sawn at Midland into lumber. The past summer the Shepherd & Morse Lumber Co. purchased the entire stock, and is now shipping it through Canada and the United States in bond for Buenos Ayres, South America, and Sydney, Australia.

Messrs. Chew Bros. in their one-circular mill have nearly finished a cut of 3,000,000 feet of lumber, together with 3,500,000 shingles and 2,000,000 lath. They ship all their lumber to Toronto and Hamilton.

The Ontario Lumber Co. have decided to cut nearly all their stock at Midland in the future, instead of Gravenhurst as heretofore. They own an excellent one-circular mill, capable of cutting from 35,000 to 40,000 feet per day. The cut this year, however, will not exceed 5,000,000, owing to having been shut a considerable portion of the season for want of logs. They intend operating largely in the woods the coming winter.

Messrs. Peters & Cain are also doing a good trade, and their cut this year will be about 3,000,000 feet.

The lumberman throughout the Georgian Bay complain that the past summer has been a very unfavorable one for them, owing to the prevailing high winds. Many logs have been lost, as many as five thousand pieces being scattered around the Bay at one time. Men for the woods in this locality are very plentiful, and as a result wages has been reduced considerably.

On my way through the Georgian Bay district I learned that the new Band mill recently erected by the William Hamilton Mfg. Co., of Peterborough, in Mr. Beck's new mill at Penetanguishene, was being tested, and I accordingly paid it a visit. The band saw is fast asserting its supremacy as a lumber producer as well as a timber saver, and the opposition to it which presented itself on its attempted practical introduction is dying out as its superiority becomes recognized. When the introduction of the band saw was seriously considered, and a few enterprising pine lumber manufacturers adopted the innovation, serious doubts existed as to whether the saving in timber would compensate for the loss of time or lack of speed as compared with the old reliable circular. But practical results have removed all doubts in that connection, and demonstrated that not only can the saving of nearly twenty per cent. in timber be accomplished but that the band saw is rapidly crowding toward the speed of the most vaunted and uesful circular. The mill above referred to is no exception to the rule as the work so far done by it is of the most satisfactory kind. So far as I am a judge from seeing this new band mill in operation and the quality of lumber it is producing, I would say that the owner of the mill has reason to feel as proud of its work as the manufacturers who built it. Mr. Beck informed me that the cut this year in his two mills would be about 10,000,000 feet. His operations in the woods the coming winter will not be quite as extensive as they were last season.

RAMBLER.

PART I.

WALNUT LOGS AND HOW TO PREPARE THEM.

BY ANSON A. GARD.

Few seem to know what an export log should be, but the number who think they know includes about all who have never before gotten out logs for export. These latter think that if a log is the required length and diameter it will pass, and that they should receive the quoted high price for it, and will feel, when the returns are received, that they have not been treated squarely. They forget that rough, crooked, knotty logs make only cull lumber, and that when any market is overstocked with just such timber, when at the best there is no demand for it, the price at which it will sell is very low indeed.

An export log must be straight, sound, free from large limb, or rotten knots, free from heart checks or wind shakes and should not be cut shorter than 10 feet and as few under 12 feet as possible.

When the tree is selected to be felled, a notch should be cut in on the side toward which you wish to "throw" it, the centre of the notch should be cut in toward the heart much deeper than the sides; when this is done start your saw a little above a line with the opposite notch and cut straight through. A tree can not only be sawed down quicker than it can be cut with the axe, but when down it is also "butted," thus saving much extra work.

When the tree has been felled, mark it off so that each log will be straight. This can usually be done even in crooked trees, unless the crook be a short one, in which case cut it out and use the piece for balusters. By cutting the logs 10, 12, 14 and 16 feet, the full length of the tree can be worked up to good advantage. When it can be done, as before mentioned, make as many of the logs 12 feet long as you can, as this length is best for export logs and also the best length for lumber.

Often when a tree is felled it may lie on a side hill, in which case care must be taken not to cut the logs slant ways, which you are sure to do if you let the saw "run."

Many a woodsman in order to safe an inch, loses a foot. He measures his log exactly of the foot mark, which is all right (although a log should be an inch over) providing he can run his saw "true," but nine out of ten sawyers will run to the right or to the left, and the bottom of the log may lack just enough to lose a foot. So I say don't be stingy, when it will pay you to be a little generous.

In some markets there is a duty on logs when they have been squared on the mill, while the same log will go duty free if hewn, besides a log looks better when properly dressed with the broad axe.

Too great care cannot be taken in selecting logs for shipping, as one or two questionable ones may reduce the value of a carload more than their value, while the freight on them is just as much as for the good ones, thus you lose both logs and freight. Therefore make it a rule not to select a log about which you have the least doubt of it passing. Having selected your logs, draw them to the railroad, if you ship by rail and there hew them on four sides to show a face taking care to use a large draw knife to smooth off the corners of the wanes, having first removed all bark therefrom.

When the logs are ready to ship, the ends should be painted with an inexpensive red paint. This not only prevents, to some extent, the logs cracking, but gives them a better appearance.

Just as soon as you have logs ready, load them at once; they will then come to the market looking fresh and will please the buyer far better than if they have been allowed to become weather-beaten and sun-cracked. The logs may cut out as much lumber and the lumber be just as good, but when a load of weather-beaten logs come to market it is surprising the difference in price they will bring. This is especially so in logs sent to foreign markets, where they are put up at auction to buyers who in the hurry and rush of a sale don't have time to carefully examine the lot, but who have to go by the looks, so that many a better lot of logs sells for less money than an inferior one well dressed and fresh looking.

In a country where snow covers the ground during the long winter months no one need be told to use a sled or drag, but where snow is the exception, or where it is never seen, a wagon must be used. There are wagons and wagons. I have been in countries where a regular log wagon would have been a curiosity. Here the loggers have from time without date hauled their logs on the high-wheeled farm wagon.

Two men are required, as the high wheel and sometimes both wheels on one side must be taken off, and the axles propped up. After much bother the log is finally loaded, and if more than one is to be taken on the load, the same process must be gone through with, and when the mill yard is reached, the wheel or wheels must again be removed. No one who follows logging can afford to use such a wagon when they can get one with which one man can do twice as much work in a day and do it easy to himself. This is the low broad tread log truck, requiring only to be driven alongside the log, "skids" run down from the tops of the wheels, the chain thrown under the log and back again to the opposite side of the wagon, then fastened to the "stretchers," the horses started, and your log is landed on the bolsters, and all in half the time required by the old tedious way. Counting the extra man and the time wasted, one could pay for a log wagon in a very short time. Another advantage is that the tire or tread being broad, a much larger load can be hauled over soft ground, as the wheels do not "cut in" like a narrow tread.

"Which will pay me better, to ship my Walnut in the log or saw it into lumber?" This question is the first one asked when the owner of Walnut timber is ready to make disposal of his wood.

The answer to the above will depend entirely on the given lot of trees. If they run large and smooth, it will pay to ship them in the log, but if they are but few large trees and many small ones, it will pay to saw them into lumber, as the large logs will enhance the value of the product more than can be realized from selling them in the log, even at the higher price at which the logs would sell. There are many advantages in selling logs instead of sawing them—other things being equal. In the first place the tree can be cut down and the logs delivered in market almost as soon as it could be sawed into lumber, thus gaining all the time required for sticking up and drying, five months at least saved, which to one of moderate means is a long while to wait.

Again, every producer of lumber will always prefer to know how much his stock will bring as it runs. When sold in the log, there is but one price, while if sawed into lumber the same log is sold at three and in some markets at four prices, and the aggregate price governed by an inspector who may never have seen a walnut tree grow.

Don't write to a log buyer or lumber dealer and say, "I have some logs," or "some lumber; what will you pay for them?" or "it" as the case may be. The fact that "it is good stuff!" don't convey any notion of what it is, or what it is worth. Take for illustration of how you should write to inform a buyer that you have logs for sale:

Mr. A.—Dear Sir: I have, now ready to ship, two carloads of Walnut logs, fresh hewed and in good order. There 26 logs in the lot and they measure as follows: (Give lengths and diameters, being careful not to measure more than they contain). I will deliver these at (give point of destination) for $— per M feet.—Yours, etc., J. S.

When the buyer receives this letter he knows that "J. S." has some logs; he knows how many, and what they contain; he knows that the writer means business, for he has put a price on his stock, and the result will be that J. S. will sell, and have the money invested in more trees, before the man who says: "I've got something, what will you give me for it?" will even get a reply to his letter. This is an age when men must be definite, if they would succeed—the man who don't tell what he has to sell will be passed by the one who lets the buyer know what he has to offer and what he wants for it.

One word of advice to J. S. and others who may write what they have to offer. Don't say that you have two cars of logs, that one will run twenty-four inches and larger, for which you will take $— per M., and one car twenty to twenty-three inches at $—, and in shipping them put some of the small ones in the higher priced car and expect to get the higher price for them, just because they were all together. This would seem unnecessary advice; had I not had a recent case of this kind I never would have thought that it could occur.

Poplar—or miscalled whitewood—logs are now being exported from localities where the rate of freight will warrant their shipment. The same rule for the preparation of Walnut logs will apply to Poplar. They must be evenly hewed on four sides and the wanes smoothly dressed.

I would call the attention of the hewer to one point in particular in preparing the log. Don't cut away too much of the wood *i. e.*, don't square the log, as by measurements there is a great loss over Scribner. A point in question. Two cars of Poplar logs, measured here by Scribner, have just been rejected in a German market on account of being too much squared. Thus not only a loss of wood, but a sale lost.

Different from Walnut, Poplar, Gum and such other rough bark woods, Cherry is shipped round. This may also be said of what few Ash logs there are exported.

When the sap is at work building up new tissues, making new leaves and twigs, the tree when felled is most apt to "check" when made into logs. For this reason valuable timbers should be cut before the middle of March in this climate, and earlier in the far South, then in July or August, when the sap has done its work and is at rest, you may begin and continue till March again. It is well in making Walnut logs to have a bucket of glue water and broad brush, and as soon as the log is sawed off "size" the ends, which when dry part of walnut logs

tends to keep out the air and prevents checking. This "sizing" is simply made with ordinary glue dissolved in hot water and made very thin.

Much more could be said on the subject of logs, but it would not change the one important fact that only good ones are required, and poor ones will ever be a risk to a shipper. If you who have logs bear this in mind you will find that it will pay you a large per cent. in satisfaction and the buyer will never tell you; "He has enough of your stock."

LOGS REDUCED TO INCH BOARD MEASURE.—GARD'S RULE.

L. Ft.	Dia. 8	Dia. 9	Dia. 10	Dia. 11	Dia. 12	Dia. 13	Dia. 14	Dia. 15	Dia. 16	Dia. 17	Dia. 18	Dia. 19	Dia. 20
8	10	14	20	28	33	41	51	61	73	85	100	110	130
9	11	16	23	31	37	47	57	69	82	95	110	125	145
10	12	18	25	34	41	53	63	76	91	105	120	140	160
11	13	19	27	37	46	56	70	84	100	115	135	155	175
12	14	20	29	40	50	62	76	92	109	125	145	170	190
13	15	22	32	43	54	68	83	99	118	135	160	185	210
14	16	23	34	46	57	72	90	108	127	150	170	195	225
15	17	25	36	49	62	78	96	115	136	160	185	210	240
16	18	27	38	52	65	82	102	123	145	170	195	220	255
17	19	28	41	55	69	88	108	130	155	180	210	240	270
18	21	30	43	58	74	92	113	138	164	190	220	255	290
19	22	33	46	61	78	100	121	145	173	200	235	265	305
20	23	36	48	65	82	105	127	154	182	210	245	280	320
21	24	39	50	69	96	109	133	160	191	220	255	295	335
22	25	45	53	74	90	113	139	168	200	230	270	310	350
23	26	45	56	79	94	117	146	176	209	245	280	325	370
24	27	48	60	84	100	123	152	183	218	255	295	340	385

L. Ft.	Dia. 21	Dia. 22	Dia. 23	Dia. 24	Dia. 25	Dia. 26	Dia. 27	Dia. 28	Dia. 29	Dia. 30	Dia. 31	Dia. 32	Dia. 33
8	145	160	180	200	220	240	265	290	310	340	365	390	420
9	165	180	205	225	250	270	295	325	350	380	410	440	475
10	180	200	225	250	275	300	330	360	390	420	455	490	525
11	200	225	250	275	305	335	365	395	430	465	500	540	580
12	215	245	270	300	330	365	395	430	470	505	545	590	630
13	235	265	295	325	360	395	430	470	510	550	590	635	685
14	255	285	315	350	385	425	465	505	545	590	640	685	735
15	270	305	335	375	415	460	495	540	585	635	685	735	790
16	290	325	360	400	440	485	530	575	625	675	730	785	840
17	305	345	385	430	470	515	565	610	665	720	775	835	895
18	325	365	405	450	495	545	595	650	705	760	820	880	945
19	345	385	430	475	525	575	630	685	740	805	865	930	1000
20	360	405	450	500	550	605	660	720	780	845	910	980	1050
21	380	425	475	525	580	635	695	755	820	885	955	1030	1105
22	395	445	495	550	605	665	725	790	860	930	1005	1080	1155
23	415	465	520	575	635	695	755	830	900	970	1050	1125	1210
24	435	485	540	600	660	725	795	865	940	1015	1095	1175	1260

L. Ft.	Dia. 47	Dia. 48	Dia. 49	Dia. 50	Dia. 51	Dia. 52	Dia. 53	Dia. 54	Dia. 55	Dia. 56	Dia. 57	Dia. 58	Dia. 59	Dia. 60
8	925	970	1015	1060	1105	1150	1200	1250	1300	1350	1405	1460	1510	1570
9	1040	1100	1140	1190	1245	1295	1350	1405	1465	1520	1580	1640	1700	1765
10	1155	1210	1265	1320	1380	1440	1500	1560	1625	1690	1755	1820	1890	1960
11	1270	1330	1390	1455	1520	1585	1650	1720	1790	1860	1930	2005	2080	2155
12	1385	1450	1520	1585	1655	1730	1800	1875	1950	2030	2105	2185	2270	2350
13	1500	1575	1645	1720	1795	1870	1950	2030	2115	2195	2280	2370	2460	2550
14	1620	1695	1770	1850	1935	2015	2100	2185	2275	2365	2460	2550	2645	2745
15	1735	1815	1900	1985	2070	2160	2250	2345	2440	2535	2635	2735	2835	2940
16	1950	1835	2025	2115	2210	2305	2400	2500	2600	2705	2810	2915	3025	3135
17	1905	2055	2150	2250	2345	2450	2550	2655	2765	2875	2985	3100	3215	3330
18	2080	2180	2280	2380	2485	2590	2700	2810	2925	3040	3210	3335	3465	3590	3725
19	2195	2300	2405	2515	2625	2735	2850	2970	3090	3210	3335	3465	3590	3725	3920
20	2310	2420	2530	2645	2760	2880	3000	3125	3250	3380	3510	3645	3780	3920	4115
21	2425	2540	2655	2775	2900	3025	3150	3280	3415	3550	3685	3825	3970	4115	4310
22	2540	2660	2785	2910	3035	3170	3300	3435	3575	3720	3860	4010	4160	4310	4520
23	2660	2785	2910	3040	3175	3310	3450	3595	3740	3885	4040	4190	4350	4510	4725
24	2775	2905	3040	3175	3315	3455	3600	3750	3900	4055	4215	4375	4535	4705	4930

ONE of the signs of the times is the extensive preparations that are being made to get out logs in Northwestern Ontario or rafting to mills on the other side of the international line. It is evident that their supply of standing timber at many points across the lakes is falling short and they are driven to have recourse to our forests. Now we have not too much pine for our own mills and the employment of our own people, so the development of this system of transportation in the log is not at all to be encouraged. The Dominion export duty on saw logs has hitherto acted as a deterrent to a very considerable degree, but as the demand for logs for United States mills becomes more pressing the restraining influence seems to have lost its effect. It is not the easiest thing in the world to collect this duty in the region where these operations are chiefly in vogue, but such arrangements should be made by the Canadian authorities as will ensure their not being evaded. If they want our logs in the United States they should certainly be made to pay for them.

THE LUMBER INDUSTRY OF THE OTTAWA VALLEY.

The following report, written by United States Consul Hotchkiss, a press edition of which was recently issued by government, is an able exposition of the subject on which it treats. At this juncture it will be read with profit by both Canadian and American operators who are interested in the question of free lumber. The report bears date February 2 :

In previous annual reports the fact has been stated that the Ottawa district was a manufacturing and not an agricultural district. The exportations of agricultural products are merely nominal, deserving of little attention through their insignificance. The all-absorbing industry is that of lumber, which is, as a specialty, not equaled in its extent and value at any other point in the Dominion. Such being the situation, my report will be confined mainly to facts and figures which are incident to the prosecution of the lumber business, not only of this district, but of the locality of country known as the Ottawa valley, through which, by means of the Ottawa river, this locality is drained of its forest products, and which river also furnishes the magnificent power to operate the saws which reduce the logs to shapely lumber.

The business of the past year has moved steadily onward. No difficulty has been experienced in readily marketing the output, and at prices fully equal to that of any preceding year. All desirable lots, meaning those lots especially known for their desirable qualifications, either sawed American style, viz : boards and plank, or English style, three-inch "deal," were principally sold before any of the season's logs were sawed. In this connection I may add that probably 50 per cent. of all the stock which will be sawed at Ottawa and vicinity in the season of 1888 is already sold, even while the trees are yet standing in the forests. The yearly output of the Ottawa city lumber mills will approximate 350,000,000 feet. The product of mills tributary to Ottawa and its agency, Grenville, will aggregate 250,000,000 feet, making 600,000,000 feet for the Ottawa valley district.

These aggregate figures to those unacquainted with lumber, or unaccustomed to lumber figures, will appear enormous ; but when I say that these figures, multiplied by three, will not represent the full sum of the yearly requirements of the lumber trade of Chicago alone, their insignificance will be apparent.

A false impression too generally prevails in regard to the importance and the influence on the American lumber markets of the pine lumber produced in Canada, as also the quantity of her available pine and the general quality thereof. In regard to the production of sawed pine lumber of a quality available for the United States market, and suitable for the demands of the English market, I firmly believe that the yearly aggregate will not exceed 1,000,000,000 feet. This quantity must be doubled to supply Chicago, and is but a fair supply for the little village of Tonawanda, N.Y., while Buffalo would simply view this quantity with complacency as bidding fair for her one year's necessities.

This quantity, however, must be divided between the United States and England with other foreign markets, while Canada, for her own requirements, must, of necessity, reserve a portion. As it is with the United States alone I have to deal in this report, I have made great efforts to obtain reliable figures, both in feet and values, of the trade of this section with the United States for the calendar year 1887. I have carefully compiled from the 2,875 certificates which have passed through this office for the year a table of the quantity of sawed lumber, with other forest products and the values thereof. Through the kindness and courtesy of the consuls at Prescott and Brockville, I am also enabled to give the amount in feet and value which has been declared through these consulates, which combined with Ottawa, embrace the total exports of forest products of the Ottawa valley. In my judgment the quantity indicated by the figures is a reasonable approximate to one-half of the amount of sawed pine lumber which is exported from Canada to the United States.

The unprecedented drouth of the past year, during the sawing season and until very late in the fall, undoubtedly curtailed the cutting capacities of the mills at Ottawa, specially and to a degree that of all the mills located on the Ottawa river, and which likewise extended to the log supply. The winter opened with a shortage of lumber on the docks for drying, estimated to be fully 50,000,000 feet. This shortage will be shown in the business of 1888, that of 1887 being merely nominally affected thereby.

The important question now so widely agitating the American people, that of free lumber, and I may add free logs—for free lumber to the Canadian should mean free logs to the American—is one on which I may not be expected to venture a personal opinion, but I may be permitted, from the standpoint of a lumberman of over 45 years active experience in the lumber business in Canada and the United States, to review the situation as it appears to exist, and permit others to draw such conclusions therefrom as may enlighten them toward reaching a just termination of a complicated question.

I think I am warranted in presupposing that the desired object to be attained in the remission of the duty on lumber is an anticipated benefit to the American consumer at large, both by cheapening the market price now, as well as tending to prolong the existence of American forests by the substitution of Canadian lumber and logs—the only other country which has white pine timber.

Will the remission of the $2 duty have the desired effect? I think not, and will give my reasons for the conclusion that no appreciable benefit will transpire to the American consumer, and why and how the advantage will accrue to the Canadians. The control of the prices of lumber in the United States is certainly and absolutely in the hands of the timber owners and large mill men. The standing timber is held in large bodies by heavy capitalists, who, owning the mills, can govern the supply of manufactured lumber, and this element of first control is the chief factor in making yearly market values, it being influenced only by the probable demand, present or prospective.

I assert that in the making of prices the American lumbermen have never been controlled or scarcely influenced in any degree by the competition of Canadian pine lumber. I confine my remarks to pine lumber, and have nothing to offer in respect to the spruce and hemlock of the eastern portion of Canada, tributary to the eastern states, or to the lumber of the northwest provinces, tributary to the United States territories and far western states ; but to the white pine sawed lumber, the produce of the middle part of the provinces of Quebec and Ontario, lying between Montreal on the east and Lake Superior on the west, within which bounds is produced the only quantities of white pine worthy of any consideration, and which embraces the Ottawa valley, the chief outlet of this immense district or pine belt lying north of the Ottawa river.

The fact that pine trees are not reproduced enters largely into the question of possibility of control of the timber. The question how, as well as by whom, are the pine forests of the United States and Canada owned and controlled is a factor in determining the future of prices and of the possible advantages to be derived by the proposed legislation.

The manner in which the United States Government has disposed of its timbered possessions is well understood, and that individual purchasers have come into possession of them in fee simple at a fixed price per acre ; that having thus obtained absolute control and ownership they can and do manage their own business affairs in connection therewith without let or hindrance from the government as grantor, such lands, subsequent to purchase by individuals, being subject only to local and state taxation. The timber thereon is cut at will or left standing, as the necessities or inclinations of the owners may compel or induce.

Turning now to the Canadian timber we find a widely different practice. The forest possessions are not sold by the governments which are the owners. The lands in Quebec are controlled by the provincial government of Quebec, while those in Ontario are controlled by the provincial government of Ontario. The Dominion government owns and controls but a limited area in the northwest. The forest possessions are not sold in fee simple, but are leased for a term of one year, under certain conditions and regulations, the *modus* of doing which is by public auction. Whenever the government may deem it judicious or opportune to dispose of certain areas of timbered lands it gives public notice of the time and place, with a description of the lands to be disposed of, and the privilege of leasing is put up for the highest attainable sum, which sum is to be paid simply as a bonus for the privilege of being the lessee of the lands offered, under conditions of lease or license which are statutory, and, of course, well understood by the bidders. The chief conditions of the lease, termed a "timber license," are that the lessee shall (additional to the first "bonus" paid), on the first day of May, pay into the crown land office a certain sum per square mile (640 acres), which sum was originally $1 ; then it was advanced to $2, and is now fixed at $3. If any trees have been cut on lands covered by the license, such cutting shall be duly reported under oath, and crown dues paid therefor according to the tariff schedule, as given below :

	QUEBEC.	ONTARIO.
Oak and walnut, per cubic foot	$0 04	$0 03
Maple, elm, ash and tamarack, per cu. ft.		02
Norway and white pine, birch, basswood, cedar and other square timber, per cubic foot	02	02
Pine saw logs, including culls, each	22	(*)
Spruce saw logs, 13½ feet long, each	05½	10
Hemlock saw logs, 13½ feet long, each	06	10
Hardwood saw logs and tamarack, round	22	25
Balsam saw logs, 13½ feet long, each	05	10
Pipe staves, per 1,000	7 00	7 00
West India staves	2 25	2 25
Cordwood, hard, per cord of 128 feet	16	20
Cordwood, soft, per cord of 128 feet	08	12½
Cedar rails, 10 to 12 feet long, per 100	25	01
Cedar pickets, per 100	15	01
Cedar or pine shingles, short, per 1,000	08	01
Cedar or pine shingles, long, per 1,000	15	01
Cedar telegraph poles, each	06	01
Cedar fence posts, per foot in length	00½	01
Cedar hop poles, per 100	20	01
Rails, other than cedar, per 100	10	01
Pickets, other than cedar, per 100	05	01
Railway ties, any timber, each	02	(†)
Hemlock lath wood, per cord	15	01
Hemlock bark, per cord	32	30
Birch sticks, 28 feet long, each	25 to 30c.	1c. per cu. ft.
Knees, according to size, each	5 to 25c.	(†)
Futtocks, according to size, each	10 to 25c.	10
Cedar for shingles, per cord	16	12½
Pine for shingles, per cord	20	12½
Boom timber, round spruce, per lineal ft.	00½	01¼ cub.
Boom timber, pine or tamarac, pr lineal ft.	01	01¼ cub.
Small round spruce spars, under ten feet, per lineal foot	00½	
Birch, per cord of 128 feet	30	

(*) $1 per 100 feet. (†) 15 per cent. *ad valorem.*

ADDITIONAL EXPORT DOMINION CUSTOMS TARIFF.

Pine and Norway saw logs, per 1,000 feet, board measure	$2 00
Spruce and hemlock saw logs, per 1,000 feet, board measure	1 00
Shingle bolts, per cord of 128 feet	1 50

By the character and sum of the annual land dues ($300) and the nature and amount to be paid as timber dues (per tariff), a full appreciation of the position of the lessee will be had, while the lessor, the government, it will be also observed, continues its sole control over the timber. The only right which the lessee possesses is to cut the timber on his licensed lands and annually pay the government its demands, and when promptly paid the continued right to renew the license yearly.

It is likewise the right of the government to change the terms and conditions at will, taking effect after the first of May of the following year. I will refer to the last order making such changes, by which it will be seen how absolute is the government control and their disposition in the premises.

DEPARTMENT OF CROWN LANDS, TORONTO, April 29, 1887.

Public notice is hereby given that, by order in council of 27th instant, the rate of ground rent on timber limits or berths is increased from $2 to $3 per square mile per annum ; and the dues on square and waving pine timber are increased from 1¼ to 2 cents per cubic foot ; and the dues on pine saw logs are increased from 75 cents to $1 per thousand feet, board measure.

The increased ground rent to be payable on licenses to cut timber granted and renewed on and after the first day of May, 1887; and the increased dues on pine timber and pine saw logs to be payable on such pine timber and saw logs as may be cut after the date last above mentioned.

(Signed)
F. B. PARDEE,
Commissioner.

It will be observed that this order is dated April 29th, to take effect May 1st, and that without any prior notification of intention being given. This order means an additional tax upon limit holders varying in its effects upon licenses according to their holdings, but in sums ranging approximately from $1,000 to $80,000 individually on the annual dues to be paid on the lands, in addition to which comes the further advance on the timber cut.

I have been thus explicit in describing the systems of the two countries, for to my mind they are the key by which the situation and effect may be safely prejudged in case free lumber becomes a reality.

There is no dispute that the American manufacturer controls the making of prices. In doing this he is not influenced by the Canadian supply in any degree. If the duty of $2 is removed it will not affect the American price, because it has never been a factor and will still be unfelt. No lower price will prevail in the United States than heretofore, and no different net results will be experienced by the manufacturer. The Canadian, on the contrary, will lay his timber down in the American market at $2 less per thousand, and will obtain for it the same as the American does, so that the net result to the Canadian manufacturer will be a clear gain of the $2 which the American government has remitted. This additional net result to the Canadian manufacturer will, however, be of very brief duration.

Having shown how the governments [illegible] their control of the timber lands and their disposition of them to the utmost, I am confident that [illegible] will pass before a public notice will issue [illegible] increase in annual and timber dues has been [illegible] council, in sums sufficient to absorb the $2 per thousand to the provincial treasuries.

Some may question the light treatment which I give to production of Canada lumber exported to the United States. I believe the statement to be sound and reliable that Canadian sawed pine lumber sent to the United States for consumption is not sufficient in volume to affect prices by being a factor in any degree.

The following table, showing in feet and value the declared exports of sawed lumber and value only of other forest products for the calendar year ending December 31st, 1887, will be proof positive to experienced lumbermen of the soundness of my conclusions. This table embraces the declared exports of pine at the ports of Ottawa, Grenville, Brockville and Prescott, and is a fully reliable statement of the exports to the United States of the Ottawa valley section.

Location.	For consumption.	Value.	In bond for export	Value	Value
	Feet.		Feet.		
Ottawa	150,199,285	$2,017,648.47	33,698,348	$610,795.71	$1[illegible]
Grenville	30,695,339	263,393.21			
Prescott	9,497,803	116,513.25			[illegible]
Brockville	36,747,472	429,679.64			[illegible]
Total	227,139,959	$2,827,234.55	33,698,348	$610,795.71	$22[illegible]

The following shows the exports from Canada (customs returns) of pine boards and plank from all of Canada to the United States for the fiscal year ending June 30 :

	FEET.	VALUE.
1884	557,29[illegible]	$ [illegible]
1885	[illegible]	[illegible]
1886	[illegible]	[illegible]
1887	[illegible]	[illegible]

The following shows the export of pine saw logs to the United States in the following years :

	FEET	VALUE
1884	[illegible]	$ [illegible]
1885	[illegible]	2,3[illegible]
1886	[illegible]	[illegible]
1887	2 [illegible]	[illegible]

By comparing the quantities shown in the first table, being the amount exported from the Ottawa valley with the amount shipped annually from all of Canada, it will be found that the first bears a percentage to the total exported in 1887 of 50 per cent., showing the important position which the Ottawa district holds in this industry.

The second table will show also the correctness of my statement that the volume of pine lumber exported to the United States from Canada is too insignificant to have any influence in the making of prices in the United States. The figures show that if all the lumber sent into the United States from Canada was placed in the Chicago market it would supply but one-quarter of the requirements of that market alone, and but one-half of the quantity handled in either Tonawanda or Buffalo.

Regarding the few logs shown to be exported to the United States, they are of no account whatever, nor do I believe that if "free lumber" were to prevail that any appreciable increase of log exports would be seen, for the logs would, to a large extent be manufactured into lumber at the place of growth, or approximately so, as long as the lumber was admitted free. This course presents very many palpable advantages as against the expense of the transfer of the mill.

A few mill owners on the shores or adjacent to the shores of Lake Huron and Lake Michigan, having exhausted their available timber, would make a few spasmodic attempts to import logs from Canada, but a very brief attempt to handle logs across the lakes would develop the superiority of the location nearer the timber. In addition to this, by operating their mills in Canada they would find the English markets open to them, for it is in Canada that the English buyer of pine lumber always has and undoubtedly will continue to look for his stock. This advantage to the manufacturer is one which will not be lost or disregarded, for the English market requires from Canada pine lumber (mainly cut into "deal") in volume about half as large as is sold to the States. The English demand also is gradually changing in the character of its requirements of "deals," sawed boards and plank.

That the character and volume of the English trade demand for sawed pine lumber from Canada may be appreciated, and its relative importance to the Canadian as compared to his trade with the United States, I append a

statement of the exports to Great Britain for the same years which I have heretofore given for that to the United States. This comparison shows that fully double the quantity is sent into the United States market in feet over that sent into the English market, but as that sawed for the English is 90 per cent "deals," sawed 3 inches thick, and is now accepted down in quality made from quite "commonstock," the greater advantage to the manufacturer lies in catering to the English requirements.

PINE BOARDS, PLANKS AND "DEALS" EXPORTED FROM CANADA TO GREAT BRITAIN IN THE FOLLOWING YEARS. (CANADIAN STATISTICS.)

	1884.		1885.	
	FEET.	VALUE.	FEET.	VALUE.
Plank and boards ..	24,484,000	$ 297,786	19,156,000	$ 251,270
Deals.....	700,766,000	7,610,813	198,393,250	2,679,670
Total.....	725,250,000	$7,908,599	217,549,250	$2,930,340

	1886.		1887.	
	FEET.	VALUE.	FEET.	VALUE.
Plank and boards..	12,673,000	$ 155,221	17,016,000	$ 241,360
Deals.....	205,326,000	2,944,230	207,861,500	3,148,161
Total.....	217,999,000	$3,099,451	224,877,500	$3,389,521

The abnormal exports of the year 1884 will be specially observed, but cannot be explained.

This subject is a prolific one, and very many points of interest and commercial value could be entered into in connection therewith, but to do this would occupy more space than is allotted to this character of consular reports. If, however, from the statements, conclusions and Statistics given I have assisted toward a clearer understanding of the free lumber problem the purpose in view will have been attained.

OTTAWA EXPORTS.

[Reported for THE LUMBERMAN by Geo. W. Hotchkiss U. S. Consul.]

The following statement gives the declared Exports to the United States, of forest products from Ottawa, Canada, for the quarter ending Sept. 30. 1888.

		VALUE.
Lumber, feet.....	58,892,240	$772,323.28
Lath, pcs.....	15,732,050	19,588.52
Pickets, pcs.....	2,425,283	12,150.87
Box Shooks, val.....	6,000	47,171.42
Posts, val.....	6,775	397.50
Poles, val.....	508	482.60
Shingles, M.....	1,463,000	2,944.01
R. R. Ties, pcs.....	10,931	2,653.65
Hemlock Bark, cds.....	1,059	5,295.00
Match Blocks, cds.....	287	1,004.00
		$864,010.85
Lumber shipments apportioned as follows :		
By Water.....		36,284,340
By Rail.....		22,607,900
Total number of feet.....		58,892,240
	FEET.	VALUE.
For duty.....	53,794,780	687,124.07
In bond re-export.....	5,097,460	85,199.21
Total.....	58,892,240	$772,323.28

OUR TIMBER EXPORTS TO BRITAIN.

Since our last issue the following cargoes of Canadian wood have been reported entered at the various United Kingdom ports :—

AT BRISTOL.—Ontario, from Montreal, 95 stds. deals. Aldine, from St. John, 13,596 deals, battens, scantlings, boards and ends. Norman, from Shediac, N. B., 15,587 deals, scantlings and ends. Quebec, from Montreal, 2,596 pine deals, 2,075 red pine deals, 7,554 spruce deals.

BELFAST.—Lothair, from Miramichi, N. B., 19,505 deals, 5,000 palings.

BARROW.—Habor, from Halifax, 6,855 deals.

CARDIFF.—Stella, from Shediac, N. B., 14,886 deals and ends. Odin, from Sheet Harbor, 14,019 deals and ends. J.H. McLaren, from St. John, 26,163 deals. Gettysburg, from St. John, 33,988 deals.

CARVARNON.—Dusty Miller, from St John, N. B., 509 birch logs, 2,891 birch planks, 4,461 deals, 3,387 deals and ends.

FLEETWOOD.—Doore, from Halifax, N. S., 11,431 deals.

GLASGOW.—Alcides, from Montreal, 9,603 deals, 163 pcs. waney board, 358 pcs. oak lumber, 62 pcs. birch, 136 pcs. ash. Chestina Redman, from Bangor, 42,238 bdls. spoolwood. Siberian, from Montreal, 4,581 pine deals. Cynthia, from Montreal, 3,600 staves, 6,556 deals. Grecian, from Montreal, 1,200 deals. Cock o' the North, from St. John, N. B., 2,129 birch planks, 5,508 spruce deals and battens. Ella Moore, from Spencer's Island, 12,716 spruce deals. Colina, from Montreal, 2,295 deals. Carthaginian, from Montreal, 4,493 deals and ends. Circe, from Montreal, 674 deals, 2,680 deal ends, 322 pcs. oak lumber. Concordia, from Montreal, 1,260 pcs. oak lumber, 15,800 deals.

GLOUCESTER.—Estella, from Miramichi, N. B., 40,895 deals. Otto, from Miramichi, 16,598 deals. William Nordon, from New Mills, N. B., 24,419 deals. Vila, Chatham, N.B., 40,424 deals.

GREENOCK.—Gylfe, from Quebec, 175 pcs. oak, 120 pcs. red pine, 602 pcs. waney pine, 1,616 deals, 2,267 deal ends, 491 spruce deals. Alfhild, from Quebec, 775 pcs. white pine, 16 pcs. oak, 487 pcs. ash, 159 pcs. red pine, 72 pcs. waney pine, 3,332 pine deal ends, 2,201 pine deals, 1,578 spruce deals. Norwood, from Quebec, 445 pcs. red pine, 206 pcs. oak, 109 pcs. elm, 44 pcs. ash, 13 pcs. maple, 339 pcs. white pine, 455 pcs. waney pine, 2,385 deals, 2,185 pipe staves, 4,800 W.O.W.I. staves, 2,020 deal ends, 3,063 spruce deals. Princess Alexander, from Quebec, 77 pcs. oak, 152 pcs. elm, 400 pcs. waney pine, 3,257 deals, 1,260 deal ends, 861 spruce deals, 3,338 pipe staves, 3,600 W.O.W.I. staves, 333 pcs. square pine, 223 pcs. red pine, 125 pcs. square pine.

LEITH.—Martin Luther, from Quebec. 440 pcs. hewn fir, 13 pcs. hewn oak, 78 pcs. hewn elm, 29 pcs. hewn ash, 72 pcs. hewn birch, 6,650 deals and ends, 59 pcs. hickory. Exalona, from Montreal, 3,308 deals, 307 deal ends.

LIVERPOOL.—Lake Ontario, from Montreal, 8,082 deals, 4,149 boards. Sardinian, from Montreal, 761 deals. Trust, from West Bay, N. S., 13,799 deals and battens, 1,405 deal ends, 86 scantlings, 468 deals. Toronto, from Montreal, 19,635 deals, 2,490 boards, 106 deal ends. Puertoriqueno, from St. John, 33,525 deals and battens, 4,313 boards, 1,023 birch planks. Parisian, from Quebec, 1,854 pine deals. Sariva, from Montreal, 7,274 pine deals, 789 spruce deals. Hugo, from St. John, 784 stds. deals, 44½ stds. ends. Valona, from Richibucto, N.B., 29,879 deals and ends. Lake Superior, from Montreal, 2,686 deals, quantity deals, boards and ends. Capulet, from Miramichi, 71,977 deals and battens. Valona, from Richibucto, 2,987 deals. Bertie Biglow, from St. John, 17,459 deals and battens, 414 scantlings, 8,077 deal ends, 473 boards, 863 pcs. birch. Circassian, from Montreal, 2,377 sidings, 6,922 deals. Oregon from Montreal, 16,948 deals, 8,097 deal ends, 3,386 boards, 2,329 pcs. elm. Enrique, from St. John, 40,814 deals, 1,816 scantlings, 9,263 deal ends, 4,860 boards, 530 birch planks. Saturnina, from St. John, 53,963 deals and battens, 7,502 boards, 3,468 scantlings, 12,154 deal ends. Lennil, from St. John, 828 pcs. birch, 17,563 deals and battens, 76 scantlings, 3,714 ends, 2,933 deal ends. Lake Ontario, from Montreal, 5,001 deals, 14,181 pcs. lumber, 2,391 boards, 39 scantlings. Cassius, from Quebec, 14,322 spruce deals and ends, 1,127 pcs. waney white pine, 505 pcs. square white pine, 71 pcs. red hickory, 110 logs ash. Kanoma, from Richibucto, 35,399 fir deals and ends, 6,610 palings. Sardinian, from Montreal, 874 pine deals. Benan, from Chatham, N.B., 48,102 deals, boards and ends. Nikana, from St. John, 28,661 deals, 901 scantlings, 4,141 ends, 1,890 boards. Polynesian, from Montreal, 1,163 pine deals. Montreal, from Montreal, 6,957 deals and ends, 461 deals, 9,921 boards. Lake Nipigon, from Montreal, 3,328 boards, 4,423 deals. Lake Huron, from Montreal, 9,528 deals, 5,522 boards. Vestfold, from Chatham, N.B., 550 deals, 657,700 palings. Northumbria, from Quebec, 182 pcs. oak. 56 pcs. elm, 1,093 pcs. white pine, 4,505 spruce deals, 1,600 spruce ends. Vancouver, from Montreal, 11,035 deals, 12,250 boards, 7,575 deals and ends. Vanduora, from Quebec, 79 logs oak, 100 logs elm, 193 pcs. red pine, 1,329 pcs. white pine, 3,212 pine deals, 3,625 pine deals and ends. Canopus, from Montreal, 5,210 boards, 1,882 ends, 21,712 deals. Capenhurst, from Miramichi, 21,431 deals and ends, 10,000 fir palings.

LONDON.—Pomeranian, Montreal, 6,404 deals. Grassbrook, from Montreal, 11,731 deals, 399 ash planks, 5,766 staves, 1,215 deal ends. Nestorian, from Montreal, quantity lumber, 3 pcs. wood. Ulunda, from St. John, 11,594 deals, 40 stds. deals. Assyrian, from Montreal, 320 pcs. oak. 179 pcs. lumber, 10,017 deals. Freidrich, from Quebec, 46,168 deals, 3,093 ends. Corin, from Quebec, 30,995 deals, 1,803 ends. Fremona, from Montreal, 818 pcs. lumber, quantity of basswood boards, 7,735 deals.

LONDONDERRY.—Semaria, from Quebec, 5 pcs. hewn oak, 30 pcs. hewn elm, 2 pcs. hewn ash, 10 pcs. hewn birch, 377 hewn fir, 15,599 deals. Ellida, from Quebec, 830 pcs. sawn fir.

LLAANELLY.—Camilla, from Pictou, N.S., 6,544 pcs. birch and sawn fir.

PLYMOUTH.—Valborg, from Quebec, 23 pcs. elm timber. Canova, from Quebec, 467 pcs. hewn oak, 1,087 pcs. hewn fir, 2,488 pcs. sawn fir.

SUNDERLAND.—Erminia, from Quebec, 577 pcs. hewn fir, 719 deals.

SWANSEA.—Spes and Fides, from Shediac, N. B., 10,305 pcs. sawn fir. Medusa, from Yarmouth N.S., 15,425 deals, 994 ends. Medusa, from Yarmouth, 5,160 sawn birch timber.

TRALEE.—Parima, from St. John, N.B., 10,800 deals.

WESTPORT.—Eglfeden, from St. John, N.B., 8,504 deals.

YARMOUTH.—Budstikken, from Montreal, 5,991 deals and ends, 5,726 deal boards. Lydia, from Quebec, 13,314 deals and ends.

THE NEWS.

QUEBEC.

—The E.B. Eddy Manufacturing Co., of Hull, is now manufacturing vessels from sawdust capable of resisting fire. Sawdust and mill refuse will soon become an important commodity.

—The bad feeling which has prevailed for some weeks past between the French and English-speaking workmen employed by Hurdman & Co., of Hull, culminated in a free fight a few nights ago among the hands. Over one hundred men participated in the *fracas*, and quite a number were injured by being struck with sticks and stones.

—The saw mills belonging to the E. B. Eddy Manufacturing Co., of Hull, have suspended operations owing to the want of logs. The transfer of Messrs. Hurdman & Co.'s Magnissippi limits to the above company has been made. The price paid as stated in the deed of transfer was $320,000. The general impression among the lumbermen is that the Eddy company have secured one of the best pieces of pine country in the Ottawa valley. The company intend only working their new limit for logs. No square timber will be taken out.

MANITOBA AND THE NORTH-WEST.

—Mr. Morden has opened a lumber yard at McGregor.

—A. H. Van Etten has opened a lumbed yard at Winnepeg.

—Walker's lumber yard at St. Boniface has been sold by the bailiff.

—Prominent Michigan lumbermen are exploring the timber limits to the north of Calgary, N. W. T.

—Mitchell has sold out his lumber business at Brandon, and contemplates starting a yard at Douglas.

—The traffic on the Selkirk branch of the C.P.R. is very heavy at present, largly owing to shipments of lumber from the Lake Winnipeg mills.

—The lumber cut on Lake Winnepeg this season is placed at about 7,000,000 feet, valued at $13 per thousand feet. A considerable quantity of ties have also been cut on the lake.

—The Alberta Lumber Co., who have had their machinery on the ground for the past year, are now putting up their saw mill at Little Red Deer, and expect to commence operation soon.

—A patrol of mounted police will be placed along the south boundary of Manitoba to put a stop to the wholesale stealing of timber and evasions of Custom duties thereon by residents of Dakota.

—The demand for lumber throughout Manitoba still keeps up well, and manufacturers are generally behind with their orders. If the present movement continues long the mills will shut down for the winter with very light stocks, and by spring lumber will be a scarce article. Prices hold stiff at list quotations as follows : Dimension—2x4 to 12x12, 12 to 16 ft. long, $15 ; do 10, 18, and 20 ft long, $16. Fifty cents per M advance on each foot over the above length up to 24 feet long. One dollar per M advance on each foot over 24 feet long. $1 per M advance on each inch over 12 inches surface. Surfacing, 50c. per M ; Surfacing and sizing, $1.00 per M. Boards—1st, common, rough, $16.50, dressed, $17.50 ; 2nd common, rough $15, dressed, $16 ; Culls, rough, $11 ; dressed, $12 ; 1st common, stock, 12 in, rough, $19, dressed $20 ; do, 8x10 inch, rough, $18, dressed, $19 ; 2nd common, 12 in, rough, $17 ; dressed $18 ; do, 8x10 inch, rough, $16, dressed, $17. Ten feet long and under, $1 less per M. Shiplap—10 inch, $17.50 ; 8 inch, $17. 8 and 10 inch flooring and siding at $1 per M advance. Siding, ceiling and flooring—1st, 6 inch, $29 ; 2nd, do, $25 ; 3rd, do, $21 ; 4th, do $18 ; 1st, 5 inch, $29 ; 2nd, do, $25 ; 3rd, do, $20 ; 4th, do, $17 ; 1st, 4 inch, $29 ; 2nd, do, $25 ; 3rd, $19 ; 4th, do, $16. $1 per M advance for dressing on both sides. $1 per M less for lengths 10 feet and under. Bevel siding—No. 1, 1st siding ½ in x 6 in, $20 ; No. 2, do $17. Stock—B, $35 ; C, $30 ; D, $25. Clear, 1 inch—1st and 2nd, $32 ; 3rd, $28. 1¼, 1½, and 2 inch—1st and 2nd, $40 ; 3rd, $35 ; selects, $30 ; shop, $25. Mouldings—Window Stops, per 100 feet lineal, 75 cts. ; Parting Strips, do, 50 cts. ; ¼ round and cove, per 100 feet lineal, 60 cts. Casing—4 inch, O. G., per 100 feet lineal, $1.50 ; 5 in, do, $1.75 ; 6 in, do, $2 ; 8 inch, O. G., base, $3 ; 10 in, do, $3.75. Lath, $1.75. Shingles—1st quality, $3 ; 2nd do, $2.50 ; 3rd do, $1.50 ; 4th do, $1. Dealers are requested to order by number. No delivered prices.

BRITISH COLUMBIA.

—Messrs. Dunsmuir & Sons are building a large sawmill at Union Coal Mines, Comox, B. C.

—The first mill on the west coast of Vancouver Island will be erected by A. Broder & Co., of Morrisburg, Ont., who have purchased a large tract of timber land on Alberin Canal.

—Notwithstanding the recent death of Hon. J. G Ross, of Quebec, the Ross-McLaren mill project will go on. It is understood that the construction of the big mill at Warminster, B. C. will be commenced at once.

—For some time the saw mills located on the Rocky Mountains, on the line of the C. P. R., have complained of the high freight rates which have been charged on lumber shipped to the only available market in the Territories to the east. The C. P. R. have now made the following reduction in lumber from points named to Calgary: Pallester, from $18.50 to $16.50; Golden, from $20 to $17; Donald, from $22.50 to $18; Beaver Mantle, from $23 to $18.50; Six Mile Creek, from $23 to $16; Roger's Pass, from $24.50 to $20.50; Illicillewaet, $25.50 to $22.

—The Vancouver *News-Advertiser* says:—One of the things which causes much surprise to strangers visiting the various saw mills here when a vessel is being loaded with lumber for China, is the enormous length and size of many of the sticks of timber composing the cargo. In answer to enquiries many different explanations are given of the special uses to which these large pieces are put in China. The alleged reasons, however, are seldom accepted as satisfactory by persons who have been in the Celestial Empire, and who while not observing any structures in which timber of such large dimensions is used, have seen these large pieces quickly sawn up on their arrival. The real explanation of the peculiar character of the orders for lumber received from China will probably be found in the fact the customs duty there is levied on the piece and not by the foot or any other ordinary measure or quantity. The larger the individual piece of timber, therefore, the lower will be the amount of duty payable on it in proportion to the quantity of lumber it contains.

NEW BRUNSWICK.

—The work of engineering a dam building scheme for the relief of lumbermen on the St. John river, has been undertaken by Mr. Pond, of Sheer-boom fame. Lumbermen have been very much troubled by delays in getting their logs through Grand Falls, where the recent big jam was formed. It is probable that an improvement Company will be formed and incorporated to carry on the work.

AMERICAN.

—Thirty million trees have been planted in Kansas this year.

—The tendency in the shingle market is towards greater firmness in prices.

—Bush fires have again been doing great damage throughout the state of Michigan.

—The total cut of Muskegon, Mich., shingle mills this season will be about 430,000,000.

—Scarcity of cars for transporting lumber are reported throughout the different Western States.

—It is estimated that there is in the forests of Arkansas from $700,000,000 to $1,000,000,000 worth of lumber.

—It is thought that wages may be a little lower than last season as more labor is offering than there is a demand for.

—There is a noticeable dullness in the demand for walnut lumber, but it is said that holders of large stocks of dry lumber are not at all disposed to make concessions.

—The Tonawanda lumbermen are going to have a joint debate on the effect of the tariff on lumber. We may therefore expect to hear some startling revelations at an early date.

—There has been an evident disposition among lumbermen this year to push work in the woods as fast as possible before the winter fairly sets in. It is surmised, however, that the cut of logs will fall short of previous years.

—The collector of customs at Suspension bridge has been informed that the provisions of schedule D. T. J. new 219, imposing a duty of 50c per 1,000 feet on boards "planed or finished" applies to the number of feet board measure, and not surface measure, as held by the department's decision of April 8, 1879.

—The Michigan and Wisconsin lumbermen who have held on to their hemlock timber, are in a fair way to realize handsomely as a reward for their persistence and faith in the future of this most despised wood. Already the demand for the timber as well as for the bark is presenting itself from the east.

—An official report has been made of the amount of lumber surveyed at the port of Bangor, Me., from January 1 to October 1, 1888, as compared with surveys for the same period in the two preceding years. There were 13,919,320 feet of dry pine surveyed for the nine months, as compared with 12,193,552 feet for 1887, and 13,527,414 for 1886. In green pine the figures are 8,921,256 feet for 1888, 5,902,792 for 1887, and 6,000,906 for 1886. The showing in spruce was 82,558,919 feet for 1888, 75,327,306 for 1887, and 72,333,570 for 1886. In hemlock it was 13,411,240 feet for 1888, 12,778,953 for 1887, and 11,765,369 for 1886. The totals are 118,810,735 feet for 1888, 106,202,608 feet for 1887, and 103,527,159 feet for 1886. The increase over 1887 is in detail as follows: Dry pine, 1,725,768 feet; green pine, 3,018,459 feet; spruce, 7,231,613 feet; hemlock, 632,287, total, 12,608,127 feet. The total increase over the showing of 1886 is 15,283,576 feet.

EUROPEAN NOTES.

—An effort is being made in England to open up a market there for Australian hardwoods, and it will therefore not be welcome news to American lumbermen who are interested in the hardwood export trade.

—It is reported that an English company is in process of formation for the purpose of buying up several saw mills at Pensacola, Fla., and cutting yellow pine for the foreign market on a large scale.

—It is said that there is a shortage in stocks in Quebec pine timber in the English markets, and the prediction is freely made that the St. Lawrence river shippers will be practically masters of the situation during the rest of the season. A lack of vessel accommodation is likely to prevent the free shipment of stock, so that which is able to secure transportation will probably sell readily and bring good prices.

—An English journal states that timber rafts on the Rhine are often fully as large and valuable as the monster American log raft so much discussed of late. For instance, a raft went down the Rhine from Mayence to Holland which was 725 ft. long and 170 ft. broad. It carried a crew of 120 hands, housed in some dozen huts along the raft, and the timber was worth $20,000.

PERSONAL.

Jonathan Francis, a lumber merchant of Pakenham, Ont., is dead. He was immensely wealthy.

Mr. Joseph Oliver, of the firm of Donogh & Oliver, wholesale lumbermen, of Toronto, has recently returned from a visit to the Pacific coast. He was very much impressed with the timber resources of British Columbia and Alberta.

Messrs. Tennant & Co., the well-known wholesale lumber firm of 9 Victoria street, Toronto, inform us that they have removed their business office to No. 3 Dock, foot of Bathurst street. Our readers should bear this in mind when anticipating a call.

Mr. Robert Moore, who has been representing Messrs. Christie, Kerr & Co. at Gravenhurst for some years past, has severed his connection with that firm and expects to leave for Carahell, Florida, the early part of this month. He has accepted a similar position with a lumber firm at that place. Mr. A. O. Symington, lately in the employ of Messrs. Thomson & Baker, is also about leaving for the same place. The LUMBERMAN extends to them its best wishes for their future success in the warmer clime to which they are going.

By the death of the Hon. James G. Ross Canada loses one of its wealthiest and best known lumbermen and merchants. He has been connected financially or otherwise with almost every business house in the timber trade, either as manufacturer, millman or merchant, exporter or lumberman, during the past two generations. His principal office was in Quebec, but his interests were very much scattered. He was president of the Quebec Bank, a member of the Senate of Canada, and held many other important offices. Owing to delay in securing an engraving of the Hon. gentleman which was intended for this issue, we will hold over our more extended notice until next month.

It is rumored in official circles that Mr. R. R. Dobell, Quebec's leading lumber exporter, and son-in-law of Sir David Macpherson, will receive the Senatorship left vacant by the death of the late Hon. J. G. Ross. The name of Mr. E. K. Price, the surviving head of the great firm of Price Brothers, is also mentioned as a possible candidate for the seat, as the division represented by the late Mr. Ross, the Laurentides, embraces the region from which the Prices have taken their title of "Kings of the Saguenay." Moreover, Mr. Price's brother, the late Hon. David Price, was Mr. Ross' immediate predecessor in the Senate.

We had the pleasure of a call some days ago from Mr. A.W. Spooner, of Port Hope, patentee and manufacturer of Spooner's celebrated Copperine for making journal bearings. By indefatigable energy and the assistance of an article which recommends itself wherever used, Mr [illegible] his goods into almost every manufacturing [illegible] Dominion. No better evidence of the superi[illegible] of Babbit metal could be found than the very [illegible] tion given it by Mr. John [illegible] Toronto Water Works, who has been [illegible] bearings and crank pins. Two tho[illegible] was used in connection with thes[illegible] in Canada. A testimonial of th[illegible] no user of machinery should fail to avail [illegible] uable composition. Enquire of your hardware dealer for Spooner's Copperine.

FIRE RECORD.

F. W. Beckman's lumber mill at Beaver Bank, N. S., w[illegible] destroyed by fire recently, together with a large [illegible] lumber.

A blaze took place on Oct. 12th in the sawm[illegible] lumber yard belonging to John Ashcroft, at Wiarton, On[illegible] The loss was not very heavy.

The sawmill and machine shop belonging to Mr. H. A Calvin, at Garden Island, near Kingston, Ont., were destroyed by fire the latter end of September. The loss amounts to about $20,000 with small insurance.

On October 5th sixteen lumber piles belonging to Mr. J. R. Booth, were destroyed by fire at Rochesterville a suburb of Ottawa. The loss is variously estimated at between $2,000 and $3,000, with insurance distributed over a number of companies.

CASUALTIES.

Two men lost a thumb and finger respectively a few days ago in the Dickson company's saw mill at Peterborough, On

John Taylor, an employee of the Rathbun Co., at Campbellford, was killed recently while shunting a car of coal.

Geo. Golding, 60 years of age, fell on a rotary saw in Jordan & Stetson's mill, St. John, N. B., and was alm[illegible] two. Death was instantaneous.

An employee of R. Hurdman & Co., at Ottawa was found some days ago lying unconcious, having, it is surmised, been almost beaten to death by some person or persons unknown.

During the early part of October a young man named Gauther, from Vaudreuil, Que., was almost crushed to death by a falling pine tree in the bush at La Ferne des Pi[illegible]s, near Buckingham. The poor fellow had to be carried 32 miles on a litter before receiving medical aid.

A peculiar accident recently occurred at Ste Anne de la Perade, by which Louis Joseph Baribeau, a citizen of [illegible] place, lost his life. Mr. Baribeau, being in Mr. Rosseau's saw mill, was standing in front of a circular saw when a splinter violently projected struck him in the face. The fatal piece of wood not only destroyed one of his eyes, but sank deeply into his head, causing death in less than fifteen minutes after the accident. The deceased was a married man, father of four children, and a brother to Mr. Baribeau, advocate, of Three Rivers.

ITEMS OF INTEREST.

"Three-fourths of the moss on trees grows on the north side; the heaviest boughs on spruce trees are always on the south side; and, thirdly, the topmost twig of every uninjured hemlock tips to the east."

A new industry started in Maine, if carried on here would mitigate our destructive forest fires. The tops of pine and spruce trees left by the lumbermen are utilised. After removing knots and other objectionable portions, and steaming the remainder to extract resin, it is ground to pulp for paper, pasteboard, and the many other forms of the material.

A statement that has been going the rounds of the papers would appear worthy of investigation before being accepted as a fact, viz., that "dry rot" in timber is contagious, and can be carried by saws and other tools which have been in contact with infected wood and thus vitate sound timber such tools afterward come in contact with.

American yellow pine, laid upon a foundation of concrete, is considered one of the best street paving mediums at present used in Germany. Employed alone or in combination with cypress it has proved more durable than granite blocks laid at the same time and in like situations.

CROWDED OUT.

A large amount of interesting matter has been unavoidably crowded out of this issue. The size of the LUMBERMAN will be materially increased next issue to allow of a larger amount of reading matter. We trust our readers, and especially those who are particularly interested in some reports not appearing in this issue, will accept our excuses.

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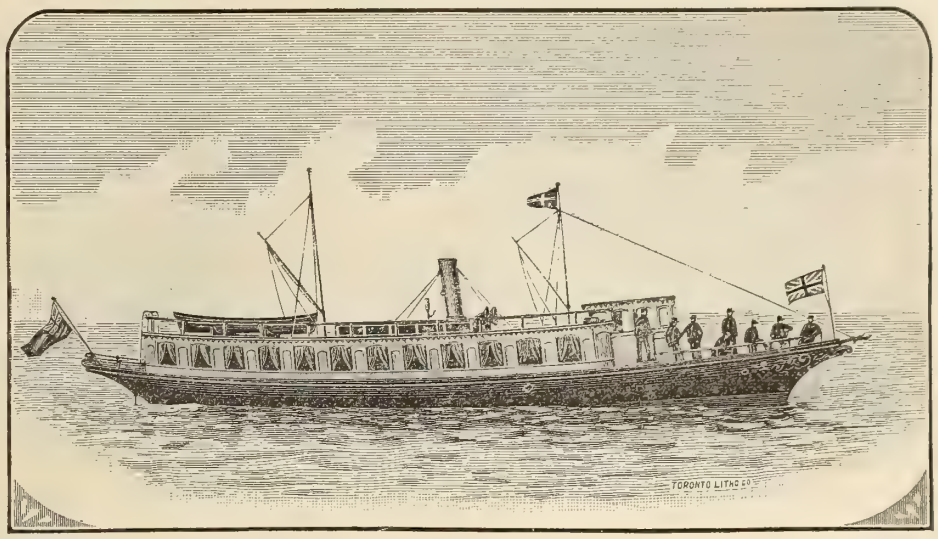

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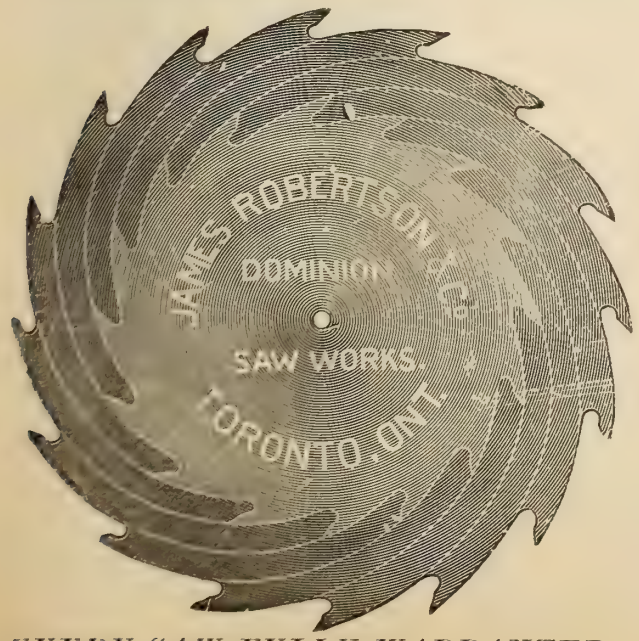

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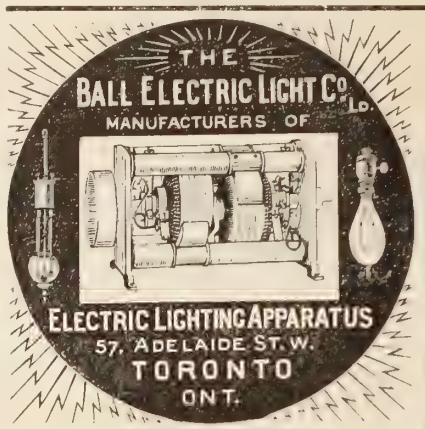

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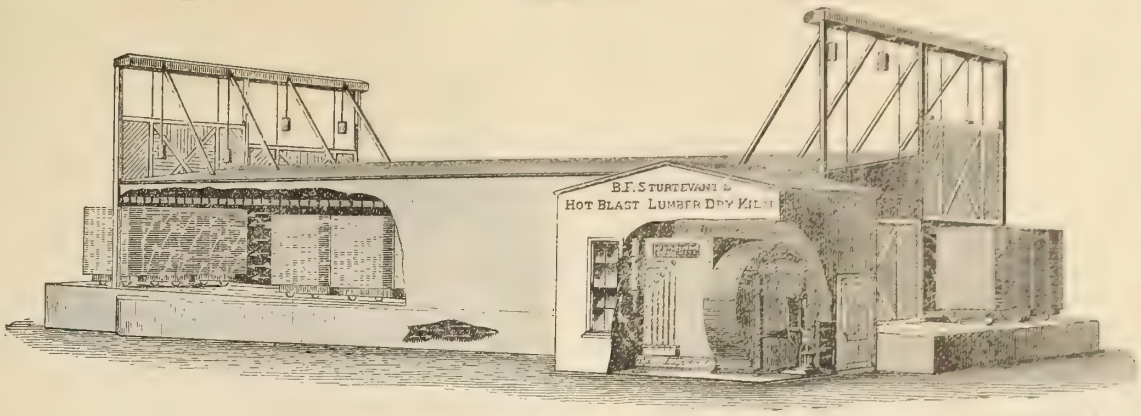

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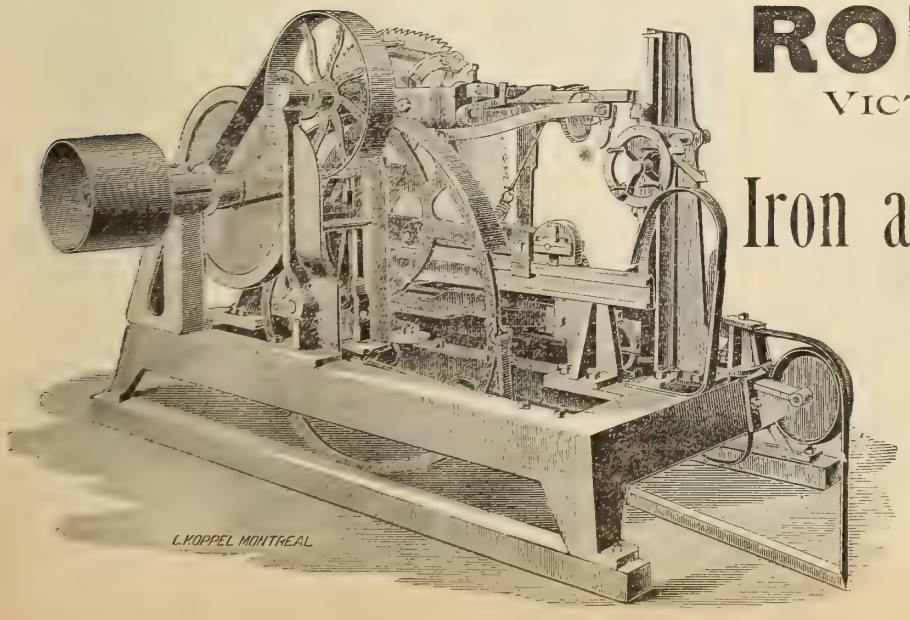

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ONE Goldie & McCulloch Hall self-acting shingle machine.
ONE self-acting shingle machine, Green Bros. make.
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ONE Eureka self-acting shingle machine and jointer, I. Frenchette, maker, St. Hyacinthe, P. Q.
TWO Doherty hand swing machines.
ONE upright swing, with 40-inch saw.
EIGHT wheel jointers, various makers.
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ONE new eclipse planer, matcher and moulder, Galt make.
ONE 24-inch planer and matcher. Picton make.
TWENTY-inch planer and matcher.
EIGHTEEN-inch planer and matcher.
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NEW Economist 24-inch planer and matcher.
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Guaranteed to Saw Lumber Perfectly Smooth and Even in thickness.

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REFERENCES BY PERMISSION.—Simeon Jones, Dominion Commissioner to the Argentine Republic, St. John N.B.: Nicol Kingsmill Consul to the Argentine Republic, Toronto; W. B. Hamilton (of W. B. Hamilton, Son & Co.); Hon. Frank Smith (of Frank Smith & Co.); W. R. Brock & Co.; Wyld, Grasett & Darling; Smith & Keighley; Eby, Blain & Co., Toronto; Hon. James Turner (of James Turner & Co.,) Lieut.-Col. J. M. Gibson, M.P.P. Hamilton; Wm. Darling & Co., Montreal.

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They are tempered by the Simonds Patent Process, insuring [illegible] throughout the plate, and stand without a rival as the best, fastest and easiest-cutting Saw known. *For Sale by the Trade generally.*

THE VERDICT

OF

Engineers and Saw Mill Owners, after using our Crown Lubricants the whole season, is fitly expressed by one of them as follows :--

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"We couldn't do without it."

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Correspondence solicited. Shafting and Engine Cups supplied. We Manufacture a full line of Oils for all purposes.

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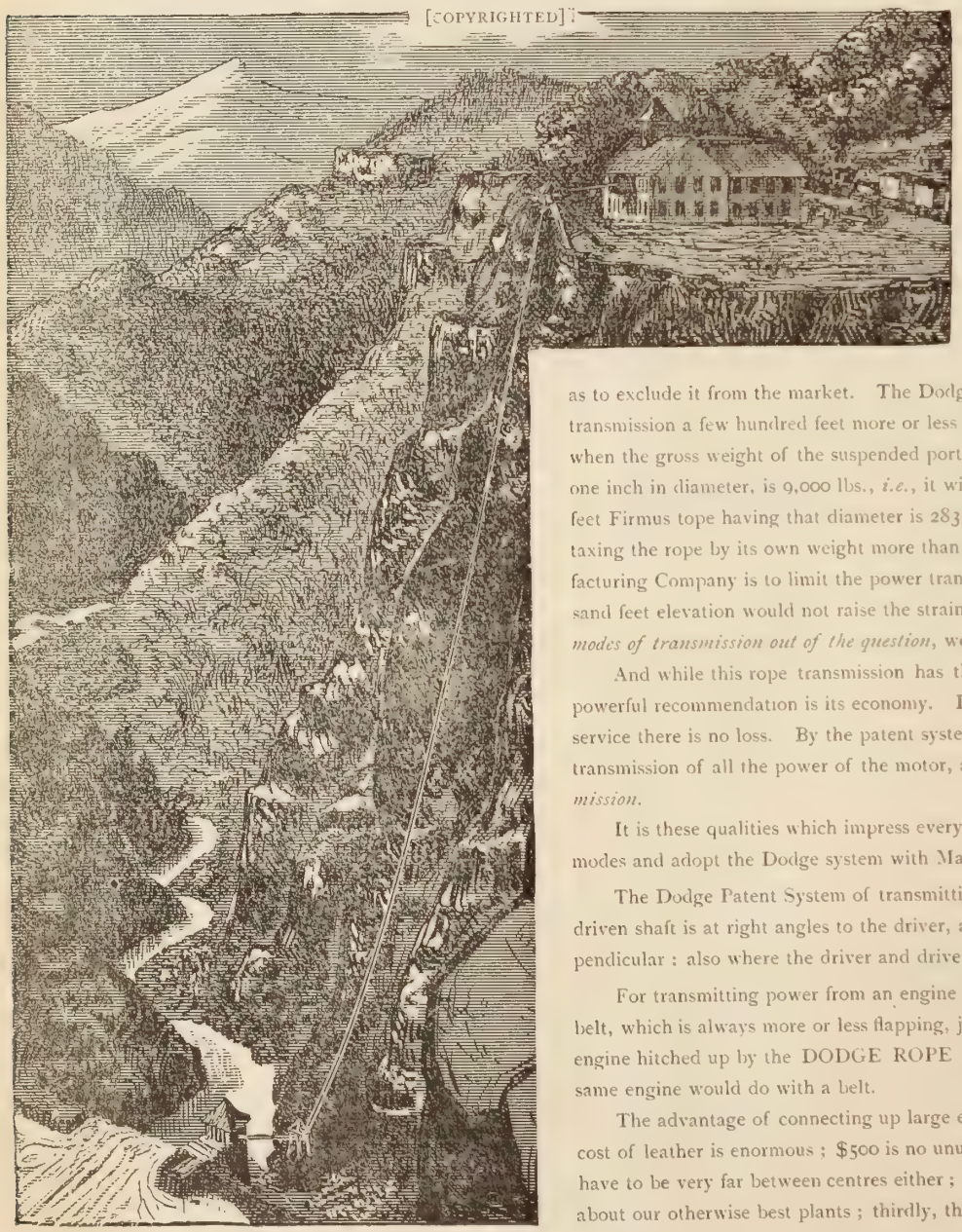
TRANSMITTING POWER BY ROPES GROOVED WOOD PULLEYS

The purpose of this cut is to illustrate the possibility of carrying power upwards to a great height by the

DODGE SYSTEM OF POWER TRANSMISSION BY MANILLA ROPES AND GROOVED WOOD PULLEYS

THIS SYSTEM WILL MAKE AVAILABLE MANY WATER POWERS NOW UNUTILIZED.



EVERY railroad which crosses a mountain divide avails itself of the precipitous sides of streams to find practicable grades to and from the summit levels. These streams often have considerable volume and rapid fall. The railroad is frequently at an elevation of several hundred feet above the water, with mountains behind, capable of furnishing inexhaustible supplies of raw material, mineral or vegetable.

Heretofore the utilization of such material near the place of supply has generally been impracticable, because of the impossibility to transmit the power of the stream up the mountain side to the neighborhood of the means for transportation. In such a case as that represented, however abundant may be the raw material, the cost of sending it down to the water level, and returning the manufactured article to the level of the railroad, might easily so handicap the product as to exclude it from the market. The Dodge system, however, renders it possible to laugh at difficulties such as this. To this transmission a few hundred feet more or less is of no moment. A rope suspended in the air will break near the upper support when the gross weight of the suspended portion exceeds the tensile strength of the rope. The tensile strength of Firmus rope, one inch in diameter, is 9,000 lbs., *i.e.*, it will break only when the suspended load amounts to 9,000 lbs. The weight of 1,000 feet Firmus tope having that diameter is 283 lbs., and therefore a vertical elevation of 1,000 feet might be overcome without taxing the rope by its own weight more than a trifle over 3 per cent. of its strength, and as the general practice of Dodge Manufacturing Company is to limit the power transmitted to about 5 per cent. of the breaking strain, it is evident that even a thousand feet elevation would not raise the strain to the vicinity of the danger limit, and an elevation which would put *all other modes of transmission out of the question*, would really not make a difference with *this* transmission worth noticing at all.

And while this rope transmission has the wonderful adaptibility shown in the illustrations heretofore published, another powerful recommendation is its economy. Its first cost is a tithe of the cost of any other Transmission, and after being put to service there is no loss. By the patent system of Dodge Manufacturing Company, the rope runs *without slip*. This means a transmission of all the power of the motor, and from 20 to 25 per cent. more than can be secured *by any other system of transmission.*

It is these qualities which impress every power user, and which has caused many large establishments to discard all other modes and adopt the Dodge system with Manilla Rope.

The Dodge Patent System of transmitting power by ropes is cheaper and superior to belts in many cases, such as where the driven shaft is at right angles to the driver, also where the drive is perpendicular, particularly when it is quarter twist and perpendicular : also where the driver and driven are close together ; also for long drives, such as across a street or a stream, etc.

For transmitting power from an engine to the line shaft, this system is unequalled : steady all the time, not like a heavy belt, which is always more or less flapping, jerking and stretching, then slipping and losing power. It is safe to say that an engine hitched up by the DODGE ROPE SYSTEM will do 25 per cent. more work on the same consumption of fuel than the same engine would do with a belt.

The advantage of connecting up large engines in this manner cannot be too highly recommended. In the first place, the cost of leather is enormous ; $500 is no unusual sum for an engine of three or four hundred horse-power, and the pulleys do not have to be very far between centres either ; in the second place, the noise at high pressure is terrific, and is the worst feature about our otherwise best plants ; thirdly, their weight is quite a factor ; fourth, they require attention that a rope does not ; fifth, it requires a man in the business to put one on right, and sometimes they don't always do it right ; sixth, any deviation out of line of the shafting affects the belt, while it has no effect on a rope.

The above points, to say nothing of the first cost, which would be about one-thirtieth part of leather, are enough to banish the leather belt for main driving into everlasting oblivion, especially in the minds of those that have had experience with large leather belts.

The fact alone that by raising the tention wheel the engine can be turned round by hand for repair or adjustment is enough to endorse it in the minds of those who have had to do a little pulling on a fly-wheel with the entire shop hitched on.

For estimates of cost and all information relating to this system of transmitting power by ropes, apply to the undersigned, who also manufacture the best belt pulleys in the world.

THE DODGE WOOD SPLIT PULLEY COMPANY,

89 Adelaide Street West, Toronto, Ont.

THE CANADA LUMBERMAN.

VOLUME VIII. NUMBER 12. PETERBOROUGH, ONT., DECEMBER, 1888. TERMS, $1.00 PER YEAR. SINGLE COPIES, 10 CENTS.

THE CANADA LUMBERMAN

PUBLISHED MONTHLY BY

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Advertising Rates Furnished on Application.

THE CANADA LUMBERMAN is published in the interest of the lumber trade and of allied industries throughout the Dominion being the only representative in Canada of this foremost branch of the commerce of this country. It aims at giving full and timely information on all subjects touching these interests, discussing these topics editorially and inviting free discussion of them by others.

Especial pains are taken to secure the latest and most trustworthy market quotations from various points throughout the world so as to afford to the trade in Canada information upon which it can rely in its operations.

Special correspondents in localities of importance present accurate report not only of prices and the condition of the market but, also of other matters specially interesting to our readers. But correspondence is not only welcome but is invited from all who have any information to communicate or subjects to discuss relating to the trade or in any way effecting it. Even when we may not be able to agree with the writers we will give them a fair opportunity for free discussion as the best means of eliciting the truth. Any items of interest are particularly requested for even if not of great importance individually they contribute to a fund of information from which general results are obtained.

Advertisers will receive careful attention and liberal treatment. We need not point out that for many the CANADA LUMBERMAN with its special class of readers is not only an exceptionally good medium for securing publicity but is indispensable for those who would bring themselves before the notice of that class. Special attention is directed to "WANTED" and "FOR SALE" advertisements which will be inserted in a conspicious position at the uniform price of ten cents per line for each insertion. Announcements of this character will be subject to a discount of 25 per cent. if ordered for three successive issues or longer.

Subscribers will find the small amount they pay for the CANADA LUMBERMAN quite insignificant as compared with its value to them. There is not an individual in the trade or specially interested in it, who should not be on our list thus obtaining the present benefit and aiding and encouraging us to render it even more complete.

INSTRUCTIONS have been issued from the Department of Inland Revenue that hereafter no lumber which has passed through the Ottawa or Lachine river canals shall be delivered up unless a *bona fide* check, properly endorsed by the owner himself, is presented. The change is evidently aimed at the middlemen, who it is said have been profiting largely out of the old arrangement. Heretofore anyone having a specification and filing it at the office, provided the dues were paid, could have the lumber delivered up to them. Bankers assert that the risk has become too great for them and have accordingly strongly advocated the change referred to.

THE London *Times* furnishes some interesting statistics as to the frightful consumption of wood used as sleepers for railway tracts, and points to its figures as a strong argument in favor of the employment of metal sleepers. It appears that the six principal railway companies of France use more than 100,000 sleepers per day, or 3,650,000 per annum. As a tree of the usual dimensions will give only ten sleepers, the railways in question require 1,000 trees per day for sleepers alone. In the United States the consumption is much greater, amounting to about 15,000,000 sleepers a year, which is equivalent to the destruction of about 170,000 acres of forest. The annual consumption of sleepers by the railways of the world is estimated at 40,000,000, and this is probably less than the actual number. The *Times* remarks: "From these figures the rapid progress of disforestization will be understood, and it is certain that the natural growth cannot keep pace with it. Hence we have had during the last quarter of a century the frequent inundations and changes in atmospheric condition." It would be interesting to calculate how much wood is annually wasted in Canada on sidewalks, block pavements, telegraph and telephone poles, and general railway work. The figures we fancy would startle those who have been advocating greater conservatism in the ultilization of our timber resources. It is of course to be noted that for all the purposes mentioned wood is needlessly and unprofitably used.

THE competition of the work by which the Lake St. Peter channel between Quebec and Montreal has been deepened to permit the passage of vessels drawing twenty-seven and a-half feet has been celebrated by a formal opening. This improvement is one of considerable interest for the trade. From the recurrent troubles at Quebec and other causes the practice has been increasing of loading timber and lumber at Montreal instead of at the ancient capital as formerly. The improvement and deepening of the channel between the two cities will have a strong tendency to attract vessels to Montreal. This will not only be a convenience to the trade desiring to ship from that port and tend to keep down freights, but it will also have a beneficial influence in the port of Quebec, confirming them in the better ways under the new regulations that have been adopted, and leading to further improvements in the same direction. This increase of competition and extension of shipping facilities in the St. Lawrence ports cannot fail to be beneficial.

THE appointment of a committee by the lumbermen's branch of the Toronto Board of Trade to present their grievances between the Council of the Board and obtain the co-operation of that body is a sensible step towards obtaining a very important object. That object is to obtain from the Grand Trunk and other railways a change in their methods which are felt to be unfair and prejudicial to the trade. The foremost grievance is that lumber being loaded on flat cars is often exposed for considerable periods unprotected to rain, snow and ice by which its weight is considerably augmented, and as it is weighed at the point of delivery instead of the point of shipment, freight has to be paid on this not beneficial addition of so much water. It is claimed that the weighing should be done at the point of shipment. A further grievance is that the joint classification tariff is unjust, as it assumes that certain quantities of lumber will have so much weight, when as a matter of fact they do not weigh so much as is thus assumed. There are also complaints of a great shortage of cars said to be otherwise employed. These and minor grievances are now in a fair way to be forcibly presented with the weight of combined action and there is a better prospect of obtaining redress than by individual remonstrances.

THE great advance in ocean lumber freights during the past year is given a striking illustration by the River Platte business. Twelve months ago the rate on lumber from Portland, Me., to Buenos Ayres ruled at $9.50 per M. with an increase of $1.50 per M. to Rosario or other up river ports. On August 24, 1888, there was an advance to $13 to Buenos Ayres. The following week brought the figures at $13.50 and a week later to $13.75. Now, $13.50 is freely offered to load for Montevideo for orders, and if ordered from that port to Buenos Ayres $14.50 is paid. The rate to Buenos Ayres direct is $14 and to Rosario $15.50. Even with such rates as here quoted the placing of orders is very difficult, and the Boston *Post* says one Boston firm has orders for twenty million feet of lumber on hand at the present time and is experiencing much difficulty in securing transportation for any portion of it. It had been supposed that many large coasters engaged in the coal trade would be induced to accept River Platte charters by the high rates obtainable, but the coal carrying trade has also enjoyed a most prosperous season, with a steady demand for vessels of both large and register, at very satisfactory rates. In other lines, too, the rates have advanced in proportion, and are steadily maintained.

IN the course of last month the choice of the President of the United States was virtually decided, for the proceedings of the electoral college have become a mere formality. Gen. Harrison will be enstalled next March and the Republicans have gained the day. Not only have they elected their candidate as President, but they have gained greater strength in both Houses of Congress if not the complete control, which is still uncertain. They will at least have greater power to carry any legislation they may propose than the Democrats have had for the last four years. This is a matter of interest to Canada, and especially to the lumbermen. Whether there will be any important change in the tariff or what direction it would take no man can foretell. The Democrats talked of taking off the duty on lumber, [illegible] unanimous, and the Re[illegible] It is of some significance that in more than [illegible]ne R[illegible] procession during the compaign might [illegible] "no free lumber." Mr. Blaine too, the great [illegible] leader, in addressing audiences in lumbering districts in Maine spoke to the same effect. There seems therefore [illegible] bability, if there ever was any, of a remission of the duty. As to the larger question of reciprocity some of the Republican organs and speakers, notably Mr. Blaine, have declared that Canada should not enjoy their markets unless it became part of the United States, but of course in politics no such declarations are final. There seems to be no immediate probability of a change.

THE invitation that has been extended by the Canadian authorities to delegates from the Australasian colonies to [illegible] Ottawa for a conference of the best means of exter[illegible] making closer their commercial relations and kindred [illegible] is a wise step and one that should [illegible] Our trans-continental line of railway, the [illegible] is being established with the ass[illegible] [illegible] grants, the contemplated cable beneath the Pacific ocean and the proposed reduction of postage, are all steps to bring Canada and Australasia practically closer together and to open their markets to each other. A large proportion of the imports into the Australasian colonies consists of articles that Canada could very well supply though at present they are obtained from foreign countries. The Australian forests are chiefly hardwood and in any of their journals it will be seen that they rely chiefly upon "Norway pine" and "Oregon pine." Why should not Canadian pine almost wholly replace these foreign woods? The quality is at least equal if not superior, the distance is shorter and soon there will be far better facilities for communication. Already there has been of late a considerable impetus given to exportation of timber and lumber from British Columbia to Australia with a strong tendency to a further increase of this trade. Full advantage should be taken of the improved facilities that are being provided or are foreshadowed for the near future, and the visit of the Australian delegates should be utilized to the utmost to promote an intercolonial commerce of which the trade in timber cannot fail to be one of the most important branches. The members of the trade should organize to see that their interests are duly represented and their views adequately expressed at this important conference.

MESSRS. PAQUETTE, whose lumber yard and sash and door factory at Montreal, were recently destroyed by fire with a reported loss of $75,000, uninsured, are taking the matter into court. They claim that the city should reimburse them on account of alleged insufficiency of the water supply, the machinery and the fire brigade to protect the property from destruction by checking the fire. As having a bearing on this question of the responsibility of the corporation it may be remarked that the city of Montreal is not contending that the fire insurance rates should be reduced in compliance with an agreement to that effect when the protection against fire should be rendered effective. The underwriters, however, decline to make the demanded reduction at present on the ground that the city had not yet complied with the conditions as to the efficiency of the means to prevent fires. If the proceedings of Messrs. Paquette are pressed in the courts this question of the efficiency of the fire protection and the responsibility of the municipality will receive a thorough ventilation. The proceedings and their results will be watched with great interest by many in the timber trades, who feel that while they are called upon to pay heavy municipal taxes they do not obtain in return that adequate protection for their property which they think they have a right to expect for their contribution to the municipal exchequer. Then, again, when they complain of the oppressive insurance rates on their property they are told by the underwriters that the neglect of the municipalities to render their means of fire protection effective necessitates the maintenance of high rates to cover the risk. A stirring up of the whole question in the courts will not be amiss.

REFERRING to the sawdust question and the report upon its accumulation made under the auspices of the Dominion Government, the *Northwestern Lumberman* says. "The fact about sawdust is that it will stay where it collects unless there is something to disturb it, being very different from sand in respect to shifting ; and experience has demonstrated that it will remain a long time in water without decomposing. Damaging effects from its accumulation cannot always be staved off. But the mill men of the Ottawa valley seem to be placed between two fires—the Government is complaining about the practice of dumping sawdust in the river, and the Canadian insurance companies, for some unexplained reason, object to the use of sawdust as fuel. Judging from the practice this side the line, there is no good reason why they should. If proper piping and care is used in conveying sawdust to the furnace or the refuse burner, there is no extra hazard, and if the American insurance companies object seriously to such risks sawdust would not be used for fuel in the states so universally as is the case. Saw mills, planing mills and other wood-working establishments burn sawdust, shavings, etc., right along, and they appear to get all the insurance they want.

THE annual report of the division of foresty of the United States Department of Agriculture, recently issued, contains some interesting information. The import duty laid upon manufactured lumber in 1872 had the effect at first of decreasing importations from Canada by from 50 to 60 per cent. until 1876-77 when an upward tendency of imports began. A comparison of the imports of the last three years with those of the preceeding three, shows a noticeable decline in all classes of foreign products from the amounts to which they had gradually increased up to 1884, when the importation of manufactured lumber reached nearly the same amount that was imported in 1872. For the decrease in unmanufactured wood now, the Canadian export duty of $2 on logs may serve as an explanation, but causes must have worked to effect the reduction of manufactured lumber in the face of decided enhancement of value of product. The difficulty of access and interested distance from the market is probably the explanation. It is suggested that, so far as the saving of standing supplies is concerned, there need to be no fear or hope from foreign competition, for the "quantity of standing pine in the United States and Canada is reduced to a condition of absolute control ; it is held in strong hands on both sides, and will not be lightly frittered away."

THE CANADA LUMBERMAN closes a record of eight years existence with the current issue. Since the present management assumed control a strong effort has been made to raise THE LUMBERMAN to the front rank of Dominion trade journals. How far we have succeeded in accomplishing this object our many readers are left to judge. Commencing with Vol. IX we have decided to largely augment our correspondence department by engaging the services of thoroughly reliable and practical correspondents at the following points throughout the Dominion : Toronto and Ottawa, Ontario ; Montreal and Quebec, Quebec ; St. John, N.B. ; Halifax, N.S. ; Winnipeg, Man. ; and New Westminister, B. C. We trust that we will receive applications to fill these positions from some of the most practical and able writers in the lumber trade. The editor will look to each correspondent to faithfully report all matters of news pertaining to the lumber and wood-working industries throughout his division, and discuss all matters within his knowledge affecting the lumber interests. As liberal terms as possible will be allowed those whom the editor may select to carry on the work, and it is sincerely hoped that the trade in general will further our efforts by extending as liberal a financial support to the LUMBERMAN as possible during the year 1889.

THE export duty on saw logs has been raised by order-in-council, as authorized by statute, from two to three dollars a thousand. This was no doubt considered necessary to check the increasing export from Georgian Bay and especially the very large increase that was evidently contemplated. For instance the Saginaw Lumber & Salt Co. had just been reported as having purchased three timber berths on Spanish River from which they expected to cut two hundred million feet to be rafted in the log to their mills near Saginaw city. A subsequent report from East Saginaw stated that it had been anticipated that a hundred and fifty million feet of logs would be brought to the river from the Georgian Bay next season, and that the raised duty had caused a trade for two hundred million feet to be declared off. It is indeed well known that the Michigan lumbermen have been making very extensive investments in Canadian pine to supply their mills with logs. There will now, however, be less inducement for them to operate in this manner, and if they want to use Canadian logs they will have to erect mills in this country. This is only fair so long as they have the benefit of their own import duty of two dollars a thousand on our lumber. The Michigan lumbermen are very much disgusted and threaten to use all their influence to procure an increase of the United States import duty on lumber in order to console their disappointed hopes. In this, however, they are not likely to be successful, for there are also important interests in the country which are eager to see the duty on lumber reduced or removed and they would protest very strongly if instead of a reduction there were an increase.

JUST as the November issue of THE LUMBERMAN was going to press word was received from Sault Ste Marie that the Spanish River Lumber Co. (Buswell & Co,) of Michigan, had failed, with liabilities $100,000. A week or so previous to this announcement one of the company's mills was burned on the Spanish River, the estimated loss being $40,000, without insurance. The Canadian Bank of Commerce was the largest creditor, being interested to the amount of $60,000, and they declined to carry the company's paper any longer. The authorities of this bank also suspected some fraud in connection with the recent fire, and accordingly had a warrant sworn out for the arrest of the principal of the defunct firm, F. E. Buswell, and placed it in the hands of a couple of officers to execute. They succeeded in serving the warrant at Spanish River. The prisoner insisted on dining before he left, and invited his captors to partake. They accepted, and while they were so engaged Mr. Buswell stepped outside to see a man, as he said, who happened to be on board the company's tug, which stood alongside with steam up. Mr. Buswell no sooner touched her deck that she cast off, and before the officers of the law had finished their meal, had him well on his way to his home across the lines, where he still remains and defies his would-be captors. The result of the failure of this firm will strike a heavy blow at the lumbering trade on the North Shore of Lake Huron. They had about 200 men in their employ, 150 of which were already in the woods at the time of the failure. It is stated that some of these men have so far trusted Buswell & Co. as to leave their wages with the firm, and in some instances as much as $500 has been deposited. The report that the burnt mill would soon be replaced by a new one is a mistake as the company has decided to tow its logs in the future to Detour or Cheboygan for sawing.

REFERENCE was made in our last issue to the case of H. R. Hazleton, of Michigan, which is now before the exchequer courts. This suit is attracting a great deal of interest in lumber circles as it will decide what constitutes dimension timber in the interpretation of the present customs laws of the Dominion. The minister of customs has filed his defense in the exchequer court as the Crown's defense. It reads as follows :

It is admitted that the claimant did, during the years 1883-1884, import into Canada from the United States a quantity of oak lumber and timber, but it is not aware that the quantity or value of such is correctly set out in the statement of claim. The fact is that the oak lumber and timber so imported by the claimant were manufactured, inasmuch as the same, at the time they were imported into Canada by the claimant, were not oak planks and boards coming within the classes of lumber and timber mentioned in the 726th item of the tariff as free of duty, but on the contrary, such lumber and timber were manufactured, inasmuch as the same were, at the time they were imported into Canada, sawn, cut and shaped to the exact sizes and dimensions required for the separate parts and pieces, of the wood-work of railway cars and carriages, and were, therefore, dutible under the items 504 and 506 of the tariff : in consequence of which the crown was legally and properly entitled to be paid the duties thereon. It is denied that the amount of $2,733.25 was paid by the claimant to the customs officers under protest, as mentioned in the statement of claim. On the contrary, it was paid by claimant without compulsion. Further, it is contended that the amount sought to be recovered was paid by the claimant as duties of customs upwards of three years before the commencement of this action, and no application for repayment was made within three years before the action was commenced. Hence no action lies against the crown.

Mr. Hazleton bases his claim on section 726 which provides that "lumber and timber, plank and boards, sawn, or basswood, cherry, walnut, oak, etc., not manufactured" may be imported into Canada free of duty. The sections 504 and 506 of the customs acts, and under which the minister of customs has classified Mr. Hazleton's lumber, reads : "Wood and manufacturers of, and wood-ware, namely, pails, tubs, churns, brooms, brushes and other manufactures of wood not elsewhere specified, 25 per cent. *ad valorem*, and lumber and timber not elsewhere specified 20 per cent. *ad valorem*." A date will shortly be fixed for the hearing of the case.

AN agitation has already been started by Michigan lumbermen to induce Congress to double the import duty on Canadian lumber. This, as will readily be seen, is intended as an offset to the recent increase in the export duty on pine logs by the Dominion Government. Such action on the part of our neighbors will not cause the slightest surprise to Canadians, as they are already quite aware of the Yankee capacity for retaliation. Neither do we fear such retaliation, even should it be adopted, which is certainly very doubtful. The United States has arrived at that stage in the history of its lumber industry that to do without the products of our Canadian forests would be next to impossible, and should Congress add another $2 import duty the change will militate more against the trade of that country than it will against Canada. For years American lumbermen have been cutting all their available timber regardless of future demand, and now that they find their limits exhausted, they are compelled to look to Canada for a future supply. But while they come in competition with our own lumbermen in picking up some of our most available limits they refuse to build mills in this country, but seek to tow the timber through Canadian waters to American mills. When the Dominion government two or three years ago placed an export duty of $2 per thousand feet on Canadian logs entering the United States, it was thought that that would be sufficient to put a stop to the practice. It has been seen, however, that while it has diminished the export of logs to a considerable extent the practice is still being indulged in. Brother Jonathan may squirm and threaten Canadians with retaliation in its most gastly visage, but on the lumber question we certainly hold the trump. Canadians extend the hand of good-fellowship to our Yankee friends and invite them to join in fair and equitable competition, but will not sanction the cutting of our timber to be manufactured in American mills.

HARDWOOD INSPECTION.

One of the subjects but seldom touched upon heretofore in the columns of THE LUMBERMAN is that of inspection of hardwoods. In order to cultivate the desire to inaugurate a a uniform system, which, whatever else it might do, would be a step to making the culling of our hardwood somewhat similar by each culler, we have prepared the following, which we think will be found to be in practice about what is done by most of our hardwood inspectors. The rules as given have been followed for years by many of our readers who have given particular attention to the timber growing in different parts of the country, and we fancy they are about as near right as can be applied in actual culling.

It would be a matter of considerable interest if some of the hardwood inspectors would give their views on the subject. Should a discussion be brought about and the rules herewith condemned as being too rigid, we shall be pleased to see the subject thoroughly gone into by practical cullers.

ASH.—The standard lengths are 12, 14 and 16 ft. The standard thicknesses are 1, 1¼, 1½, 2, 2½, 3, 4, and 5 inches. *Waggon tongues*—to be cut from the toughest timber and be free from all imperfections, particularly that of cross grain. Length 12 ft. 6 in. ; size 2x4 at one end by 4x4 at other, and 2½x4½ at one end and 4½ square, splits not allowable. *Firsts*—Must be not less than 12 ft. long nor under 8in. in width and at such width and length be clear. At 12 in. wide a standard knot will be admitted and no other defect. As width and length increase defects are allowable in proportion, but in no case shall defects be such as to prevent the piece from being used as a whole in the best kind of work. *Seconds*—Width not less than 7in. nor under 10ft., and at such much be clear. From 8 to 9 in. one standard knot allowed. As dimensions become greater imperfections are allowed in proportion, but five-sixths of the piece, as a whole, must be suitable for good work. Heart shake, rot, dote, wormholes and bad manufacture are excluded from Nos. 1 and 2. All lumber to be cut ⅛ in. over the required thickness and well manufactured. In black ash particular attention is directed to the annular rings, as in inferior qualities of this wood they are often detached.

BASSWOOD.—Standard lengths are 12, 14 and 16 ft. The usual thicknesses are 1, 1¼ and 1½ inches. *Firsts*—Must not be less than 7in. and free from all defects. *Seconds*—Must not be less that 5in. at this width, and up to 6in. must be clear. As width increases defects are allowed in proportion, but no piece however wide having black sap shall be taken in this grade. Sap must be bright and in good condition. Pieces having defects so numerous or of such nature as to render five-sixths, as a whole, unsuitable for first-class work must be excluded. All lumber to be well manufactured, plump thickness and free from stain.

BEECH, BIRCH, MAPLE.—Standard lenghts are 12, 14 and 16 feet. Standard thickness 1, 1¼, 1½, 2, 2½, 3, 4 and 5 inches. *Newels*—Must be free from heart and cut so as to square 5, 6, 7, 8 and 9 inches. Length to be four feet or the multiples thereof. *Balusters*—Must be cut exactly square 2, 2¼, 2½, 3, 4 inches, and on length from 28 to 32 inches, to be entirely free from all defects. *Firsts*—To be not less than 8in. wide and perfectly clear to 12 inches. At 13in. one standard knot allowable or one and one-fourth inch of sap on one edge and side, with a perfect face. Defects in proportion to width and length, but in no case shall the defects prevent the piece from being used as a whole. Sap must be bright. All pieces to be evenly sawed, square butted and square edged, plump thick-

ness when seasoned and free from taper. *Seconds*—Not less than 7in. wide and clear. At 8in. wide one small sound knot may be allowed, but no other defect. As width increases defects in proportion are admissable but not to decrease the piece below the above standard nor render five-sixths of it continuous, unavailable for good work. A short split, parallel to the edges, and not exceeding one-twelfth of the length on one end is a defect, but admissable. When sap, knots, splits and bad manufacture combine to render the waste greater than one-sixth of the piece such a piece must be rejected. Sap must be bright, knots small and sound; and the lumber entirely free from heart.

BUTTERNUT, WALNUT, CHESTNUT. — Standard lengths are 12, 14 and 16 ft. Standard thickness 1, 1¼, 1½, 2, 2½, 3, 4 and 5 inches. Balusters and newals same as in birches, Counter tops are from 12 to 18 feet long, and from 20 inches and upwards in width, strickly clear. *Firsts*—Must not be less than 8 inches in width free and clear from all defects. At 12in. wide may have one and one-half inch of sap on one side, face clear. No defects are allowable that will decrease the piece below the standard waste is not to be allowed in this quality. *Seconds*—Not less than 7in. at which width it must be clear. At 9in. wide 2 defects may be allowed and as width increases defects in proportion. Waste not to exceed one-sixth of the piece.

CHERRY.—Standard lengths are 12, 14 and 16 ft. Standard thicknesses are 1, 1¼, 1½, 2, 1½ 3, 4 and 5 inches. *Firsts*—Not to be under 8in. wide clear and free from all imperfections. According as the width increases defects are in proportion, but in no case must there be any loss in the piece. Sap when allowed must be bright. *Seconds*—Not less than 7in. and must be free of all defects. At 8in. one defect will be allowed; at 10in. wide two defects and so on as the width increases; but in no case must the loss exceed one-sixth of the piece. All pieces under 12ft. long and 7in. wide must be entirely free of knots, sap, gum specks and splits. Gum specks are excluded from firsts.

ELM, SOFT.—Standard lengths are 12, 14 and 16 ft. Standard thicknesses are 11in. and 2in. *Firsts*—Not to be less than 10in. wide at which and up to 13in. must be perfectly clear and free of all defects. Whatever defects are allowed in wide pieces must not cause any waste, must be cut plump thickness and well manufactured. *Seconds*—Not to be less than 8in. wide, and at such must be clear. At 10in. wide one defect will be allowed. Defects are not allowed in such numbers nor of such kinds as will cause any greater loss than one-sixth of the piece.

ROCK ELM. — *Firsts*—Shall be free from rot, decayed knots and open annular rings; must be cut plump thickness and well manufactured. Each piece as a whole must be free from all imperfections that would prevent it from being used in the best kind of work. Heart pieces not admitted. *Seconds*—Include all lumber which can be used without a greater waste than one-quarter. The three-quarters must be three continuous quarters.

HICKORY. — *Firsts*—Shall be not less than 7 in. wide and free of all defects. *Seconds*—To be not less than 6 in. wide, and may have a few sound knots. Not less than two-thirds of the piece must be available for good work.

OAK. — *Firsts*—Must be 8 in. and over in width, clear and free of all defects. All pieces to be evenly sawn, square butted, and square edged. What knots are admitted to be small and sound and not to exceed in size the standard, and so few as not to cause waste to the best kind of work. Pieces having worm holes are absolutely excluded. *Seconds*—Must be 7 in. wide and clear. From 8 to 10 in. will allow from 2 to 5 knots, small sound knots, of standard dimension, or a little bright sap. Two-thirds of each piece must be available for ordinary work. The standard lengths of oak are 12, 14 and 16 ft., thicknesses are 1, 1¼, 1½, 2, 2½, 3, 4, 5 and 6 inches.

QUARTERED LUMBER.—To find ready sale this lumber must be of good width and plump thickness when dry, not to be under 5 in. in width.

SPLINTERS.

THE LUMBERMAN wishes its readers A Merry Christmas.

THE mills are fast closing down for the season. The year's output on the whole has been large.

THE value of timber limits under license in Ontario is estimated at $18,500,000 and in Quebec at $23,000,000.

THE consumption of timber is said to have increased one half since 1850 and represents an annual expenditure of $1,305,000,000 throughout the world.

HON. CHARLES TUPPER, minister of marine and fisheries, has taken the initiative step in issuing an order against the deposit of sawdust in several rivers in Nova Scotia and New Brunswick.

MR. RUFUS STEPHENSON, of Chatham, has again interviewed the Minister of Finance in regard to the imposition of an export duty on hemlock logs, which are produced chiefly in Kent, Essex and Lambton counties, Ontario. Mr. Foster promised to give the matter his consideration.

HENRY F. ALBERTS is another acquisition to the little army of boodlers who are forming a colony in Canada. He hails from Buffalo where he was extensively engaged in the lumber business. He leaves behind him a large amount of debts and spurious paper. He was a forger to a large amount.

DURING 1887, at a $2 export duty, about 3,000,000 feet of pine logs were exported from Canada to the United States. The present year there has been considerable rafting of Dominion logs to American mills, and it is said that previous to the recent increase in the export duty, Michigan men had expected to raft fully 200,000,000 feet of logs from the Georgian Bay region next season.

Mr. Cassels, register of the Supreme court, recently dismissed a motion to quash the appeal in the Manitoba case of Shields vs. Leacock, involving the affairs of the Northwest Lumber Co., Mr. Dalton McCarthy, Q. C., renewed application on behalf of the respondent before Judge Fournier in chambers, but judgement was reserved. Hon. John Haggard, Postmaster-General, is a party to the litigation.

ATTENTION is directed to the advertisement of the Messrs. Northey & Co., on page 19 of the present issue. This firm is well known throughtout the Dominion as manufacturers of Steam Pumps, and they have achieved a reputation for turning out the best article of the kind in Canada. From our personal knowledge of this company we can recommend their manufacture with confidence to the lumber trade.

THE Wm. Hamilton Manufacturing Co. of Peterboro', have now completed the extensive additions to their works, mention of which was made in a former issue of this journal. But few manufacturing establishments in Canada have made such headway during the past few years as the one referred to, and their success can be attributed to the very fine class of saw mill machinery they are constantly shipping to every part of the Dominion.

IF the immense quantity of sawdust which is now deposited into the rivers and streams of this country was converted into gas, either by the use of the luntum or Swedish process or by the Siemen's regenerative furnace, we could have the best fuel possible for roasting ores and other such purposes. Under such a process sawdust can be converted into gas and used for all the purposes for which the natural gas is utilized, while the cost would be reduced to a minimum.

As will be seen by advertisement in another column the Ontario Government will put up at auction on the 11th inst. timber berth No. 2 in the township of Ballantyne, the purchaser who bid this limit in at the sale of limits in December last having failed to comply with the conditions of sale. Particulars as to locality and description, area, etc., and terms and conditions of sale will be made known on application, personally or by letter to the Crown Lands Department, Toronto.

THE day previous to the Presidental election Mr. A. M. Dodge, wholesale lumber dealer of Tonawanda, N. Y., and President of the well known Georgian Bay Lumber Co. of Canada, issued the following printed circular, which he caused to be placed in the hands of each of his employees:

> Each man in our employ is requested by us to vote at the coming election as his conscience and intelligence dictate, and in this all will be sustained by us. If any foreman or inspectors in our employ attempt to use their authority otherwise than in preformance of the work for which they are employed, a report of such conduct at our office will be appreciated. Our employes are paid by us for work performed, and not for their votes.

THE latest annual report of the Forestry Division of the United States Department of Agriculture again directs attention to the conservation of the timber wealth of the country. It points out the need of a more careful and more rational utilization of the material at hand, and of a greater regard for the production of a future crop. The natural wood crop of the country is apparently being used up faster than it replaces itself. The report enforces the conclusion regarding the forests that concerted and systematic action on the part of both the government and the people is necessary to prevent the waste of the forest wealth.

Michigan lumbermen are still investing their boodle in Canadian pine, with the expectation of being able to tow their logs across the boundary. We fear that the late move on the part of the Dominion Government in raising the export duty on logs will have a rather depressing effect on such operations. The latest investment reported has been made by the Saginaw Lumber & Salt Co. who have concluded the purchase of three timber berths on Spanish River in the Georgian Bay region, from which it is expected two hundred million feet of lumber will be cut. If they desire to make their investment a success they had better bring their mill to the timber.

OUR readers will notice in this issue the new advertisement of the Sherwood Harness Co. And in this connection we beg leave to copy [illegible] and company

SHERWOOD HARNESS CO., [illegible]

Gents.—I cannot say too much in praise of your Steel Logging Harness. The six sets bought of you last fall as an experiment have been in constant use in [illegible] great ease and comfort [illegible] tages that you can justly claim for your meritorious Harness. [illegible] no account would I use the old style again. We are now fitting up our teams for the woods and wish you to send us eight sets more. Ship same as before, and oblig

IT is said that Canadian freights have reached almost prohibitory limits. The Ashdene is stated to have been fixed Quebec to London, Leithe to Newcastle, at 85s. deals, with option of 60 or more standards timber at 95s. The West Cumberland is also reported to have been chartered for a range of ports in the U.K., for a lump sum of £2,200, the shipper paying stevedore charges. This, on a steamer of about 500 standards, works out about 90s. per standard. The Craigallion, 1,200 tons register recently discharging in London from Quebec, has been chartered at 70s. She is to proceed to St John, N. B., in ballast and load for range of good English ports.

In going through our correspondence some days ago we opened a letter from Messrs. Stanlake Bros., of Hillsdale, Ont., which contained a bank note of a denomination large enough to pay their subscription up to the year 1894. We fully appreciate the liberality of our Hillsdale friends, and trust that their example may have the effect of at least calling to the rememberance of several hundred delinquents that it would be an act of generosity on their part to pay up the old score and as far ahead as they deemed expedient. To all such we would say, drop your check into the post office and watch how quick you will get your receipt back.

EXCHANGE ECHOES.

Lumber World.

Reports from various lumber centres situated in nearly every section of the United States indicate an encouraging condition of trade. Here and there dullness is reported, but on the whole trade is fair, collections good and the outlook encouraging. The political excitement has retarded business somewhat, but the damage from that cause has been far less than was anticipated so long as the Mills bill was in existence. With the removal of that unwise and uncalled for bill from the arena, the various industries threatened by it began to improve, and the result is that the winter opens with cheerful prospects.

Chicago Timberman.

Timber cutting on Drummond Island, Spanish River and other points on Georgian bay waters will assume large proportions this winter. The output next season will approximate closely 150,000,000 feet, all of which will be brought to Michigan mills. The fact is, that irrespective of any tariff action, the work of importing Canadian timber to supply the Michigan mills will continue to grow year by year. The real opposition to this means of supply comes from interested holders of the Michigan pine, who are seeking to "bull" the market by holding on to the timber in their possession for a rise. These men naturally look upon any effort to obtain supply elsewhere as extremely unpatriotic, and when questioned they are pretty sure to be found in favor of protection. It all depends upon whose ox is gored. If the man owns pine lands he is against the removal of the tariff, first, last and all the time. If he owns a mill he wants logs and thus becomes a tariff reformer. It is really wonderful how these interests affects politics in Michigan. Nevertheless Canadian saw logs are going into Yankee lumber fast.

Toronto Empire.

Captain Peters, of Windsor, is in the city from Algoma on business connected with some of the large lumber firms who are operating along the north shore. *The Empire* had a short talk with Captain Peters on the prospect for the lumbering trade in that section of the country this winter. Everything up there is booming at the present time. Everybody appears to be busy and there is work for all who want it. Large quantities of supplies are going in for the lumbermen and the prospects were never better. While there was not a very great deal of lumber cut along the north shore last season a large quantity was shipped. Part of this was old stock, however, and the result is a clearing out of all that was cut, and the lumber to be shipped this year will have to be fresh cut. There is a brisk demand for board pine, and large stocks will be needed at Quebec to be shipped to the Old Country. The cut this year will probably be much larger than for some years past. The cut of cedar posts for paving will also be rather more than an average one. These posts mostly go to Chicago. The lumbermen along the north shore, Captain Peters says, feel most hopeful of the coming winter's work. All that he has spoken to, say they intend to cut more this winter than for some years past, and they are now actively engaged in their operations.

THE "CLIPPER" SHINGLE MACHINE.

The accompanying illustration will give the reader a very fair idea of the mechanical construction of what is known as the "Clipper" shingle machine, which is now rapidly taking its place in the best mills of this country. It is the development of a long, practical experience by the patentee, who for the past ten years has made the construction of shingle machinery a specialty.

All working parts are very durable, and possess equivalent strength for the duties they have to perform, and are very easily controled by the operator. The machine is automatic in set and feed, cuts all tips or butts from either end of bolt, or will cut a tip and butt alternately ; also runs long and short stroke. The carriage runs on rollers on a V track, thereby reducing the friction to a minimum, and is driven forward and backward by a heart-shaped cam which is driven by friction, and engages directly with back of carriage. No lost motion can be produced by wear. The feed works are placed high up on the frame of the machine, and out of the way of sawdust, which is usually a great source of trouble. The top of carriage is lifted by a foot-treadle, which enables the operator to use both hands to block the machine.

The seven trip-dogs for shortening the stroke each quicken the speed of carriage so that at the short stroke for narrow shingles the carriage will make as high as ninety strokes to the minute. The average cut per minute is about 60 ; speed of saw 1,300. A very important feature of this machine is that there is no jar on the carriage, a foot break being provided by which the carriage can be stopped in any part of the stroke. On the last stroke the jar is taken off by this treadle ; on other machines the operator has to throw his whole weight against the carriage to prevent the jar. By the use of the six ratchet wheels which accompany each machine the shingle can always be kept to a uniform thickness with either a thick or thin saw.

The average cutting capacity of this machine, with the usual run for ordinary bolts, is from 30,000 to 35,000 per day ; with good bolts 60,000 have been cut in nine hours.

For prices and all other information we would direct our readers to the manufacturer, Mr. Robert Brammer, Orillia Ont.

Do Tools Grow Tired ?

It is a common complaint among mechanics that their tools do not serve them as well some days as others.

A correspondent of the *Iron Industry Gazette* says : Tools, like men, grow tired. I have seen a first-class chisel get tired and act as though it was possessed of the King of Sheol. It would not keep its edge, and the more I sharpened it, the sooner it would lose its edge.

I called the attention of a shopmate, a grizzled old veteran, to the peculiar behaviour of the chisel. He looked it over and handed it back to me, saying : "The tool is all right, only a little tired. Lay it away and let it rest. It will come out all right again, just like a man who is tired." I did not believe the old fellow, and I really thought he was crazy to talk of a tool getting "tired," but as there was no help for it, the tool was laid away. I do not remember how long it was left to rest, but when it was again sharpened and used it appeared to hold its keenest edge as well as it did before it got tired. Barbers tell me their razors in constant use get tired in the same way, and woodchoppers say their axes sometimes seem to get soft all at once. Possibly constant and hard usage may cause changes in crystalization that would account satisfactorily for the peculiarity alluded to. Locomotive engineers often observe peculiar misbehaviour in their machines, which may possibly be the result of continued heating, friction and pounding. When a tool gets "tired," or a machine "balky," give each a rest.

A New Waterproof Belting.

The particular attention of LUMBERMAN readers is directed to the illustration on last page of this issue of Robin & Sadler's waterproof belting, which is now being introduced to the public for the first time. This belt is made in both light and heavy double leather, of the best material, fastened with waterproof cement and brass wire screws, after which the entire belt is saturated with a preparation which renders it entirely waterproof. Saw mill owners will find this new article in belting especially adapted for damp places in a saw mill. Messrs. Robin & Sadler, the manufacturers, inform us that they will send a sample of this belt to any intending purchaser on application either at their head office in Montreal, or at their Toronto branch, 129 Bay street.

THE NEWS.

ONTARIO.

—The Blind River Lumber Co. is shipping lumber and lath over the C.P.R. to the Sault.

—The steam barge Kincardine, which ran aground and sank in French river, has been raised.

—Mr. Wm. Orr, Shelburne, will build a saw mill there on the site of the mill recently destroyed by fire.

—The sawmills of Caldwell & Son, at Carleton Place, have closed down. The season's cut was 9,000,000 feet.

—The slack barrel coopers throughout Ontario are pushed with orders for barrels in which to market the present apple crop.

—Hollister & Jewett's mill at Gordon River has cut its first half million feet of lumber, which was purchased by a Chicago firm.

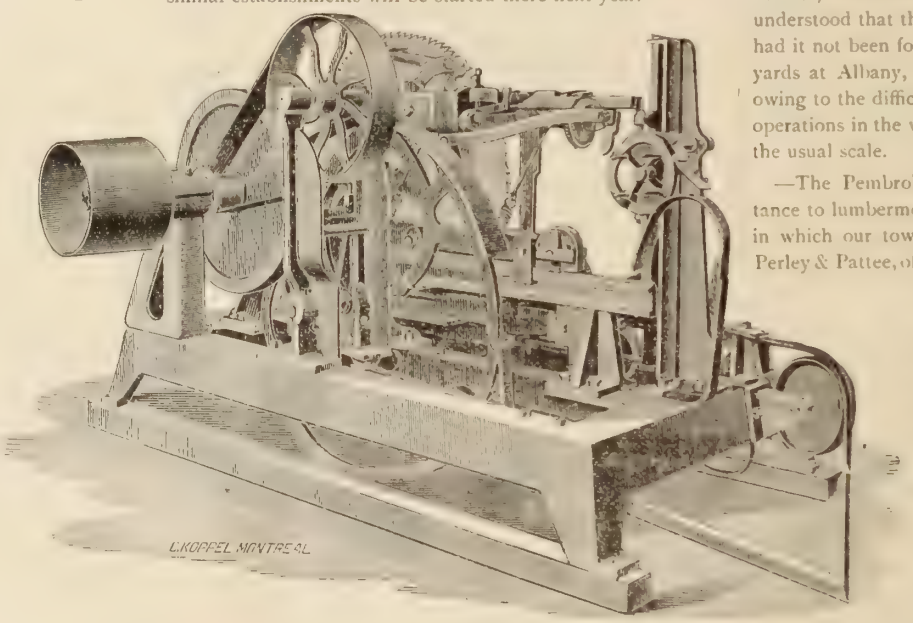
—It is estimated that 200,000,000 feet of timber, board measure, was destroyed by fire in the Muskoka and Pettewawa districts last year.

—The lumber firm of Thompson & Ellis, Fenelon Falls, has been dissolved. Mr. Ellis will continue the business alone in the future.

—The Lake of the Woods mills are being closed down for the season. Men are in demand for the woods, at $28 to $30 per month and board.

—A new steamer will be built at Keewatin this winter, for the Lake of the Woods trade, which is mainly in connection with the lumber industry.

—The paper pulp factory of Brophy & Co., at the Chaudiere, is working at full capacity. It is stated that two or three more similar establishments will be started there next year.



THE "CLIPPER" SHINGLE MACHINE.

—Hall Bros. & Brown have commenced the erection of a saw mill at Keewatin, which they expect to have ready for operation early next spring.

—A new mill to replace the one recently burned at Glen Lewis is being constructed, and Mr. Hungford expects to have it ready for cutting operations next spring.

—McClellan & Goodmurphy's new saw mill on the Lake Huron shore, township of Burpee, is now rebuilt on the site of the old one and will be running in a few days.

—The lumber firm, of which Mr. F. E. Boswell, of Boswell Mills, (Spanish River district) is the head, shipped over 3,500,000 feet of lumber to the Chicago market this season.

—Carpenter's mill on the Kaministiquia, Thunder Bay district, has had a prosperous season. He will have a large force of loggers at work in the woods during the winter.

—Thompson, Tassart & Co., owners of a large saw mill at Teeswater, require better facilities for the purposes of their business and threaten to abandon the place unless they obtain them.

—O'Brien & Lequier cut 3,000,000 shingle for Graham, Horne & Co., of Port Arthur, this season. Formerly all the shingles used in the district were imported from across the lake.

—An assignment has been made by W. & W. Addison, sash and door manufacturers, of Hamilton. The liabilities are nearly all to local firms, and a meeting of creditors has been called to consider the position of affairs.

—The break in the Cornwall canal has proved a serious matter to lumber forwarders. A great number of barges, loaded with lumber were tied up at Prescott, and were compelled to remain there until the break was repaired.

—The Algoma *Advocate* thinks that Thessalon should have another saw mill, and that all the timber that is being cut in that vicinity should be manufactured there, in order that the village might get the benefit. The *Advocate* is right.

—Messrs. Charles Scott & Co., of Philadelphia Pa., will probably establish an extensive hub and spoke factory at Port Colborne, in the vicinity of which place are large quantities of elm timber especially adapted to the manufacture of such goods.

—The lumber exported from Ottawa to Liverpool is purchased principally by the following Quebec houses, viz.: Smith, Wade & Co., I. Burstall & Co., Pierce & Co., R. R. Dobell & Co., and Sharples & Co. It is delivered at Montreal, where it is loaded on to the ocean vessels from Canal boats or cars.

—At a meeting of the creditors of the Michael's Bay Lumber Co., held at Toronto last month, a statement of the liabilities and assets was given, showing that the debts amounted to about $100,000 and the assets $80,000. Both the Central and Imperial Bank are secured for their respective claims, the former being for $40,000 and the latter for $20,000.

—The Victoria Harbor Lumber Co., Alex. Fraser and Chas. J. Smith, have received contracts from the Canadian Pacific railway for supplying all the lumber required for the construction of the new Toronto Esplanade. The amount of the lumber for this work will be very large. The Leycock Lumber Co., of Buffalo and Gravenhurst, Ferguson Bros., of London, and Messrs. Fraser & McGann, of Toronto, have received contracts for the supply of lumber for the construction of trestle work, etc., on the C.P.R. line west of London.

—Messrs. M. Boyd & Co., the old-time lumbermen of Bobcaygeon, have already shipped this year 18,000,000 feet of lumber, besides large quantities of lath, pickets, etc. It is understood that their shipments would have been much larger had it not been for a scarcity of shipping facilities. The firm's yards at Albany, N. Y., have at times been almost depleted owing to the difficulty in shipping lumber to that point. Their operations in the woods this winter will be conducted on about the usual scale.

—The Pembroke *Standard* says : A case of some importance to lumbermen was tried at the Ottawa Assizes recently, in which our townsman, Mr. A. McCormack, sued Messrs. Perley & Pattee, of Ottawa. The action was to recover commission for the sale of a timber limit on the Du Moine river. $5,000 was claimed as commission for negotiating the purchase of the limit from the Quebec bank, the price of the limit being $80,000. Later on it seems that defendants would not take the limit owing to the increase of timber dues made by the Quebec government. The defendants afterwards negotiated for the purchase of the limit for $80,000 without the knowledge of the plaintiff. The case was tried before Hon. Justice Street without a jury, and considerable interest was taken in it by the lumbermen of the district. The Judge in giving his decision said that he considered some sort of a bargain had been made with reference to the commission, and he thought the plaintiff was entitled to some commission and he awarded him $2,500 and costs. Dalton McCarthy, Q. C., and J. H. Burritt, Pembroke, appeared for the plaintiff, and A. J. Christie, Q. C., and Thomas Deacon, Q. C., Pembroke, for defendants.

—The amount of three inch deals annually manufactured at Ottawa is estimated at about 100,000,000 feet, made up as follows : J. R. Booth, 30,000,000 ; Eddy Manufacturing Co., 20,000,000 ; Hamilton Bros. 15,000,000 ; Perley & Pattee, 10,000,000 ; Pierce & Co., 5,000,000 ; other firms, 20,000,000. The greater part of the stock finds a ready market in England, the Bronson & Weston Co. being the only large firm which manufactures exclusively for the American market.

—An exchange, speaking on lumbering in the Ottawa valley, says that although the present yards are overcrowded, it will not be for long, as the Canada Atlantic Railway and the firms of J. R. Booth and Perley & Pattee have workmen engaged laying tracks in the new yards of the latter, on the line of that road, a little over a mile from the mills. This railway has been extended almost into the heart of the lumber district, the station being but a few hundred yards from the mills of the two firms above mentioned, Bronson & Weston Lumber Co., and Pierce & Co., at well as Barnes & Co's box shook factory. Therefore a great saving is expected, as the lumber is taken almost directly from the saw to the yards by rail, much cheaper than by ordinary wagons, and when dry, it can be shipped directly to his destination, and another advantage, the ground, being high and open, it is expected that the lumber will season quicker than in the overcrowded vicinity of the mills. But for this extension most of the mills would have been obliged to shut down long ago for want of piling room.

—Messrs. R. Cox & Co., of Liverpool have purchased next season's cut of pine deals from Perley & Pattee, of Ottawa.

—The Canada Atlantic railway seems to be carrying far more lumber from Ottawa this year than any other road. As many as one hundred cars in a day have been shipped by this line.

—There will be an unusually large output of logs this winter in the up river shanties, providing the snowfall is favorable. This season will see a larger number of men logging up the Ottawa river and tributaries than any season before.

—The colonization road between North Bay and Lake Temiscamingue has been extended to opposite the Hudson Bay fort on the lake a distance of some 68 miles. This means increased facilities for lumbermen getting in men and supplies to their limits between the two points.

—A correspondent from Wahnapitae writes to the LUMBERMAN as follows: The weather for the past month has been very unfavorable in this district and has retarded work considerably in the lumber woods. Alex. Fraser, of Westmeath has a mill erected on his limit west of Sudbury in which he intends cutting dimension timber. McCormack & Son, of Sudbury, have a mill in operation there which has been running steadily all summer, and they intend to move it back on their limit about three miles from Sudbury and will cut all winter. They will haul their logs direct to their mill. The Georgian Bay Lumber Co. are doing less this season on their Wahnapitae limits than last. The Emery Lumber Co's cut will be about the same as last year.

—J. B. McKay, a lumber measurer, formerly in the employ of Flatt & Bradley of Hamilton, and lately employed by John D. Lebel, of London, recently requested a resident of Paisley to endorse a draft on Lebel for $45 which was cashed at the Western Bank. McKay said he was going to load a car of lumber at Harriston. He afterwards went to a second gentleman and said he was short of funds and would return here Tuesday to load lumber and that he wished to get a draft for $35 on Lebel cashed and requested the second gentleman to endorse this draft which was cashed at Porteous & Saunders' bank. McKay told his second victim that he was going to Milverton to load there. McKay is now missing and Mr. Lebel refused payment of the drafts. McKay is probably on the American side of the line.

—At a recent meeting of the ratepayers of the village of Teeswater, convened for the purpose of enquiring into the shipping facilities, etc., of the place, the following facts of interest to LUMBERMAN readers were brought out:—That Thompson, Fessant & Co. pay yearly freight on 250 cars at an average rate of $25 per car, being a total of $6,250, besides way freights; they have at present an order for 80 cars of maple for Liverpool, Eng.; the freight to the C.P.R. on this shipment alone will amount to nearly $5,000. Mr. F. Deutschman, lumber dealer, has shipped this year 600,000 feet of lumber, or about 75 carloads, and has 140,000 feet more to ship, the freight on which would amount to about $2,400. Besides these large shipments there are three flouring mills, foundry, cabinet factory, woollen mill, etc., whose shipments must be considerable.

—The product of square timber on timber limits on the Ottawa valley is likely to be large during the coming winter though the wet season may retard operations. It is estimated that 5,500,000 cubic feet of white pine, and 800,000 feet of red pine square timber making 6,200,000 feet in all will be taken to market next season. Advices from the regions north and west of lake Nippissing are to the effect that this has been the worst fall experienced in the woods for many years. Owing to the heavy rains in October the swamps are filled with water which makes the work for skidding teams very difficult. The roads over which camp supplies are usually forwarded are now almost impassable. Large gangs of men are, however, located on the limits. Messrs. Edward Moore, R. H. Klock & Co., Alexander Fraser, Booth & Hale, Barnett & McKay and the Hawkesbury Lumber Company are going heavily into square timber making, and a considerable quantity has been contracted for. The high prices ruling during the past season have proved an incentive to increased operations. The cut of last winter did not exceed 4,500,000 feet, so that an increase of nearly fifty per cent. in the output is anticipated.

QUEBEC.

—Messrs. Henry Lovell & Sons are building a steam clapboard mill at Coaticook.

—The lumber yard belonging to Mr. Roberts, of Montreal, was destroyed by fire during the past month.

—Messrs. Hall & Price have sold the cut of their Three Rivers mills, about 8,000,000 feet spruce, for the American market.

—The weather during the past month has favored the vessels at Quebec to get a fair despatch for this season of the year, consequently but few vessels now remain in port.

—The sale of Baptist's Three Rivers deals to Messrs. John Burstall & Co., is reported. Prices are stated to be $112, $77, $37 and $27 for 1sts, 2nds, 3rds and 4ths respectively.

—Messrs. R. R. Dobell & Co., of Quebec, are reported to have purchased next season's cut of spruce deals of the Montgomery mills, and also Baptist's wintering pine and spruce deals at Calumet.

—By the burning of his extensive saw mill and lumber yard at Montreal the latter part of October, Mr. McFarlane will lose about $30,000. In addition to a complete outfit of new machinery 50,000 feet of lumber was burned.

—As compared with 1886 the quantity of white pine timber measured and culled at Quebec to November 10, fell off from 3,032,738 to 1,661,884 feet, but as compared with 1887, an increase of 493,741 feet.

—Lumber freights from Quebec to American ports during the past month have remained steady with tonnage in fair demand. From Quebec to Burlington $1.40 a thousand feet; to Whitehall $1.66; to New York $2.75; to Troy $2.75.

—A Montreal purchaser at the recent timber limit sale by the Provincial government, refused on the spot a bonus of $3,000 on a portion only of his purchase. The proceeds of this sale averaged $20 per mile more than the sale of 1885.

—It is understood the contemplated deal between the Eddy Manufacturing Co., and R. Hurdman & Co., of Hull, for the Maganicippi limits, has fallen through, one of the reasons given being that certain parties interested with the Hurdman's in the limits refused to sell at the price agreed upon.

—The local demand for lumber in Montreal fell off considerably the last month, owing principally to unfavorable weather and the bad condition of the country roads. The prospects do not look encouraging, contractors being almost at a standstill. Prices have ruled steady all round.

—It was confidently expected that the Cornwall Canal would be again open for traffic the early part of November, but unfortunately a crack was discovered in the bank where the old break occurred, and now the chances are that the boats will not get through this fall. This will be bad news for forwarders, as fully a million dollars worth of goods is locked up on the other side of the break.

—In April last an order-in-council was passed by the Quebec government wherein it is provided that the rates of ground rents and of duties on timber cut shall not be increased till 1st September, 1900, reserving, however, the right to change the table required to be used in acertaining the contents, board measure, of saw logs, etc. This information appeared for the first time in the statutes for the last session recently issued.

—Lumbering operations are expected to be very active in Saguenay county this winter. Very advantageous arrangements have been made by contractors and wages are higher than usual. X. Brassard will operate on the river Cyriac, Joseph Brassard on the river Pickauba, and Ed. Lemieux has signed a contract with Price Bros. to get out 40,000 logs on the river Blanche. At St. Etienne H. P. Blair hopes to cut between 200,000 and 300,000 logs. The cut of Chantiers, of Bersimes & Sault au Cochon, will be considerably more than in past years, while at Lake St. John the new saw mill of B. A. Scott has given an impetus to lumbering operations in the vicinity.

—Mr. W. F. Hutchinson, Sherbrooke, has recently invented and patented some simple but effective machinery by which he can manufacture 60,000 wooden tooth-picks per hour. He has established a factory in Sherbrooke and will engage extensively in the business. To supply the millions of tooth-picks used every year, ingenious machines of great productive power have been invented. Like all other occupations the tooth-pick business has its combination, but a Maine inventor has set out to break it with a machine that makes 6,000,000 picks a day, and he is making a machine that will produce 72,000,000 a day. Green, clear, straight-grained birch and maple wood is used, and after steaming for several hours it is easily cut into veneers or thin strips of wood with the grain running across. These veneers are pliable and are wound upon large spools, a hundred feet on each, and from the spools they are fed into the pick machine, which cuts them into picks with wonderful rapidity.

NOVA SCOTIA.

—The law requiring saw mill owners to prevent saw dust from entering the streams is causing much comment among mill men in Nova Scotia. It is stated that as most of the mills in Nova Scotia are direct action, there will be waste in any attempt to stop the sawdust, and the effect must be to curtail the business. A stoppage of business has taken place until an understanding can be arrived at in the matter.

Mr. Leary, the New York builder of rafts at J[illegible] takes issue with the Dominion government upon its position that $1 a thousand should be charged on the timber entering into rafts which are sent out of Canada, to protect the shipping and labor interests. His claim is that out of the $48,000 which the raft cost that successfully reached New York [illegible] $38,000 were expended in Nova Scotia for timber, materials, labor, etc., the benefit to Canada by that expense being much greater than would have resulted had the timber [illegible] ped by vessel.

NEW BRUNSWICK.

—Word from the lumber district [illegible] ter's operations will be commenced on a scale much larger than usual. Wages to axemen on the north shore are [illegible] twenty-five per cent. higher than [illegible]

—It is estimated that St. John alone has shipped the first eight months of this year at least 200,000,000 deals, while [illegible] output from other New Brunswick ports has been [illegible] large. The timber shipment has been on a proportionate scale.

MANITOBA AND THE NORTH-WEST.

—Hugh McDougall is opening a lumber yard at Moose Jaw, Assa.

—A large number of men are engaged in the forests at the Riding mountains taking out saw logs.

—All the lumber is in from Lake Winnipeg, and the boats are going into winter quarters at Selkirk.

—Hamilton & Badgley, lumberers, Emerson, are disposing of their business to McDonald & Muller.

—The engine and machinery for a grist and saw mill at Duck Lake, Sask., has been shipped from the east.

—E. M. Gatliff, lumber, Emerson, has admitted a Mr. Adams into partnership, and is opening a branch at St. [illegible] Baptiste.

—There is talk at Selkirk of the formation of a company to operate the large saw mill at that place. The mill has been idle for some years.

—An exchange chronicles the fact that a lumberman on Lake Winnipeg has decamped. Here the information ends, however, and we are in ignorance of who the decamping party is.

—The mills are now all about closed down for the winter, after a very successful season. Business is now slackening up. Stocks on hand are not large for this time of year, and in lath and shingles there is said to be a shortage. Prices are firm but last quotations hold for the present.

BRITISH COLUMBIA.

—J. Curtis, of Michigan, has lately been prospecting in British Columbia, with a view to engaging in lumbering in that province.

Fader Bros'. new mill at Vancouver is being pushed towards completion. The capacity of the mill will be about 100,000 feet per day.

—The *News-Advertiser* announces a new lumbering firm in Vancouver, viz., Anderson & Grady, composed of John Anderson, late of Pembroke, and Mr. C. Grady, of the first named place. They intend to erect a saw mill on the Inlet, with a capacity from 70 to 80 thousand feet of lumber per day. The machinery for it, made by the Wm. Hamilton Manufacturing Co., Peterborough, is on the way.

—Fred Robinson, of the Beaver saw mill, near Donald, B. C., has stopped sawing for the season. He turned out 2,500,000 feet of lumber, says Donald *Truth*, finding a market for about half of it. The other half is piled up in the yard, where it is likely to remain until next season, as the C.P.R. will not make a rate to points east of Regina that will leave him a profit.

AMERICAN.

—The total cut of the La Crosse, Wis., lumber mills, the past year was 210,700,000 feet.

—It is stated that there are single trees in Humboldt county, California, that yield 50,000 feet and acres that yield a million feet of lumber.

—Pronounced satisfaction is expressed with the outcome of the recent election in lumber circles in the Puget Sound district, where free trade was more feared than anywhere else. It is little more than an imaginary line which divides the pine in Canadian territory from that in Washington territory.

—It is stated that several lumbermen of Duluth have voluntarily increased the wages of their employees 25 cents a day on the strength of Harrison's election as President. They realize that the Mills Bill which was intended to put lumber on the free list is now a dead letter and they are accordingly greatly rejoiced thereat.

PART II.

HARDWOOD LUMBER AND ITS MANUFACTURE.

BY ANSON A. GARD.

IF the manufacturer of hardwood lumber would pay the same attention to his business as the pine man does to his, there would be less dissatisfaction about the inspection of his lumber. If he learned the requirements of this or any other market he would know that to please he must send his product in in good condition. There are too many sawyers of Hardwood who have merely "picked up" the "trade" the result is that many a No. 1 log, which if handled as a Pine sawyer would handle it would turn out valuable lumber, but instead it is not sawed with judgment and the result is one-half its value is gone, and even the good is not extra. To know how to properly put a "carriage" on its foundation so that it will run true; to know how to set a saw with just enough "set" to cut smooth, even lumber; to know how to put a log on the carriage to cut as few "heart" boards as possible; to know when to "turn" a log—in short, to know how to get the best results out of logs is not in the power of him who has merely "picked up" his trade, and the sooner this is learned by the manufacturer of valuable lumber, the better for the credit side of his bank account.

The prevailing custom of paying a stated price per thousand feet for sawing is another cause of much poorly sawed lumber. The sawyer must know his business thoroughly, but to work up to his knowledge may require more extra time than he is willing to devote to "the other man's" interests, and the result is he does a good day's work in the number of feet he has sawed, but the man for whom the work was done doubly pays for it. How much better it would be for both mill owner and the man who is having the work done could they agree on a stated price per hour. It may seem a broad assertion, but I venture to say that by this arrangement the man for whom the sawing is done—providing the logs sawed be valuable timber—will gain enough to pay for the whole day's sawbill, as by this plan the sawyer can see advantages to be taken of a log which never would have occurred to him if quantity instead of quality were taken into consideration. The mill owner who saws his own logs need not be told that care must be taken, and yet many will "butcher" their own timber as though they were not sawing money out of their own pockets every hour they run their mills. These are the men who want the lumber buyers from the large markets to pay them the same price that the careful sawyer gets for his product, and will think they have not been fairly dealt with if they are made to pay for their own mistake.

I have tried many ways for getting the most good lumber out of logs, and find this is best: first take off a slab, turn the slab side down upon the carriage and saw the log through past the heart until you get a clear face if the log be a good one, then turn it over against the head blocks and saw until you have a wide clear face, which may leave a plank two, three or four inches thick, owing to the size of the log. Then take the sawed boards or plank and after running the head blocks back 24 or more inches, place the boards or planks, whichever you have sawed, so that the saw will edge them properly. To determine just where the saw will come may be done by "sighting," or better still by the man at either block using a two foot measure, which placed across the board, back to the block, will show how far out to place it (the board); treat the other edge the same way and if the heart runs straight enough not to cut away too much lumber saw it out. A better way to edge lumber, but requiring extra machinery, is to have attached to the mill an edging saw bench. In this way the lumber can be edged as fast as the log is sawed and where a mill can be so provided the result will show that it pays well.

Of course where the logs are poor so much care is not necessary, but one thing I have paid dearly to learn and that is, no log can be too poor to neglect to saw full thickness.

Thousands of dollars have been lost in not urging upon the sawyer the great importance of sawing full. There is a double loss in thin lumber. It drops one grade if inch, and will often be refused altogether, while on the other hand, if a carload of lumber is plump, but really a little inferior, its thickness will often sell it, so that a manufacturer cannot urge too emphatically upon his sawyer to be liberal in thickness. A stout 1-16 for ⅝ and 1 inch and a scant ⅛ for inch and a quarter and inch and a half, and full ⅛ for two inch; for three and four inch 3-16 is not too much; better be too thick than too thin.

A careless sawyer will often allow his log to "cant" out, making one edge of the board plump while the other edge may lack just enough to spoil the board for the grade into which its quality would place it. This same result more often occurs from the carriage not being properly set in place or again the saw may heat and "run." A good sawyer will see that everything is kept in perfect order and stop at once to adjust his mill at the first mis-cut board.

Not a mill man in the country but who can tell (?) just how to properly stick lumber, and when to stick it, and yet when the lumber is marketed it shows that some of the many have made a grave mistake, especially so in the case of Poplar, and other light colored lumber. In sawing Poplar, when it is green with sap, it should be stuck up at once, as if left piled together it will "sap color" in a few hours. "Haven't time" will not answer! If you care to get the full value of your lumber, you *must* stick it up as fast as sawed. This is true of Oak, and in fact of all lumber affected by sap. Lumber manufacturers often wonder why their stock is not as bright and nice as some they have seen. If these same men continue to saw their lumber and pile it close together and leave it until they have *time* to stick it up, then I can assure them they will spend the rest of their days wondering. This should be the order in importance with them, first how to keep the lumber bright, then next how to saw it properly. Use narrow strips, and under no circumstances may they be green, as they will most certainly color the wood wherever they touch and if left too long will rot it. If you have no dry sticks and are on a railway line, buy a carload and run them to your mill; it will be money well spent, and the first sawing you do let it be on a good supply of sticking lath, which will soon be dry enough to use.

Walnut should be piled together as soon as sawed and will receive no injury if not stuck up for some time after sawing. The sap seems to dry out faster when finally the lumber is put on sticks than if stuck right from the saw.

If you have plenty mill yard room pile your lumber thus: Set the piling blocks at least a foot from the ground and with sufficient fall to let the rain run off readily when the pile is finished and covered. Begin by laying the first course with the boards say 6 inches apart if wide and the narrow ones put two together, and build the pile in this order, so that when finished the spaces started in the first course will run to the top of the pile. The openings will be so many chimneys, drying out the lumber more in one month than in three months the old way. Start the next pile at least twenty inches away and so continue covering your yard and you will be surprised how soon you can begin shipping dry lumber. One point more in the sticking of lumber in which there are sappy boards; instead of placing these boards away in the centre of the pile they should be put on the outside as far as possible, so that they will get the more air, and again, these boards should be laid with the sap side down. It may seem useless advice, but a glance into the mill yards of some of the smaller mill owners will show that they may well be told to stick each length lumber together.

No mill is complete without an "evener." It pays for itself many times over, as where each board in a car comes into market exactly even length, it is no trouble to find a buyer. The enterprising mill man is finding this out to his profit.

When you have cut your logs good lengths, carefully sawed them into even lumber, and properly stuck it up and have it ready for shipping; you have then only reached that point where you will begin receiving a return for your labors. If you have done your work well, your returns will show it, as good lumber is always in demand. But if you have allowed your logs to be run to the mill with no care about square ends, and have had them sawed in a careless manner, or if after having used all precautions up to this point to get good lumber, you fail to care for it properly after it leaves the saw, then your returns will show it. Poor stock requires a special sale for every car, while one car of good lumber only opens the way for as many as the buyer may need.

If you ship your lumber "all rail," load it with even ends showing, so that a good impression is given when the car is opened, as many a buyer will judge the lumber by the way it is loaded, on the principle that one who will load a car in a careless manner will also manufacture the same way. Unless so ordered, a car should not contain mixed lengths, *i. e.*, 10, 12, 14 and 16 feet, all thrown in together, as so many shippers are wont to load it. If different lengths must be shipped, load each one by itself and not promiscuously. It looks better and will sell far more readily.

Don't write to your consignee and say, "I've just shipped you a car of lumber." Tell him what you have sent as nearly as possible. Say: "I have loaded a car of [give the kind] lumber for you, containing the following." Then give number of feet, number of pieces, thickness, length, how well seasoned, and any general remarks you may think will aid the seller in describing the lumber to a customer. If the stock is at all desirable, it will be sold by the time it arrives, and can be ordered at once direct to its destination, with no demurrage or storage charges to eat into the profits. To merely say, "I've sent you some lumber," or, worse still not to say anything about it, the consignee really knows nothing until he sees the stock, and must find a place for it, after it arrives, requiring so much time that very often it will have to be stored, which means that you have either bought your lumber at a very low price or that you and the profits are to remain strangers.

It may be some trouble to select the grades, but it will pay you to do so. One car of "log run" Poplar or Walnut will require more time to sell than it will take to dispose of ten, of all one grade lumber; beside this it will cost far more money to handle it, as it must be carted to as many different places as there are grades in the car. The above will apply as well to thicknesses, as only one thickness should be sent in the same car. While five men may want a car of inch lumber, it will be hard to find one who will care for a car with three or four thicknesses; especially is this true of Poplar.

If mill men would be held close to their contracts, the above advice would be but useless words. The men to whom this does not apply need not take it to themselves, as I only wish to talk to the mill man who will positively agree to fill a specific order at a stated time, and when he finds it inconvenient to furnish the stock, quietly drops it, as though he had not given his word to furnish it. He forgets that the other man, especially if he should be a novice, may have in turn sold the order to arrive at a stated time, and not being able to furnish it, must pay for any loss occasioned by not filling the contract. Do what you agree to do. It may cost you money the first deal, but you will be placed on the list of "square men," and you can always drive a better bargain for it, as you can be counted upon and your trade will be sought after.

Many of my readers are located where they can have a choice of the roads over which to send their lumber to market. It is not always the one with the most agreeable agent at the point of shipment who should get the patronage. It is the road that will aim to give you full value for your money, and be willing to promptly adjust an error when one has been made, and not tire you out by a species of red tape calculated to discourage you from ever again trying to get back what it has taken from your profits. Again, choose the road that will handle your lumber in lightering as though it were of value, and not to be thrown about and split by careless handling.

All shippers should see that the agent writes across the bill lading "lighterage free," as most roads now will give free lighterage where it is so written across the bill. Otherwise there is an extra charge of 3 to 4½ cents per hundred pounds.

In these papers I may have said many things which would seem to be unnecessary, but there is not an absurd line in all the number, as each one will fit into some particular instance. To those who already know the requirements of this and other particular markets—and all markets are each year calling for better manufactured Hardwood lumber—I do not ask to take my advice to themselves as I have been talking to that mill man who blindly works on year after year, wondering why he don't succeed. I want him to stop wondering and do his work better—do it as the successful competitor does his. It may require more care, but his bank account will show that he has stopped working for nothing.

EFFECTS OF FOREST DENUDATION.

Whatever may be the truth or the state of opinion on the question of how much the cutting of the timber of a country affects the rainfall, there is no question as to the fact that the denuding of our hill-sides and mountains seriously affects the permanency of the streams and lakes, and produces floods and drouths to a far greater extent than before the cutting of the forests. All experience proves that serious climatic changes are to be noticed over extensive sections of country where the forests have been removed. It is as equally true that the planting of large number of trees over hill-sides and on heretofore barren slopes has brought about important and permanent changes. The absence or presence of trees in large numbers over any great extent of country is as a natural rule accompanied by absence or presence of water.

History shows that large tracts of country that were once prosperous and fertile have become desolate and barren by the destruction of the forests, and, in at least one instance within our own knowledge, in one of the Pacific islands a large sugar plantation was made a successful venture by the planting and growth of a tract of timber adjacent to and partially surrounding it. The reason of this is evident to any one who thinks or studies the process of nature. The verdure of the trees, the decaying leaves, and the shade induce and retain the moisture, and the rains of summer and the snows of winter are held until they penetrate the ground and slowly seep away, preserving a uniform and steady flow of the spring and streams, while the barren surface, hardened by exposure to the sun and with nothing to retain the rains, allows them to flow away as fast as they fall. There is no mystery or scientific wonder about this; it is mere common sense, and result of cause and

effect. In many, in fact, in most civilized countries, the Government, at least in a measure, takes this matter in hand, and enforces strict rules concerning the disforesting of the soil. The nearer that mankind in its work leaves the country in its natural condition, the better for all interested.

Attempts have been made in this country by associations,

twenty. But it is proper to state that while in most other directions there has been a loosening of the hold of government on private affairs, and a tendency toward non-interference in the ordinary things of every-day life and of the old strict and oppressive police regulations, in the matter of forest management the necessity of some form of strict supervision, and of stopping the indiscriminate cutting of timber, has become so apparent that the matter of governmental care and interference has become an acknowledged fact, and steps are being taken to enforce a more economical system.

Hitherto, the most of the European countries, private individuals have been permitted to enjoy their forest property without any government interference. "Communities, villages, towns, and cities and 'eternal' corporations, like churches, colleges, etc., very often own large tracts of forest land as common property. Over these the State, in many cases, exercises supervisory powers, with a view of preventing the waste or depreciation of this common property, acting *quasi* as guardian or trustee, as in other corporated interests. Wherever supervision of private forest property is exercised, it is almost always done only after full demonstration that the common welfare—the interest of the many against the few—demand it, and full indemnification for damage sustained is given in every case." "All European governments, without exception, have felt themselves in duty bound to encourage and aid proper forest management and all efforts at reforestation. This is done :

"By setting a good example in the management of the forests belonging to the State.

"By offering an opportunity of acquiring the necessary knowledge in forest schools, and encouraging the employment of trained foresters.

"By aiding and encouraging reforestation, when it appears necessary, with active financial aid."

The experiment of a bounty system, or exemption from taxation as a reward, has been tried only in France, and there, as in some of our Western prairie States, it has proved a failure, while the plan of giving plants at a nominal cost, with the added advice and suggestions of forestry officers, as well as the wise expenditure of money in reforesting, has given practical and valuable results. These facts are in contradiction to our ideas of European government forestry, but they seem to be well authenticated and official. The plan of planting and preserving what are called protective forests—that is, those not merely for a future supply of fuel or lumber, but combining therewith the forest influence on climate and product—is becoming a settled and practical one, both with private citizens and with the government, and each are becoming active in promoting this. The mere idea of preserving fuel and timber is in every instance made subservient to that of protection against damage by flood and drought, and the prevention of harmful climatic changes. This appears to be the European reason for forest preservation and growth, and it would seem that what was the right course there could not be wrong or harmful here. We invite discussion of, and cor[illegible] concerning this matter, which is of interest to all our people. *Southern Lumberman.*

CANADA AS A WOOD-PULP CENTER.

The agent to the minister of agriculture, Ottawa, Dr. Otto Hahn, located at Reuthugen, Germany, has sent over to his department a report on German pulp manufacture from wood. The report includes a letter from a director of one of the largest paper mills in Germany, which is as follows :

"The accompanying are samples of a new fiber material which as now prepared in enormous quantities, is bound to have an immense influence on the paper making industry. There are factories which turn out as much as fifty tons of it a day. The invention was covered with a patent until recently, and the inventor has made a large fortune out of royalties. The imperial law courts have now caused the patent rights to be cancelled, as the process appears to have been revealed to Professor Mitscherlich by a Scotchman. It has occurred to me that Canada is destined to turn to account its vast resources of forests, and of sulphur, which latter exists so largely in the deposits of pyrities, in connection with the manufacture of paper for the continental or even the international requirements. If our existing supply of wood were to be devoted to the paper industry, it would soon be exhausted, and prices would rise very much. With the profits to be derived from Canada's forest resources in this direction, the railway debt could easily be paid off, and settlers, instead of burning the pine and fir, might obtain a substantial return for that which they are compelled to destroy. If the idea I have thrown out should meet with any support in Canada, I should be prepared, with my friend, to arrange for the promotion of a company in Germany for the utilization in a large way of Canadian wood fiber.

Canada, with its abundance of vast pine woods and clear water, the discharge of which is in our country objected to, alone has the possibility of meeting the wants of the world for this new branch of industry. Suppose the yearly produce of paper to amount to 2,400,000 of tons, and half of this weight, say 1,200,000 of tons, to be made of wood pulp, and, further, that each ton of finished paper requires three tons of wood pulp, then the total consumption of paper demands 3,600,000 of tons of pine wood. But Canada furnishes besides the wood still other important additional materials for the manufacturer ; for instance, coal for firing, and common iron pyrites for distilling the sulphuric acid. Canada possesses all these raw materials in the vicinity of its shipping ports. The freight from Canada to Europe can, therefore, not come into consideration against these enormous advantages. But till now a great part of wood adapted for paper manufacture is simply burnt in Canada. Let us suppose that Canada is able to furnish only half of these 3,600,000 tons, say about 1,800,000 tons every year, and let us further calculate the ton of pine wood at 100 to 120 marks, as it will cost in Germany, we obtain for Canada a gross receipt of 198,000,000 of marks, from which the freight expenses are to be deducted. But even these expenses remain again in Canada for the benefit of either its inland economy, or of its equipment. The author thinks it his urgent duty to call the attention of the government to this favorable opportunity of so immensely increasing the receipts as well of the government, which has the sole right on all the wood on its land, as of private persons. The writer now proposes that your government should take this matter in hand and make arrangements for the manufacture of pine wood pulp whereby Canada may also retain the profits from this work.

The European production suffers everywhere from two facts. (1) From the high prices of the wood, which will more and more increase in consequence of this industry. (2) From the difficulties of establishment, the necessary water not being at disposal, neither in sufficient quantity nor clearness ; and finally, what is worst of all, that no favorable discharge is to be had, because the drainage of the waste water into the rivers is not permitted on account of the fishing, waterworks, and so on. I submit now to your government samples of (1) bleached pulp, (2) of raw paper pulp, (3) of raw paper pulp bleached and dried. The latter cost 40 marks per 100 kilograms. By personal observation made with one of the first engineers in the German paper trade, I am willing and able to give the necessary instruction for the establishment of cellulose manufacture, and also to make arrangements for the sale of the finished pulp in Europe, and are waiting for corresponding directions. The ultilization of the material increases every day, and the price per hundredweight is now about 15 marks. Imagine the number of hundredweights that Canada's forests would furnish. If war does not break out in the meantime, I shall send my son to Canada in the course of the present year to investigate the matter more thoroughly."

—A Port Arthur paper says that the reason lumber is being imported from the U. S. into that district, is that many of the best timber limits are held by speculators who have not the capital to work them. This looks very much as if the government had been doing it up handsomely to some of its political heelers.

HINTS TO PLANING MILL OPERATORS.

The care and management of wood-working machinery is a subject that can always be profitably discussed. Much has been said upon this subject and yet much remains to be said. It is one of the most important duties of the designers and manufacturers of this class of machinery, and one that should not be neglected, to so apportion every wearing part of the machine that the surfaces in contact with each be in proportion to the weight and velocity, so that there will be no danger to those parts from heat and abrasion.

The conveniences for the proper lubrication of such parts cannot be too carefully taken into consideration. Many places it is true are to be found where a bearing is necessarily so located that it is difficult to get at it with the usual appliances for oiling, but in all such places by a careful calculation in the first instance, they may be rendered more accessible than they frequently are. A small shallow oil hole in such a place, especially if the bearing has considerable length, will be condemned as a nuisance by any sensible operator who is disposed to keep this machine in good working order. There are but very few places where an oil cup of some kind cannot be applied, but if the space occupied is so small that one cup cannot be used, a hub should be cast upon the box large enough to admit a good sized hole being drilled into it, at least part of the way through, to form a suitable receptacle for the oil, and this should be provided with a cover, if one can be applied, and packed full of cotton waste, sponge or some other fibrous substance, to retain the oil and prevent it from running off as soon as it is applied.

It is not so much the quantity of oil that is required to keep a journal well lubricated as it is in the manner in which it is applied. An ordinary journal when once well covered with oil will not retain more than a few drops at a time, the rest soon runs off and is wasted, but it may be that the few drops may be required more frequently than it is convenient for the operator to apply them, especially if he is obliged to stop the machine in order to do so, and in that case the journal may run dry and begin to cut before he is aware of it. Hence the necessity of retaining the oil in the cup and distributing it gradually.

There is no class of machinery that is required at times to work under more unfavorable conditions than wood-working machinery. Under very unfavorable circumstances, the wear and tear is greater, the high speed at which it is required to run in all kinds of dust and grit with which the lumber is sometimes covered, and which is a very difficult matter to exclude from the bearings, is a constant source of trouble and annoyance to the most careful operator. For that reason woodworking machinery requires to be stronger in proportion and more accurately fitted with long bearings, and the most practical and convenient manner for lubricating.

In cold weather, especially when there is no provision made for heating the mill, the trouble with some parts of the machine is rendered still greater. While the fast running parts, such as the cylinder and matcher spindles will always warm up after running a few minutes sufficient to keep the oil in a fluid state, the roller bearings and that portion of the gearing which runs slow and loose upon studs and pins are the parts which are the most liable to suffer in cold weather, when the oil as soon as it comes in contact with the iron becomes chilled. In such places a small oil hole is worse than none at all, and it is safer to slip off the wheel and apply the oil directly to the stud or pin, and for this reason all such gearing should be so arranged that they can be readily and quickly removed for this purpose.—*Timberman.*

FIRE RECORD.

Messrs. J. & J. Kerr's planing mill at Petrolia, Ont., has been totally destroyed by fire.

Colthart & Neilson's furniture factory, at Chatham, Ont., was destroyed by fire the early part of November. Loss. $2,800 ; fully insured.

The custom woollen mill, owned by the Lakefield Lumber & Manufacturing Co., was destroyed by fire at that place recently. Baptie's planing mill had a narrow escape.

The twin saw mills owned by John Robinson and Harvey Copp, at Midjie, N. B., were burned the early part of November. Each mill was insured for $1,000. The loss is $4,000.

French, Wells & Burnies' sash and door factory at Dresden, Ont., has been burned. In addition to the loss of the factory there was material made up to the amount of $2,000. Total loss about $7,000 ; insured for $3,000.

Joseph Paquette's planing mill and sash and door factory at Montreal was totally destroyed by fire on Nov. 5th. The loss is estimated at $70,000, with no insurance. Another large planing mill on the opposite side of the street had a narrow escape.

PERSONAL.

It is rumored that Mr. E. B. Eddy, the well-known lumberman, will be asked to contest Ottawa (Quebec) county against Mayor Rochon.

At a meeting of the Board of Directors of the Quebec Bank, Mr. R. H. Smith was elected president in place of the late Hon. J. G. Ross, deceased.

A London, (Ont.) Syndicate have purchased some timber lands at Little Rock, Arkansas, and Messrs. R. Lewis and R. W. Greer have been sent to that place to look after the company's interests.

It is said that William Carson, the Eau Claire lumberman, who, by the way, is a native of Canada, is one of the most temperate of men. He has amassed considerable wealth, and is one of the most respected citizens of Wisconsin.

Mr. John Brennon, who has been in the employ of the Ontario Lumber Co. at French River for some years, has gone to California where he has accepted a position with Mr. J. M. Dollar, late Toronto manager for the above company.

It is asserted on presumably reliable authority that Hon. A. S. Hardy, provincial secretary of Ontario, will become Commissioner of Crown Lands in place of Hon. T. B. Pardee who is about to resign owing to illness. Col. Gibson, of Hamilton, is mentioned as the probable successor of Mr. Hardy.

Mr. Geo. Humphrey, jr., who was the Montreal resident agent for Cook Bros. of Ontario and a leading Liberal politician, died the early part of November at his late residence at Sillery from galloping consumption, aged 46 years. The deceased unsuccessfully opposed Hon. Thos. McGreevy in Quebec West, during the Dominion elections of 1882.

It is understood in legal and political circles that Mr. H. J. Cloran, of the law firm of Cloran & Bedard, of Montreal, is about to retire from the political and legal arena and enter upon the career of a lumberman. We understand that he has already purchased one hundred square miles of timber lands on the Ottawa river. We hope to hear that Mr. Cloran's well-known business ability will do him good service in the new field in which he has cast his lot.

CASUALTIES.

A young man named Joe Prevost had his fingers amputated by an edger in a Hull saw mill a few days ago.

Geo. Golding was cut nearly through the body by a saw, and died instantly, at St. John's, N. B.

Jean Baptiste Richard, a mill hand employed in Hurdman's mill at Ottawa, had his hand badly jammed in the mill machinery recently.

Joseph Laundry, a boy employed in the saw mills of the E. B. Eddy manufacturing company, of Hull, Quebec, had two toes of his left foot cut off by a circular saw.

Mr. J. R. Booth, one of the Ottawa's lumber kings, had one of his ankles severely fractured some days ago through a truck loaded with lumber running over his foot.

James Hore, engaged in a North Toronto lumber yard, was struck on the head some days ago by a piece of timber. He now lies in the hospital in a precarious condition.

Elie Proulx, while working in Messrs. J. R. Booth & Co.'s saw mill at the Chaudiere was struck with a knot and received injuries from which he died a day or two later, after suffering intense agony.

William Burrel, a lumberman, met with a serious accident while chopping in the bush at Lead Lake, fifteen miles from Gravenhurst. The axe slipping cut his foot through from the toe to the instep.

A young man named Stewart Wood engaged in falling trees in Gilmour's shanty near Oak Lake, (Ont.) was struck by a falling pine, the injury from which resulted in his death a day or two later.

Alonzo Sopher, employed at Richardson's shingle mill, a short distance from Guelph, was holding a shingle to the jointer when it split, throwing the man's left hand against the knives, shaving the flesh off the index finger.

A shocking accident took place some days ago on the Upper Ottawa which resulted in the death of a young man named Oliver Laroque. He was employed above the "Rocher Capitaine," and while engaged in felling a tree was caught under it. The crashing timber fell on his body, and broke three of his ribs. An endeavor was made to bring him to Ottawa for medical treatment, but he expired on the road near Pembroke.

A distressing accident happened on Nov. 24th in the big mill at Deseronto belonging to the Rathbun Co. Felix Cautre was employed on the bucking saws and in some way got caught in the gang and was drawn onto the saws. One saw cut his head open, exposing the brain, another nearly cut off his left arm, while a third split his left foot open. Both legs were also badly cut. On his removal home his arm was amputated and his other wounds dressed by a local physician. He is said to have stood the operation bravely and the prospects are that he may still live.

THE FORESTS OF THE UNITED STATES.

The following is a summary of the annual report of the Division of Forestry of the United States Department of Agriculture, which estimates the forest lands in the States and territories as follows:—

	Acres.
Maine	12,000,000
New Hampshire	3,000,000
Massachusetts	1,389,500
Rhode Island	163,528
Connecticut	650,000
Vermont	1,990,000
New York	8,000,000
New Jersey	2,330,000
Pennsylvania	7,000,000
Delaware	300,000
Maryland	2,000,000
Virginia	13,000,000
North Carolina	18,000,000
South Carolina	13,000,000
Georgia	18,000,000
Florida	20,000,000
Alabama	17,000,000
Mississippi	13,000,000
Louisiana	13,000,000
Texas	40,000,000
Michigan	14,000,000
Wisconsin	17,000,000
Minnesota	30,000,000
Ohio	4,258,767
Indiana	4,[illegible]
Illinois	3,500,000
West Virginia	9,000,000
Kentucky	12,800,000
Tennessee	16,000,000
Arkansas	28,000,000
Iowa	2,300,000
Dakota	3,000,000
Nebraska	1,550,000
Kansas	3,500,000
Wyoming	7,800,000
Colorado	10,630,000
New Mexico	8,000,000
Idaho	10,234,000
Nevada	2,000,000
Utah	4,000,000
Arizona	10,000,000
Washington Territory	20,000,000
Oregon	20,000,000
California	20,000,000

EXCHANGE ECHOES.

Canadian Manufacturer.

A new scheme of utilizing the sawdust of the Ottawa River for the purpose of fuel is proposed. It is claimed that by a system of grinding the refuse into a uniform finess, mixing it with the refuse gas tar from the gas house, and compressing the substance into cakes, a fuel can be made in every way superior to soft coal for open fires. Sawdust rolls were common forty years ago in England and Scotland, and were considered far ahead of peat and grate fires. The cost of manufacturing this kind of fuel is merely nominal, and it is expected that it can be sold at a very much lower price than soft coal. The formation of a company to give the scheme practical effect is mooted.

Northwestern Lumberman.

It would appear from the facts that come to the surface, that lumber will continue to come in good and increasing volume from Canada to the United States—not only to the more important eastern markets, but to Chicago, without the stimulus afforded by a removed customs duty. Canadian lumber has all along cut more or less figure on the Chicago market, and late purchases by men on the American side, of pine timber in Canadian regions, accessible to Chicago by waterway, indicate enlarged operations in such regions from now forward. Of course these purchases have been mainly in anticipation of an increase of value in the timber, and some buyers have been moved by a belief that the free lumber measure in this country would carry. The feeling in Canada is that, in that event, the Dominion would be largely benefitted, and natural operators in the Northwest want a finger in the pie. But the timber in the Spanish river region of Ontario is good property without the duty off, and those that have bought some of it will no doubt find it so. As an evidence of this probability it is instanced that the Buswell Lumber Company, formerly of Grand Rapids, Mich., and now operating on the Spanish river, has been cutting 10,000,000 feet annually, and shipping the most of it at a profit, in spite of a $2 customs duty assessed on this side the line. Many Michigan men now operating in Canada are reported doing well.

AMERICAN NOTES.

—Michigan lumber dealers say that the recent increase in the export duty on Canadian pine logs will stop their importation into the United States.

—Three conal boats and one barge loaded with one million feet of pine lumber from Ottawa, consigned to the Oswego Manufacturing Co., which were at anchor at Cape Vincent, N. Y., harbor for fair weather, dragged anchors Nov. 26th in the severe gale. The wind took several thousand feet of lumber off the boats, all of which came ashore and were picked up.

A correspondent writing to the New York *Lumber Trade Journal* wants to know what kind of lumber was used in the building of Noah's ark. The editor has endeavored to satisfy the correspondent's curiosity by giving his reasons for the belief that Cypress was used in the construction of this ancient but wonderful building.

—Very few charters for timber are being now reported, the Canadian and Baltic seasons being practically over.

—The demand for pine in London is reported as being very sluggish and any violent rise in price may have the effect of checking what little business there is now doing.

—The *Thomas Hillyard* from Quebec bound for Liverpool had a fearful passage during October. During one gale her boats were washed away, one seaman was swept overboard and drowned, and another killed.

—Liverpool advices state that steamer freights by the regular liners from Montreal and Quebec have advanced to 80 s. per standard. From St. John N.B. freights are a little easier but the supply of deals will be small.

—The excess of importation of wood goods up to the end of September over that of last to London amounts to 19,915 loads of hewed wood and 83,734 loads of sawn, or a total of 103,649 loads. Other large wood trading centres exhibit a like result.

—The stock of Quebec timber at Leith has already got reduced to small proportions, and only a few cargoes are expected this fall. This, taken in conjunction with the limited Clyde stocks, will very materially affect the market during the winter and spring months.

—The extensive timber yards and saw mills belonging to Messrs. Watson & Todd, of Liverpool, were burned on Nov. 14th. The loss is estimated at $15,000. It is announced that the fire will in no way interfere with the firm's business, as all orders will be executed as usual from their branch mills.

—Inquiries for next year's goods continue to be received by agents both in England and France, but it seems that buyers are slow in committing themselves to any definite quotation. Many of the importers have expressed themselves willing to repeat contracts closed at the highest prices of the current year, but these offers have been declined. It is generally thought by large buyers that a slight advance in values on free-on-board prices is not unlikely to take place.

—Denny, Mott & Dickson, of London, in their wood circular, under date Nov. 7th, in speaking of Canadian lumber say: "The demand for all classes of this timber has been good; little oak remains in first hands, and prices continue to advance for first-class quality. Square and Waney pine are asked for at advanced prices, the demand by consumers being altogether out of proportion to the small floating supplies. Elm is in good demand with a moderate stock.

Items of Interest.

Timber constitutes a great industry and represents an annual expenditure of $1,365,000,000. Its consumption throughout the world has increased 50 per cent. since 1850.

From the annual circular of the Export Lumber Company it is learned that the total shipments of pine and spruce lumber from the St. Lawrence river to the River Plate for the season of 1888 were 17,980,814 feet—14,544,814 of pine and 3,436,000 of spruce. In 1887 the shipments amounted to 34,036,076 feet, and in 1886 to 29,088,204 feet.

TRADE REVIEW.

Toronto, Ont.

TORONTO, Nov. 29th, 1888.

CAR OR CARGO LOTS.

1¼ and thicker clear picks, American inspection	$34 00@35 00
1¼ and thicker, three uppers, American inspection	40 00
1¼ and thicker, pickings, American inspection	30 00
1x10 & 12 dressing and better	20 00 22 00
1x10 & 12 mill run	15 00 16 00
1x10 & 12 dressing	16 00 18 00
1x10 & 12 common	12 00 13 00
1x10 & 12 spruce culls	10 00 11 00
1x10 & 12 mill culls	9 00
1 inch clear and picks	24 00 26 00
1 inch dressing and better	18 00 20 00
1 inch siding mill run	13 00 15 00
1 inch siding common	12 00 13 00
1 inch siding ship culls	10 00 11 00
1 inch siding mill culls	8 00 9 00
Cull scantling	8 00 9 00
1¼ and thicker cutting up plank	22 00 25 00
1 inch strips 4in to 8in mill run	14 00 15 00
1 inch strips, common	11 00 12 00
1¼ inch flooring	14 00
1½ inch flooring	14 00 15 00
XXX shingles, sawn	2 40 2 50
XX shingles, sawn	1 40 1 50
Lath, Sawn	1 80

YARD QUOTATIONS.

Mill cull boards & scantling	$10 00	Dressing stocks	16 00@20 00
Shipping cull boards, promiscuous widths	12 00	Picks Am. inspection	30 00
stocks	13 00	Three uppers, Am. inspect.	40 00
		B. M.	
Scantling & joist, up to 16 ft	13 00	1½-in. flooring, dres'd	25 00 30 00
" " 18 ft	14 00	1½ " " rough	14 00 15 00
" " 20 ft	15 00	1¼ " " dres'd	23 00 25 00
" " 22 ft	16 00	" " undres'd	14 00
" " 24 ft	17 00	" " dres'd	16 00 20 00
" " 26 ft	18 00	" " undres'd	12 00 14 00
" " 28 ft	19 00	Beaded sheeting, dressed	18 00 20 00
" " 30 ft	20 00	Clapboarding, dres'd	12 50
" " 32 ft	21 00	XXX sawn shingles per M	2 75 2 90
" " 34 ft	22 50@22 50	Sawn Lath	2 25
" " 36 ft	24 00	Red oak	20 00 25 00
" " 38 ft	27 00	White "	25 00 30 00
" 40 to 44 ft	30 00	Basswood, No. 1 & 2	18 00 20 00
Cutting up planks 1¼ and thicker dry	25 00 26 00	Cherry, No. 1 & 2	50 00 60 00
" board	18 00 20 00	White ash, 1 & 2	25 00 30 00
		Black ash, 1 & 2	20 00 25 00

Ottawa, Ont.

OTTAWA, Nov. 27th, 1888.

	Dimensions, Inches.	Per M.
Mill culls	10 x 1	
"	12 1	
"	12 1½	
"	12 2	
" selected 16 ft. long, above dimensions		8.50 to 9.00
Cull strips, 1 in. thick, 5 to 7 wide		7.00 to 8.00
Mill cut outs	12 x 1	
"	11 1½	4.00 to 5.00
"	12 2	
Scantling	2 4	
"	3 4	12.00
" culls	2 4	
"	3 4	7.00
Laths		1.25
Stock shorts, 12 x 1		10.00
1 inch siding outs, 1¼, 1½, 2		15.00
" outs from shorts, 1¼, 1½, 2		6.50 to 7.00
Outs from stocks	12 x 1	
" "	12 1¼	10.00 to 12.00
" "	12 1½	
Shingles, X		1.25
" XX		2.00
" XXX		3.00
" cedar, No. 1		2.00 to 2.
" cedar, culls		1.25
Difference in planed lumber, in waste and planing		5.00
Ditto, on average good stock		20.00 to 25.00

Hamilton, Ont.

HAMILTON, Nov. 29th, 1888.

Mill cull boards and scantlings	$ 9 00@10 00	Dressing stocks	$16 00 18 00
Shipping cull boards promiscuous widths	10 00 12 00	1¼ flooring, rough	16 00 18 00
Shipping cull stocks	14 00	1½ flooring, rough	16 00 18 00
Scantling and joist up to 16 feet	13 00	1¼ flooring, dressed	25 00
do up to 18 feet	13 50	1½ flooring, dressed	32 00
do up to 20 feet	14 00	flooring, dressed	21 50 23 00
do up to 22 feet	15 00	Beaded sheeting 1	25 00 30 00
do up to 24 feet	16 00	Picks, Am inspection	32 00 34 00
do up to 26 feet	17 00	Three uppers Am. In.	40 00
do up to 28 feet	18 00	XXX sawn shingles	2 60 2 70
do up to 30 feet	20 00	Sawn Lath	2 25
Cutting up plank 1¼ and thicker dry	20 00 25 00	Red Oak	20 00 25 00
Cutting up boards	20 00	White Oak	25 00 30 00
		Basswood No. 1. & 2.	16 00 20 00
		Cherry No. 1 & 2	60 00 70 00
		White Ash No. 1 & 2.	25 00 30 00
		Black Ash No. 1 & 2.	20 00 25 00

St. John, N. B.

ST. JOHN, Nov. 29th, 1888.

Deals, Boards, Scnatlng, etc.

Spruce deals	$12 00	Spruce boards	12 00
Pine "	15 00	Pine "	12 00@40 00
Deal ends	6 00	Oak "	40 00
Scantling	10 00	Ash "	15 00@25 00
		Hemlock "	7 50

Shingles.

Spruce, extra	$3 50	No. 1	1 25
" clear	3 00	Pine	1 25
" No. 1 extra	2 25		

Clapboards.

Pine, extra	35 00	Spruce, extra	24 00
" clears	45 00	" clears	23 00
" 2d clears	35 00	" No. 1	15 00
		" No. 2	10 00

Flooring, Dressed.

6 in.	No. 1	12 00	4 in., No. 1 12 00
"	No. 2	10 00	" No. 2 10 00

Miscellaneous.

Staves	3 00@ 4 50	Laths	1 80
Heading, 17 in. per pr.	04	Pickets	6 50@15 00
" 18 in.	04½ 05½	Railway ties	15
" 22 in.	04½ 06		

Goderich, Ont.

GODERICH, Nov. 27th, 1888.

PRICES IN CAR LOTS.

1 inch Mill Culls	$8 00@ 8 50
1x6-8-10 & 12, common	12 00
1x6-8-10 & 12, dressing	16 00
1x14, and wider, common	12 00
1x14, " " dressing	16 00
1¼ dressing	16 00
1½ "	16 00
1¼ Norway pine flooring	14 00
1½ " " "	14 00
1 inch clear and picks 4 to 9 inch	25 00
1 inch " " 4-in. and up	26 00
1 inch " " 9-in. and up	27 00
1¼ and 1½ clear and picks	35 00
Lath 1½x4 feet	1 80
2 inch pine joist	11 50 12 00
2 inch Norway joist	11 00

Montreal, Que.

MONTREAL, Nov. 29th, 1888.

Pine, 1st qual'y ₱ M	$35 00 40 00	Basswood, run of log culls out per M	$16 00 20 00
Pine, 2nd " "	22 00 25 00	Oak, per M	40 00 50 00
Pine, shipping culls ₱ M	14 00 16 00	Walnut, per M	60 00 95 00
Pine, 4th quality deals ₱ M	10 00 12 00	Cherry, per M	75 00 90 00
Pine, mill culls, ₱ M	8 00 10 00	Butternut, per M	30 00 40 00
Spruce, per M	10 00 13 00	Butternut, per M	30 00 40 00
Hemlock, per M	9 00 10 00	Birch, per M	18 00 25 00
Ash, run of log culls out per M	16 00 18 00	Hard Maple, per M	20 00 25 00
		Lath, per M	1 50 1 70
		Shingles, 1st, per M	300 3 25
		Shingles, 2nd, per M	1 50 2 00

Saginaw, Mich.

SAGINAW, Nov. 29th, 1888.

CARGO LOTS.

Uppers	36 00@38 00	Norway	8 50@ 9 25
Common	16 00 19 00	Box	10 50 11 00
Shipping Culls	8 50 10 00	Straight measure	12 00 18 00
Mill Culls	6 00	Hemlock	7 50 8 00

YARD QUOTATIONS—CAR LOTS DRY.

Drop Siding.

Clear, ⅞ in	42 00	C, ⅞ in	30 00
A	38 00	D	19 00
B	36 00		

Flooring and Siding—Dressed.

Flooring, clear, d & m	40 00	Siding, clear, ½ in.	22 00
No. 1	33 00	A	23 00
No. 2	30 00	B	17 00
No. 3	20 00	C	14 00
No. 4	13 00	D	12 00

Finishing Lumber—Rough.

Three uppers, 1 in.	42 00@44 00	Fine common, 1 in.	32 00@32 00
1¼ & 1½	44 00 46 00	1¼ & 2 in.	33 00
Selects, 1 in.	36 00 37 00	C, 7, 8 & 9 in.	25 00
1¼ & 2 in.	38 00	Base, 2 to 9 in. No. 1	40 00
		No. 2	30 00
		No. 3	20 00
		Coffin boards 16 in. and over	18 00

Joist, Scantling and Timber.

12 to 18 feet	10 00	22 feet	12 00
20 feet	11 00	24 feet	13 00

Plank and timber, 12 inches wide, $1 extra.

Wide Select and Common—Rough.

C (No. 1 com.) 13in. and up	28 00	D (common) 14 in. and up	16 00

Lath, Shingles and Pickets.

Lath, No. 1	1 50	Country brands XXX	3 25@ 3 35
No. 1	1 00	Clear butts	2 25 2 35
Shingles, river brands		P'kts, 2 to 2½ in rough	12 00 13 00
XXX	3 40@ 3 50	Dressed	20 00
Clear butts	2 40 2 50	1¼ in. square, dressed	14 00 19 00

Philadelphia, Pa.

PHILADELPHIA, Nov. 29th 1888.

White Pine.

Mich. uppers, 1 to 2 in., dry	$48 00@50 00	1¼ to 2 in. plank, barn quality	22 50@25 00
2½, 3 & 4 in	55 00 60 00	Common plank	20 00 22 00
Selcts, 1¼ to 2 in.	42 50 45 00	⅞ box boards, wide	14 00 16 50
2½ 3 & 4 in	41 00 43 90	⅝ siding, selected	27 50 30 00
12 in. flooring quality	30 00 32 50	Culls, 12 in.	15 50 17 00
barn	19 00 23 00	Wide	15 00 16 00
Edge barn, all widths	18 00 20 00	Narrow	13 50
		No. 1 moulding	36 00 38 50

Cargo Lots.

Yellow pine edge bds	14 00@16 00	Scantling and plank	20 00 22 00
Heart face boards	19 00 21 00		

Hemlock Boards and Scantling.

Edge boards	10 50@11 50	Scantling, 2x3 & 2x4, 12 in. stock	11 50 12 00
Fencing, 6 in., 16 ft.	11 50 12 00	16 & 18 ft	12 00@13 00
		3x4, to 12, 12 to 20 ft.	11 00 11 50

Shingles and Posts.

Cypress shingles, 24 in. heart, d & b	13 00@18 00	Cedar shingles, 30 in. hand dressed	35 00 40 00
24 in. sap, d & b.	10 00 12 00	Chestnut posts, 9 ft.	32 00
		7 ft.	28 00

HARDWOOD.

Walnut.

Nos. 1 & 2, 1 in., good dry, Indiana	$87 50@ 95 00	Reject or common, 1 in., 1¼ and up	60 00@ 65 00
1¼ & up	92 50 100 00	Culls, 1 in.	35 00 37 50
Nos. 1 & 2, ⅝ in.	72 50 77 50	1¼ in. & up	35 00 40 00

Poplar.

Nos. 1 & 2, ⅝ in. good wide, Indiana	25 00@27 50	Nos. 1 & 2, 1¼ in. & up, good wide, Ind.	32 50 36 00
1 in.	28 00 32 50	Columns, 5x5 & up clear	35 00 35 50

Oak.

Nos. 1 & 2, 1 in., good western, straight quartered	32 50@35 00 49 00 50 00	Nos. 1 & 2, 1¼ in. & up, good western, straight	35 00 37 50
		quartered	52 50 55 00

Ash.

Nos. 1 & 2, 1 in., good western	35 00@40 00	Nos. 1 & 2, 1¼ in. & up, good western	32 50 42 50

Yellow Pine—Yard and Wholesale.

Sc'tlg, 2x4 to 12x14	22 00@23 00	Flooring, 1 in. Va.	17 00 19 00
Plank, 1¼ to 2 in.	23 00 27 50	1 & 1¼ in. Ga. & Fla. cargo run	22 00 24 00
Fl'g, 1 & 1¼ in. No. 1	27 50 30 00		

Cherry.

Nos. 1 & 2, 1 in., good	62 50 70 00	Nos. 1 & 2, 1½ in. & up, good	65 00 75 00

New York City.

NEW YORK, Nov. 29th, 1888.

Black Walnut.

⅛ in., all clear	$78 00@ 82 00	Culls, 1 inch	$35 00@ 37 00
1 and 1¼ inches	92 00 97 00	Culls, thick	37 00@ 39 00
1½ and thicker	98 00 105 00	Counter tops, 18 in.	
Rejects	52 00 55 00	and over	110 00 150 00

Poplar, or White Wood.

⅛ in. 10 inches and over	23 00@24 00	1¼ to 2 inch	29 00@ 32 00
¾ in. coffin boards	27 00 28 00	2½ and thicker	31 00@ 32 00
1 inch, 10 inch and over	28 00 30 00	Common 1 to 2 inch	21 2 50
1 inch, 8 in. and over	26 00 28 50	Saps, 1 inch & thicker	27 1 00
		Culls, all thickness	16 18 00

Dressed Poplar.

½ inch panel	24 50@25 00	¾ in. clg. 4 to 6 in	21 00@21 50
⅝ inch panel	27 00 28 00	½ in. clg. 4 to 6 in	24 00 24 50
¾ inch panel	29 00 30 00	⅝ in. clg. 4 to 6 in	27 00 28 00
4, 5, 6 inch casing	30 00 31 00	¾ in. clg. 4 to 6 in	29 00 30 00
7, 8, 9, 10 inch casing	32 00 33 00	⅞ in. clg. 4 to 6 in	30 00 31 00

Ash.

1 inch, white	36 00@ 38 00	Strips, clear	26 00@ 28 00
1¼ to 2 inch	37 00 38 00	Black ash, good	26 00 30 00
2½ to 4 inch	40 00 41 00	Black ash, culls	10 00 12 00

Oak.

1 inch plain sawed,	36 00@ 39 00	inches and over	46 00@ 48 00
1¼ to 2 inch	37 00 40 00	Thicker	48 00 50 00
Thicker	38 00 41 00	Strips under 6 in.	38 00 40 00
Quarter-sawed, white, all clear, 6-			

Cherry

⅝ in., white & clear	65 00@ 70 00	2½ and thicker	88 00@ 95 00
1 inch	76 00 80 00	Counter tops, 18 in.	
1 inch strips	40 00 42 00	and over	100 00 115 00
1¼ to 2 inch	80 00 85 00	Culls, all thickness	18 00 20 00

Miscellaneous.

Chestnut, clear	33 00@ 35 00	Hickery, old growth	50 00 60 00
Chestnut common	20 00 23 00	Hickery, 2nd growth	70 00 80 00
Basswood white	30 00 32 00	Elm	20 00 22 00
Basswood common	20 00 23 00	Sycamore	24 00 27 00
Maple, clear	25 00	Sycamore quartered	35 00 40 00
Birch, clear	32 00 36 00	Gum	36 00 41 00
Birch, 1s and 2s	26 00 30 00	Butternut	45 00 50 00
Cottonwood	20 00 22 00		

Boston, Mass.

BOSTON, Nov. 29th, 1888.

Western Pine—by car load.

Uppers, 1 in	$48 00@50 00	Fine com. 3 & 4 in	46 00@50 00
1¼, 1½ & 2 in	50 00 52 00	No 2, 1 in. Fine com.	29 00 30 00
3 & 4 in	55 00 60 00	1¼, 1½ & 2 in	31 00 33 00
Selects, 1 in	42 00 45 00	No. 1 strips, 4 to 6 in	41 00 43 00
1¼, 1½ & 2in	44 00 46 00	No. 2	37 00 38 00
3 & 4 in	48 00 52 00	No. 3	25 00 27 00
Moulding boards, 7 to 11 inch clear	37 00 41 00	Cut ups, 1 to 2 in.	26 00 30 00
60 per cent clear	35 00 37 00	Coffin boards	22 00 26 00
Fine common 1 inch	37 00 42 00	Common all widths	20 00 25 00
1¼, 1½ & 2 inch	40 00 42 00	Shipping culls	17 00 19 00

Eastern Pine—Cargo or Car Load.

Nos. 1, 2 & 3	40 00@43 00	Clapboards, 4 ft., sap	
4	28 00 30 00	clear	40 00 42 00
5	23 00 26 00	Sap, 2nd clear	30 00 32 00
Ship'g bds & coarse	16 00	Heart extra	55 00
Refuse	12 00	Heart clear	50 00
West'rn pine clapbds 4 ft. sap extra	43 00 45 00		

Spruce—by Cargo.

Scantling and plank, random cargoes	12 00@13 00	Coarse, rough	9 00 12 00
Yard orders, ordinary sizes	13 50 14 50	Hemlock bds., rough	10 00 11 00
Yard orders, extra sizes	15 00 16 00	" " dressed	12 00
Clear floor boards	19 00	Clapbds., extra, 4 ft.	28 00 30 00
No. 2	16 00	Clear, 4 ft.	26 00 28 00
		Second clear	20 00 22 00
		No. 1	12 00 15 00

Lath.

Spruce	1 90@ 2 00

Shingles.

Spruce	1 40@1 50	Cedar, sawed, extra	3 30@3 50
Pine, 18 in. extra	4 50 4 75	Clear	3 00 3 15
Pine, No. 1	3 50 3 70	Extra, No. 1	2 85 3 00
		Cypress, No. 1, 18 in.	5 00 5 25

Oswego, N. Y.

OSWEGO, Nov. 29th, 1888.

Pine.

1¼, 1½, 2 and thicker uppers	$40 00@43 00		
" " " pickings	30 00 33 00		
" " " No. 1 cutting up	22 00 26 00		
" " " cuttings up pickings and uppers as run	30 00 35 00		
1 inch selected sidings	25 00 30 00		
1¼ " " "	30 00 35 00		
1 & 1½ box or No. 2 culls	11 00 12 00		
1 & 1¼ sidings No. 1 dressing and better	17 00 25 00		
1x10 & 12x12 to 16 feet dressing and better	17 00 25 00		
" " " shipping culls	14 00 17 00		
" " " No. 2 "	11 00 12 00		
1 & 1¼ in. strips 4 to 7 wide selected	20 00 30 00		
" " " dressings	16 00 17 00		
" " " box	9 00 12 00		

Brown Ash.

1 1¼ 1½ 2 & 3 in. 1st & 2nd quality	17 00 21 00
" " " culls	9 00 11 00

Basswood.

1 & 1¼ 1st & 2nd quality	20 00 21 00
" culls	9 00 12 00

Shingles.

XXX 18 inch pine standard thickness 5 to 2¼	$3 75
XX " " " " "	2 50
X " " " " "	75
XXX " cedar " " "	3 00
XX " " " " "	2 00
XXX 16 " pine " " "	3 00
XX " " " " "	1 90

Lath.

No. 1 1⅜, 1½	1 80 2 10
" 2 "	1 10 1 60

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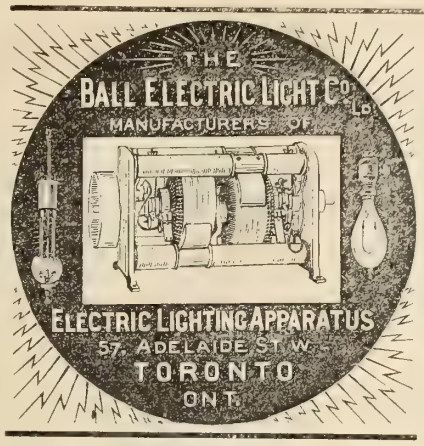

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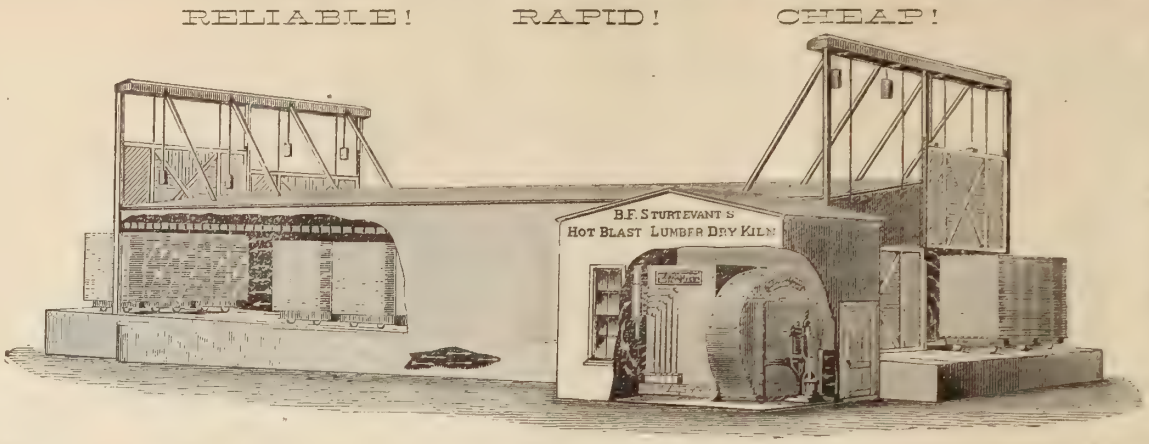

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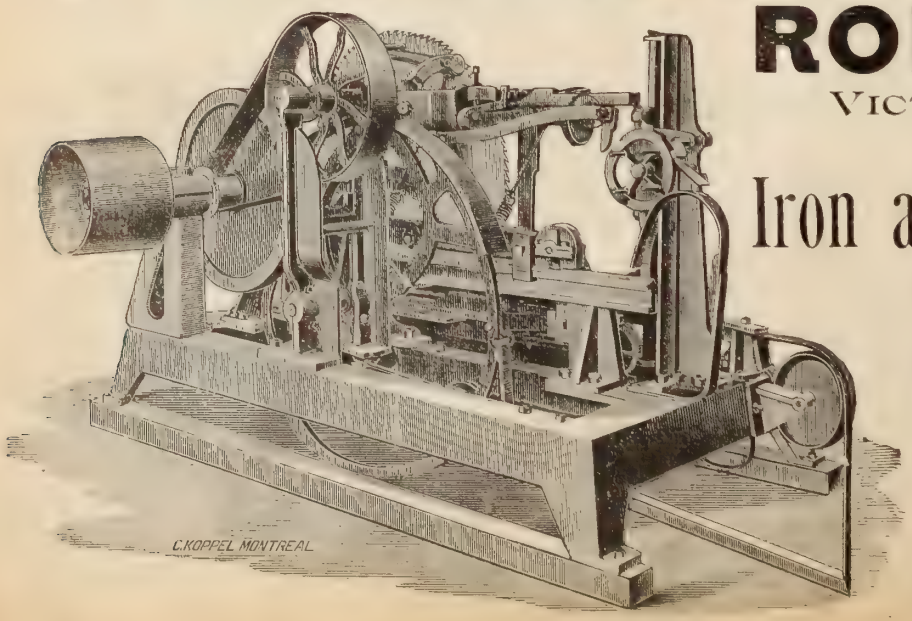

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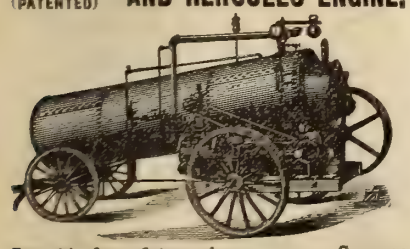

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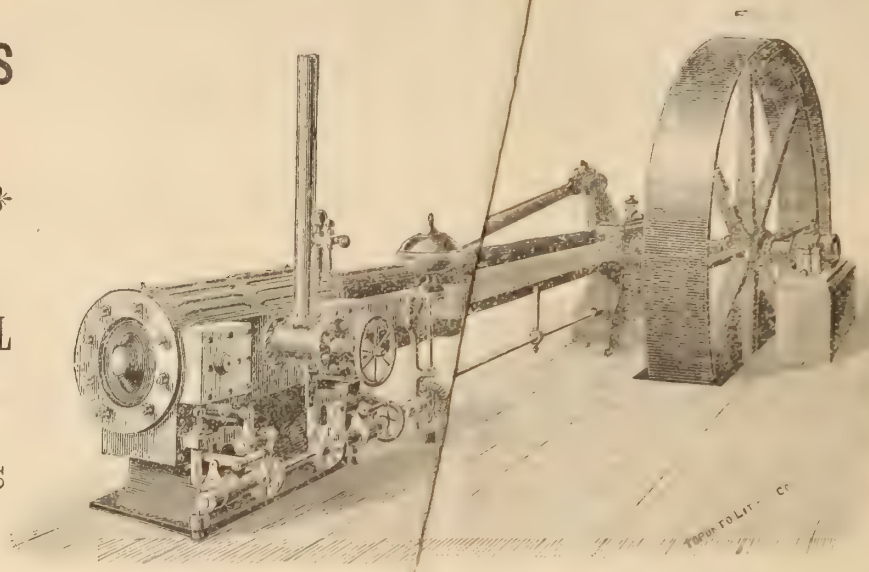

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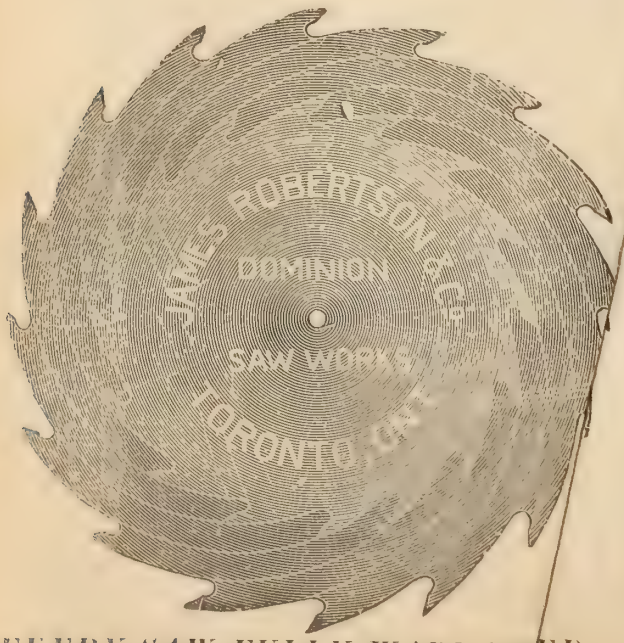

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